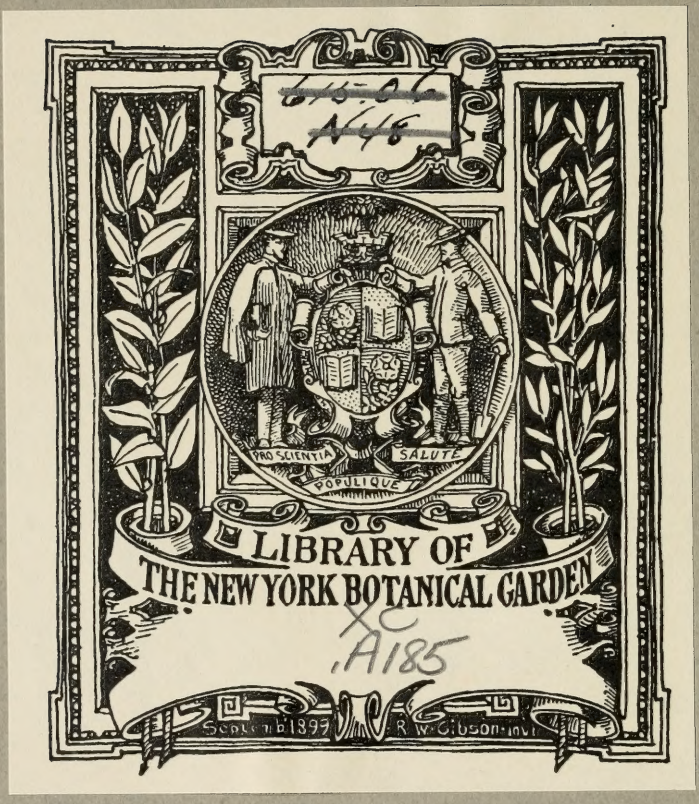
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VOL. XIV JANUARY, 1907 No. 1

The Alumni Journal

Published monthly by the Alumni Association of the College of Pharmacy of the City of New York —Pharmaceutical Department of COLUMBIA UNIVERSITY

EDITED BY

CHAS. A. LOTZ, Ph.G. H. J. GOECKEL, Phar.D.

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Columbia University

THE COLLEGE OF PHARMACY

OF THE CITY OF NEW YORK

The 78th Annual Course of Instruction begins the first week in October, 1907.

The Curriculum, which was remodeled last session, has been extended, and this College now offers a very superior course of instruction in Pharmacy and the allied subjects, with facilities for practical work in its Chemical, Pharmaceutical, Microscopical and Dispensing Laboratories, which are not equalled by any other Teaching College. The Graduate Course is open to Graduates of Pharmacy who have received their degrees from a recognized College of Pharmacy.

FACULTY.

CHARLES F. CHANDLER, A.M., PH.D., M.D., I.L.D., D.Sc.
Professor of Organic Chemistry.

HENRY H. RUSBY, M.D. (Univ. of N. Y.),
Professor of Materia Medica.
Dean of the Faculty.

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Professor of Chemistry.

SMITH ELY JELLIFFE, A.M., M.D., PH.D.
Professor of Pharmacognosy.

GEORGE C. DIEKMAN, PH.G., M.D.
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Instructor in Botany, Columbia University.

ANTON VORISEK, PHAR.D.
Professor of Analytical Chemistry.

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OAKLEY A. MORHOUS, PHAR.D.
Instructor in Analytical Chemistry.

CURT P. WIMMER, PHAR.D.
Instructor in Pharmacy.

FREDERICK A. LESLIE, PHAR.D.
Assistant to the Dean.

... The ...

Alumni Journal

A JOURNAL OF PHARMACEUTICAL PROGRESS.

Published monthly by the Alumni Association of the College of Pharmacy of the City of New York.
Pharmaceutical Department of Columbia University.

PUBLISHED AT 43 FULTON ST., NEW YORK CITY.

CHAS. A. LOTZ, PH.G., EDITOR H. J. GOECKEL, PHAR.D., ASSOCIATE EDITOR

Vol. XIV. JANUARY, 1907 No. 1.

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EDITORIAL.

The subject for our editorial this month is the old story; wake up all ye subscribers and send in articles of scientific interest to your editors for publication.

We require good solid reading material of scientific interest to all our readers, and it is only from our scientific readers that we can expect such material.

You who now are reading this, must consider yourself such, for were you not such, you would not be receiving this periodical.

It is only by virtue of your scientific knowledge that you are able to comprehend and fathom those difficult problems which confront you all, now and then, in the performance of your chosen profession, and

you should consider it not only a pleasure, but a duty to your fellowman to put in print that which you have acquired through professional experience and which will be of benefit to the next fellow.

An article of this character appeared in the December issue, under the heading of a "Beautiful Essence of Peppermint." Now there is positively no excuse why more of you readers cannot do likewise, you surely must come across some perplexing question now and then in your career, then why not make proper mention of it, and send it in for publication in your official organ.

If you were to see the articles written by your brother professionalists and published in some of our contemporaries, it would make you really ashamed of yourself for your lack of interest in your official organ.

You may say that you have no time to spare. I grant that your time is well taken up in your business, but even so it don't require hours to write an article; write a little at a time, say five minutes, when you have nothing else to do; then when completed mail it to your editors, and you will have become a "literaturist," or, better, a "scribe of the mortar and pestle." See elsewhere articles by Geo. W. Kosh, Phar. D., '05.

The Government Has an Eye on the Drug Trade of New York City.—The daily *Consular and Trade Report* for October 15, has the following comment: "Dr. Darlington, commissioner of the Department of Health in New York City, has made an analysis and assay of 10,000 specimens or samples procured from the wholesale drug establishments either located in New York City or represented by agents. Of all the samples, seventy-two per cent. were found to be adulterated or in some way failed to comply with the standard of pharmacopœia, and are consequently unlawfully sold. Only twenty-eight per cent. were absolutely and reasonably pure, and fifty-six per cent. were so rank, dishonesty compounded and labeled, and so dangerous as to call for the prosecution in the criminal court of the manufacturers and wholesale dealers. A New York journal states that 'no account was taken of the thousands of cases of criminal substitution by the retailer.' The new pure food law will take effect January 1, which will help to bring about a better condition of affairs in the drug market. Dr. Darlington gave notice that he would prosecute with vigor all persons not complying with the State and federal laws."

THE ANNUAL ALUMNI DINNER.

The regular annual Alumni Dinner held at Reisenwebers, Eighth avenue and Fifty-eighth street, New York, on Wednesday evening, December 5th, was a very well attended and enjoyable affair.

The toastmaster, Wm. A. Hoburg, Jr., introduced the following speakers during the course of the dinner:—

The Hon. Martin Saxe, State Senator from the College of Pharmacy district. He delivered a very fine speech, stating that he was in favor of State legislation bearing on pharmacy, when that legislation was to the betterment of pharmacy, and he strongly urged the State Board of Pharmacy to show their preference in all matters pertaining to pharmacy which may come up for passage at Albany, saying that if the State Board expressed its opinion, either for or against legislation affecting pharmacy, such would be received, and given much attention, for they (the Board of Pharmacy) knew better than the legislators in nearly every instance what was good for the welfare of pharmacy, and that they should not be a neutral body but take an active part in all pharmaceutical legislation.

The next speaker introduced was the Hon. President of the Alumni Association, who made a brief address.

In between dining and speeches, Dan Quinn, the humorist and singer, rendered several popular songs and stories.

Prof. Rusby related his experiences of some years ago, seeking two crates of strawberries from a railroad station somewhere out in New Jersey and wherein he was arrested and released immediately. The story is too long to relate here, but we hope to have Prof. Rusby write it up for the Journal in the near future.

The next speaker was Mr. Owens, who is called the "College Plumber," because he has a plumbing business near the college and does all the plumbing work for the college (and others were done too).

Dr. Wm. Muir, a charter member of the Alumni Association, was the next speaker, followed by Dr. Diekman, A. C. Searles and Chas. S. Erb. By this time the dining was over and all went home feeling happy.

Amongst the wholesalers noticed were Mr. Dill, of Wm. R. Warner & Co.; Mr. Burns, of McKesson & Robbins; Mr. Culpepper, of Coca Cola Co.; Mr. Mandlebaum, of Wm. S. Merrill Co., and several others.

CINCHONA CULTURE.

Referring to his report on cinchona culture in India, published in Daily Consular and Trade Reports on October 10, Consul General W. H. Michael now sends additional information from the American consular agent at Madras:

The director of the government cinchona plantation in the Madras Presidency informed him "that he has no doubt that cinchona trees might be cultivated on the sides of mountains in the Southern States of America where there is no frost, but as a commercial undertaking the first requisite is cheap labor." Cinchona grown on the Nilgiri range of hills, in the Madras Presidency, is subject to a mean temperature of about 60 degrees F.; but from December to February frosts are prevalent, and the temperature at night falls to about 25 degrees F. The day temperature seldom exceeds 75 degrees F. or falls below 55 degrees.

The director refers interested persons to the following books on the cultivation of cinchona: (1) The Cinchona Planter's Manual, by J. Cowen, Colombo Observer Press (Ceylon); (2) The Cinchona Barks, by F. McKiger, J. A. Churchill, London; (3) Handbook of Cinchona Culture, by Van Gorkom-Trabner & Co.; (4) De Kina Cultuur in Azie, by J. B. Moens de Bussy, Amsterdam; (5) Peruvian Bark, by Clements Markham, John Murray, London. The director suggests that any one desiring to study the chemistry of the cinchona alkaloids may find the work entitled "Les Alcaloids des Quinquinas," by E. Leger, published in Paris, of much interest and value.

ANTI-OPIUM REGULATIONS.

A dispatch from Pekin to the New York Times states that on November 21 eleven stringent Chinese regulations were issued for carrying into effect the anti-opium edict. The poppy-culture acreage must decrease one-tenth annually and cease altogether in a decade. All opium smokers must register, and those under 60 must decrease its use 20 per cent. annually. All government officials under 60 must abandon opium within six months or give up office, but may retain their rank. Those who continue its use secretly will be deprived of both rank and office. Shops selling opium are to be closed gradually, and the opium dens closed within six months. Medicines counteracting the opium taste are to be furnished the people free, or at cost price. The Foreign Office is commanded to negotiate with the British,

French, Dutch and Persian ministers with a view of terminating the export of opium to China within ten years. The importation of morphia and hypodermic syringes is prohibited.—*Consular Reports.*

TO PREVENT POTATO ROT.

German papers publish a method to prevent potatoes in cellars from rotting, on which Consul General Guenther, of Frankfort, reports:

It is claimed that the potato fungus causes rotting. This fungus, if present on some potatoes in the cellar, spreads to other potatoes and causes rot. A solution of one pound of chloride of lime dissolved in 25 gallons of water is used for washing the potatoes by means of a broom. They are then spread out to dry. Through this procedure the spores of the fungus are killed.—*Consular Reports.*

UTILIZATION OF NITROGEN.

The Badische Anilin und Sodafabrik in Ludwigshafen am Rhein, Germany, propose to erect, at a cost of over $7,500,000, a factory in which the nitrogen in the air is to be utilized for the manufacture of a preparation similar in its properties to Chile saltpeter. The works are to be driven by water power from the River Alz in the Palatinate. —*From Consular Reports.*

Nothing but Graft.—"Ah," said the enthusiastic friend, "your father-in-law gave you a check for $10,000, I understand."

"Yes," responded the young man who had married the daughter of a trust magnate, "but confound him, he made me give him a secret rebate."—*Houston Chronicle.*

Not Locomotive.—Mrs. Goodkind: "So you are an engineer, and can't get a job in this town! Well, why don't you go to some other place?"

Tattereden Torne: "I can't, madam; you see I'm a stationary engineer!"—*Woman's Home Companion.*

Mistrusted.—"I used to know Mr. Sneeker, who was with your firm. I understand he is a tried and trusted employe——"

"He was trusted, yes, and he'll be tried, too, if we're so fortunate as to catch him."—*Philadelphia Press.*

BOTANY AND MATERIA MEDICA.

By Oliver A. Farwell, Botanist of Parke, Davis & Co.

THE POTATOES.

According to the *Scientific American,* the name potato comes from the Indian word "botata" of the Urabak language of Darien, and was applied by the Indians to the sweet potato, the *Ipomœa Batatas* Lam. It is one of the most widely distributed of plants, coming from Central and South America. Some of the other names derived from the above are: "batata," "potata," "potato," "potada," "potate," and "sweet," "Carolina," "Bermuda," "West Indian," "Spanish," and "long" potato. It was introduced into Spain by Columbus in 1504, whence it spread rapidly into the adjoining countries, so that half a century later it was common all over southern Europe. It was early introduced into England. In 1597 Gerard transferred the name "potatoes" from the "sweet potato," *Ipomœa Batatas,* to the Irish potato, *Solanum tuberosum* Lin., calling it "English," "American," or "Virginia" potato; the other names are "Irish," "round," "common," and "white" potato; the pataque, the Murphy, and the spud; the Indian name is "appa" and the French "pomme de terre," also applied to the tubers of the hog peanut, *Apios tuberosa.* It was introduced about 1580, or earlier, into Spain, from whence it gradually spread to the other countries of southern Europe. It was introduced into Ireland by Sir Richard Grenville about 1585, who, after planting a colony on Roanoke Island, sailed for home, capturing a Spanish ship on the way; this ship was filled with the "spuds" and other vegetable products of the New World. The old belief that the Irish potato was introduced into Ireland by returning Virginia colonists can no longer be sustained, as the common potato at that time was not known on the North American continent. There are other records which would seem to indicate that Sir John Hawkins and Sir Francis Drake introduced the common potato into Ireland and England in 1586. The sweet potato is an enlarged or tuberous root, while the Irish or white potato is the enlarged end of an underground stem. The Irish potato was not cultivated in New England until some time in the first quarter of the eighteenth century.

GINSENG IN CHINA.

China consumes so large a proportion of this drug that it may be said to be the only market for it. It is as well known and as essential to the Chinaman as tea. In China medicine goes hand in hand with

the occult sciences, and the efficacy of medicinal remedies is not inquired into; tried and discarded by the medical professions of both America and Europe, it still remains to the Chinaman a panacea "for all the ills that flesh is heir to," and has been styled the "cinchona of China." The recently revived *Kew Bulletin* has presented a revision of the species under *Aralia*. The author recognizes seven varieties besides the type, as follows:

Aralia quinquefolia, Decne. and Planch. United States and Canada. This is the type.

Var. *Ginseng*, Regel and Maack. Manchuria, and cultivated in Corea and Japan.

Var. *repens*, Burkill. Corea and Japan.

Var. *major*, Burkill. Central China.

Var. *Pseudo-ginseng*, Burkill. Nepal. Shevpore.

Var. *Notoginseng*, Burkill. South China.

Var. *angustifolia*, Burkill. British India.

Var. *elegantior*, Burkill.

Var. *Ginseng* produces Manchurian ginseng, var. *repens* Japanese ginseng, and var. *Notoginseng* South China ginseng. The only other form of the species that produces a commercial article is the American type. The *Bulletin* further says that in the east the rootstocks of *Centaurea, Adenophora, Angelica, Platycodon, Rehmannia*, and of other plants are used as adulterants as well as ginseng roots that have once been extracted and then dried.

A New Source of Alcohol in West Australia.

As early as 1876 an application was made to the Australian Patent Office for a patent covering a process of making sugar from the grass-trees of Australia. These "grass-trees" belong to the rush family, Juncaceæ, and to the genus *Xanthorrhea*, of which there are some dozen species. Ten years earlier than this it was known that about twenty gallons of a saccharine juice could be obtained from a ton of the pith of interior parts of the plant, which when distilled yielded four gallons of proof spirit. Nothing was done, however, at that time to try to make alcohol from the grass-tree on a commercial scale. Of recent years the grass-trees have become so numerous that they are considered a pernicious weed. The Australian Agricultural Department has turned its attention to the matter and is conducting experiments in making

sugar and alcohol from these tree-like rushes. If successful we will have another source of production of alcohol, and especially of methylated spirit.

ANOTHER SNAKE-BITE REMEDY.

This time, according to the *Montreal Pharmaceutical Journal*, it is just the common, broad-leaved, dooryard plantain, *Plantago major* Lin. The modus operandi is to apply a poultice of the leaves to the bite and to chew a few leaves, swallowing the juice. Presumably the green leaf is preferred. It is said that this remedy was discovered by a colored boy who had been watching a fight between a rattlesnake and a mongoose; every time the mongoose was bitten it left the rattler to eat a few plantain leaves, when it would return to the fight. We give it for what it is worth.

THE LARGEST FOWER IN THE WORLD.

The *American Druggist* reports that in Java and Sumatra there has been found recently a plant of the Arum Family (Aroideæ) which has a larger flower than the *Rafflesia*. It is said to be a sort of mammoth funnel, 1.2 meters in diameter, the interior of which is of the color of red wine; the pistil is of a creamy yellow color 1.5 meters in height, and has a penetrating odor. The leaf is about 15 meters in circumference, on a stalk about 3.5 meters long by .3 meters in diameter.

COLOR OF COLA SEEDS.

According to the *Pharmaceutical Journal* C. Hartwich has proven that the difference in color of fresh cola seeds, some being red and some white, is not due to differences in their ages, as heretofore supposed, by finding one cola seed with one white cotyledon and one red one.—*Bulletin Pharmacy.*

ALUMNI PIN.

Only graduates are permitted to purchase and entitled to wear this pin. It is distinct and different from a class pin, which can be worn by any member of a class. The pin is made of solid gold with blue enamel. Its style is shown on cover. Your name, year of graduation and the pin number will appear upon the reverse side. The cost is $6 if delivered, or $6.15 if sent by registered mail. Pins may be obtained upon application to Dr. George C. Diekman, 115 West Sixty-eighth street, New York City.

ALUMNI, COLLEGE AND CLASS NOTES.

Contributors.

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ALUMNI.

Came across A. E. Hegeman, '83 (N. Y. C. P.), (Phar. D., Brooklyn College Phar.); he is conducting a prosperous drug store in Bath Beach, and is also now secretary of the Brooklyn College of Pharmacy. (N. Y. C. P. boys are in evidence everywhere nowadays.) We wish him plenty of success.

Dr. Jorgenson, '05, Phar. D., is now with Schieffelin & Co. in their analytical laboratory.

Don't forget the annual ball of The Alumni Association at Madison Square Concert Hall, Wednesday evening, January 30th, 1907. Bring the ladies and your friends. Chas. S. Erb is chairman.

Herbig, '03, is working for Uncle Sam, and is at present at Yokohama, Japan (Naval Hosp.). He and Hermann, '03, both in the service, were at the Naval Hospital in Brooklyn some time ago, earning their bread and butter, but both are seeing the world for the United States. Hermann is still down at Camp Elliott, Panama, Canal Zone.

Received a letter from Geo. W. Koch, '02, Phar. D., '05; he has purchased a store at Woodhaven, L. I., which has been established over forty years; first as the Vandeveer Pharmacy, then Irelands, and

finally Koch's. Plenty of luck, old boy. Elsewhere in this issue he contributes some "stickers" as he calls them.

STICKERS.

℞—Oil Cubebs.....½ drachms
Pulvext Buchu.....½ "
Mft. Cops, No. XII.
Sig. as dir.—Dr. X.

This prescription was recently received by me, have tried various methods of mossing without success; the question arose which method was best, add olive oil and form soft capsules or as the method below. Althea was tried, but upon mossing the oil oozed out, the moss being workable till upon the pill machine, when the cubeb oil made its appearance. I finally employed one drachm Powd. Ext. Glycyrrhiza, mossed it with the Buchu and a little diluted alcohol, and then incorporated lastly the oil which did not separate out when rolled or cut upon the pill machine.

FOLLOWING.

℞—Tr. Ferri Chloride ..... 1 drachm.
Calomel ..... ½ "
Glycerine ..... 1 ounce.
Aqua. q.s..... 4 "
M. Sig.—Dr. X.

Open for comment. What would be formed in above mixture? The doctor was notified and potassium chloride was ordered in its stead. Probably bichloride of mercury would be formed and by-products.

Respectfully yours,
GEO. W. KOCH, Phar. D.

Edward W. Gross, '02, is now in business for himself at 112th Street and St. Nicholas Avenue, New York City.

Harry A. Reynolds, '00, is now with Squibb & Sons, Brooklyn, N. Y.

Frederick E. Jorgensen, Ph. G., '05, Phar. D., '06, is in the Analytical Department of Schieffelin & Co.

Bruno Hugo Schubert, '06, is also at Schieffelin's Laboratory.

Paschal M. Everts, '04, has bought the Neegard Pharmacy at 85th Street and Broadway. Clarence C. Perdoe, '06, is clerking for him.

ALUMNI NOTES.

Otto Raubenheimer, the lost Charley Ross, and discoverer of Safety Benzine and patented, has a sign in his window which reads—"We don't sell Candy, Cigars, etc., but everything in Drugs." He is the real article in his vicinity at Verona Place and Fulton Street, Brooklyn.

Horace Sullivan, '06, is with Jas. B. Ryan, 375 Tompkins Avenue, Brooklyn.

Oscar Matthiesen, '00, after eight years' service with J. Wilson, 136th Street and Willis Avenue, Bronx, has severed his connection with that establishment and intends to go in business for himself—good luck to you, Oscar.

ADMONITION.

H. J. Goeckel.

Harken to the voice of Reason
Offering counsel in our need,
Revealing truth in all her actions,
Telling of Life's higher aims.
Enabling us to conquer falsehood:
Nothing is beyond her realm.
Superstitions by her are shattered,
Even delusions she expells.

FRATERNITY NOTES.

At the annual convention of the Kappa Psi Fraternity, held in Baltimore, Md., on Thanksgiving Day, the New York College of Pharmacy chapter was represented by Hiram K. Gaynor, Jr., '07, of Jersey City, N. J.

The following were elected officers of the Grand Council for 1906-1907:

Grand Regent—George L. Holstein, P. D., Lebanon, Pa.

Grand Vice-Regent—Robinette B. Hayes, M. D., Baltimore, Md.

Grand Secretary and Treasurer—Press Eldridge, Jr., New York City.

Grand Historian and Editor—Henry J. Goeckel, Phar. D., Bronx, N. Y.

One petition for a charter was received at the convention.

The annual convention of the Phi Chi Fraternity will be held during this month.

ANNUAL BALL OF THE ALUMNI ASSOCIATION OF N. Y. C. P.

Your editor, having been appointed chairman of the Press Committee, and given power to select four associates on that committee, takes this means of informing the following members that he has selected them to make public in their respective towns or cities that there will be such a ball held this year at Madison Square Concert Hall, on Wednesday evening, January 30, 1907. Tickets and further information from Mr. Chas. S. Erb, 108 Amsterdam Avenue, New York City.

PHILADELPHIA NOTES.

Arthur P. Hitchens, M. D., succeeds J. J. Kinyoun, M. D., as director of the Biological Laboratories of H. K. Mulford Company.

Dr. Hitchens has been connected with the Mulford Biological Laboratories for the past eight years, during the greater period of that time having had personal charge of the preparation of Antitoxins and Curative Sera. He is well qualified to conduct scientific work connected with the production of Antitoxins and Biological Products.

W. F. Elgin, M. D., continues in charge and direction of the Mulford Vaccine Laboratories.

E. D. Reed, M. D., of Ann Arbor, Mich., has been engaged to direct research work, particularly in pharmacology and physiological chemistry.

The Journal of the Medical Association and many other similar medical journals are doing a grand work for the pharmacist, and advocating pharmacopœial preparations and clean prescribing by physicians. The former journal has devoted columns each week to the consideration of the Pharmacopœia, and commenting further in a fascinating and attractive manner on it.

Leather Cement.—Asphalt, 6; rosin, 5; guttapercha, 20; carbon bisulphide, 75; petroleum, 30. All the ingredients except the carbon bisulphide are macerated for a few hours in a vessel standing in boiling water; the thick mass is then cooled, the carbon bisulphide added, and the mixture set aside for several days with occasional agitation.—*Neuste Erfind. und Erfahr.*, 1906, 33, 254.

UTILIZATION OF ALCOHOL.

DENATURED PRODUCT FROM CURRANTS IN GREECE.

Consul General George Horton writes from Athens that the Greek Wine and Spirits Company, organized for the purpose of utilizing and consuming the Corinthian currants, the principal agricultural product of Greece, is making satisfactory progress in its efforts to dispose of the crude alcohol distilled from currants.

They have opened a premanent exhibition in Athens where their lamps, stoves, etc., may be seen and purchased, and they have established depots of denatured alcohol at many convenient points in Athens and other parts of Greece. The alcohol is sold in tins of 5 okes and up, at 80 lepta the oke. (One oke equal to 0.3513 gallon; $1 equal to 5.5 drachmas; 100 leptas equal 1 drachma.) A portable heating stove which they have on exhibition, which really throws out enough heat to warm a room 12 by 24 feet, consumes about 1½ okes in twelve hours. Lamps of from 24 to 32 candlepower can be kept lighted at an expense of from 4 to 6 lepta the hour. The company has in stock lamps of from 12 to 1,500 candlepower.

There has been no opportunity to put the portable stoves to a practical test as yet, as the supply has only recently been received and the cold weather has not yet come on. The lamps are being sold, however, and are giving great satisfaction. They are fitted with mantles and give an extremely bright light.

A recent editorial in "l'Economiste d'Orient" predicts that denatured alcohol will take the place of petroleum for lighting purposes in Greece, rather than gas, electricity, gasoline, or acetylene, the use of which is confined to the principal cities. The same editorial calls attention to the fact that the tax on petroleum constitutes one of the principal sources of revenue for the payment of the public debt, and it predicts that the international control will be compelled to put a tax on denatured alcohol to reimburse itself in case the latter should largely take the place of petroleum.

RETORT COURTEOUS.

Clerk—Mr. B., I have no clean towel to dust the display cases with.

Mr. B. (Manager)—I haven't any in my pocket, do you want my handkerchief?

Clerk—That won't do. I must have something clean.—H. J. G.

COST OF ALCOHOL FROM MOLASSES.

The question as to how cheaply alcohol can be made from molasses is answered by H. Heyn, who stated before the Louisiana Planters' Association, on October 11, that he figured the cost at 20 cents per gallon, which would give the planter six cents for his molasses f. o. b., whereas he now receives but two and three cents.—*Consular Reports.*

The amount of bismuth mined in the United States in 1905 was 24,405 pounds, containing 2,288 pounds of metal, valued at $4,187, states a writer in the *Mining Journal.* The production the previous year was worth only $314. The American consumption of bismuth is 175,000 to 200,000 pounds per year, and imports come in free of duty.

FEMININE PHARMACY.

There in the corner pharmacy,
This lithsome lady lingers,
And patent pills and philters true
Are fashioned by her fingers.

Her phiz behind the soda fount
Is often seen in summer,
How sweetly foams the soda fiz
When you receive it from her.

When mixing belladonna drops
With tincture of lobelia,
And putting up prescriptions
She's fairer than Ophelia.

Each poison in its proper place,
Each potion is her chalice,
Her daedel fingers are so deft
They call her digitalis.

WHAT HE HAD.

Medical Student—What did you operate on that man for?
Eminent Surgeon—Five hundred dollars.
Medical Student—I mean, what did he have?
Eminent Surgeon—Five hundred dollars.—*Puck.*

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The Alumni Journal

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EDITED BY

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CONTENTS

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Alumni Journal

A JOURNAL OF PHARMACEUTICAL PROGRESS.

Published monthly by the Alumni Association of the College of Pharmacy of the City of New York.
Pharmaceutical Department of Columbia University.

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EDITORIAL.

It is with pleasure we make the announcement that we have received several responses to our editorial of last month, wherein we urged our readers to make themselves heard through the medium of their JOURNAL; one of these articles RADIO-ACTIVITY, by Geo. E. Bolles, D. D. S., Ph.G. (N. Y. C. P.), and another on OIL of EUCALYPTUS, by B. B. Alt, Phar. D., space permitting will be published this month. These articles speak for themselves, and it goes to show that perhaps there are many of us who possess the ability to write something "worth while." Though inclination to do so may be lacking, still we trust that a little persuasion will succeed in causing an effort to be made. Do not imagine that you are no genius with the pen, for

there you are mistaken, no matter how poorly you write or how bad the grammar, if you have only the text or theme, leave the linguistic brilliancy or the literary talent to our editorial censors, and lo, like Aladdin's lamp, which did wonders, so will your ideas be drawn out in proper style.

So much for a while, but do not let the subject drop here, keep up the good work of enlightening your brethren, and you will be rewarded by that fame which must come to all who display their calling in the proper way.

At the last meeting of our association some of the members complained that now and then they fail to receive their copy of THE JOURNAL. We wish to say right here that when this happens to any of our readers, if they will just drop a postal to the editor he will at once mail another copy, and see why last copy was not delivered. We wish it understood that all of our readers should receive each and every copy of their JOURNAL, and where such failure of delivery occurs, we want to see that it is attended to at once.

MR. PHILIP FITZ TAKES WELL MERITED REST AND A TRIP ABROAD.

After many years of conscientious service as manager of one of William Wilson's drug stores, Mr. Philip Fitz has terminated his engagement and sailed for Europe.

Mr. Fitz had been contemplating this trip for some time, and the closing of Wilson's stores hastened his preparations. He sailed on January 9th by the American Line to London. While there he will make his headquarters with his parents whom he has not seen for several years. It is his intention also to visit the leading retail drug establishments and many of the wholesale drug houses throughout England and Scotland. He will return during the second week of February and begin a new engagement.

Mr. Fitz has had a wide experience in the management of retail drug stores, also as an analytical and consulting chemist. He will probably return from his trip abroad with many new ideas relative to modern pharmacy.

We wish Mr. Fitz every enjoyment during his absence, and we hope he will return much recuperated from his stay in foreign parts.

RADIO-ACTIVITY.

By George E. Bolles, D. D. S., Ph.G. (N. Y. C. P.).

At this stage of our progress in Chemical Science, we as professional units are called upon to give evidence of at least a general knowledge of radioactivity.

This is comparatively a new term, and having accorded to it only a period of about nine years of existence. It was first recognised by Prof. Bacquerel in the element Uranium in 1896 and although it has been subjected to the most diligent and scrutinizing investigation by men of science like Lodge, Crooks, Thompson and others, still it is possible that we even exaggerate in saying that it is a mere child. The facts which are concerned in explaining radioactivity are somewhat arbitrary in their nature, and no doubt many emphatic but instructive controversies will ensue before there is established an absolute uniformity of opinion. Nevertheless, the accepted facts at our command at this time are reasonably ample, and in consideration of this condition I venture to give you a brief outline of the accepted theory relative to the atomic condition of some kinds of simple matter, such as Uranium, Thorium, Polonium, Actinium, Radium and others, which possess this very remarkable property of atomic radiation or radio-activity.

Without taking any of your time by going into the history, manner of obtaining, or physical properties of these several radioactive elements, I will simply pass on to the real purport of this paper.

Up to a few weeks ago, the atom was supposed to be the most ultramicroscopic and indivisible portion of matter. It was the all important and fundamental unit of chemical science, and which has subsequently permitted the building up of a chemical superstruction which is to say the least actually choked with marvelous complexities. It has ever been an accepted fact, that the mass of an atom of anything could not be conceived of, it is so infinitesimal; it is utterly and absolutely beyond the possible concept of the human mind to grasp its attenuated minuteness. This being the case, we are at once consecutively filled with awe, incredulity, sense of ignorance or intellectual incapacity, when we are gently but firmly informed that atoms themselves are divisible, that they are not ultimate quantities of matter, that they are made up of hundreds and

in some cases thousands of smaller particles, the most important of which are termed Electrons.

Radioactivity, as the term indicates, is that property of a substance which causes it to resolve itself into more simple or ultimate particles, by the process of emanation or radiation from the substance, of particles of matter so small that the comparative size of the atom passes into significance.

For a good mental picture of the atomic condition or state of these radioactive substances, we must conceive that their atoms are in a constant process of disintegration, or we might say spontaneous decomposition. This decomposition takes place very slowly as compared with the amount of force or energy displayed.

Passing on now in our line of thought, we say that there emanates or issues forth from the atoms of these radioactive substances, three distinct kinds of emanations, called respectively the Alpha, Beta and Gamma rays, which differ from each other in several characteristics. Now the question arises, wherein lies the cause of this disintegration, and what are the main differences between the rays resulting from it? It is now mainly accepted that an atom of anything is that quantity of matter, which when further decomposable is resolved into particles charged with positive electricity, and those charged with negative electricity, these being associated together in the atom, and by the terrific disturbance set up resulting in the separation of these positive and negative particles, there is formed the third emanation or ray, which is believed to be an ethereal pulsation or X-ray. The flying positive particles constitute the Alpha ray, the negative particles the Beta ray, and the Ethereal pulsation the Gamma ray. According to the most recent theories, it is believed that all elements are made up of a definite and unchanging number of positive particles, without regard to whether it is one element or another; they are all identical so far as the number of positive particles is concerned. But as to the number of negative particles, they vary exceedingly for the different elements, and it is believed that herein lies the cause of the difference in physical and chemical properties, atomic weights, etc. In fact, it is the number of negative particles to the atom which gives to the elements their individuality.

Another conception of the atom is, that it is an individualized mass of positive electricity, throughout which is disseminated a great number of specks of negative electricity, otherwise called Electrons or Thompson's corpuscles. All of these electrons are flying about furiously within the atom, repelling, encountering, and bombarding each other in a most terrific manner, but on account of the mass or stroma of positive electricity present around them, they are to a great extent maintained within certain spheres of activity.

In measurement according to Lodge the electrons are said to be only one-thousandth of the diameter of an atom of Hydrogen. It is estimated that about 800 electrons are present in an atom of Hydrogen. Thus 800 electrons is the least number that any element can obtain, because Hydrogen is the unit for all chemical considerations.

The atomic weight of Hydrogen being 1, and having for its electronic content 800, then Li. with an atomic weight of 7 would have an electronic content of 5,600. C. being 12 would have 9,600, Sodium at 23 would have 18,400, Br. at 80 would have 6,400, Caesium at 132.7 would have 106,160. Bi. at 208 would have 167,120. Uranium at 232 would have 185,600. Radium at 238 would have 190,400. As can be readily observed, the greater the atomic weight, the greater the electronic contents of the atom. In other words, the greater the atomic weight the greater is the atom of that element, crowded with these flying and bombarding electrons. The elements of low or comparatively low atomic weight, not being excessively crowded with these very active negative particles of electrons, there is not the liability of collision with each other, and consequently the atom is a more stable one, and there is no apparent manifestation of radioactivity. But in the case of those elements having high atomic weights, like Uranium, Caesium, Thurium and Radium, which have from 100,000 to about 200,000 of these electrons, crowded and jammed into one single atom, the collisions, mutual bombardments are so rapid and terrific that the eruption of Vesuvius in its most active state could not be called a circumstance as compared with the state of disturbance which is present within one tiny atom of any of these radioactive elements.

As a result of this intra-atomic upheaval there follows a violent explosion or disruption of the atoms, whose constituents are carried far beyond their usual powers of mutual attraction and the disintegration is recognized and made conspicuous by aid of a special instrument called a Spinthariscope, which shows the electro-positive particles flying off from the atom at a tremendous velocity, approximately 20,000 miles per second. These particles escaping from their parent mass give rise to considerable heat, which according to recent calculations is about 1,000,000 times greater than in the most violent chemical reaction. Radium will heat its own weight of H_2O through 100 degrees C. per hour. Furthermore, if these positive particles are passed into a magnetic field they are deflected to the left.

About 200,000,000,000 of thse Alpha particles are expelled from one gram of Ra. every second. Still, the atoms in Ra. are so numerous that this emanation can continue for years, without sensible alteration diminution in quantity of Radium. They do not possess very great penetrative power, but are readily intercepted by thin layer of air or cardboard.

Still looking to the Spinthariscope it is noticed that there are other and different particles flying off from the atom. They are detected in part by their extreme smallness, being only about one one-thousandth (1-1,000) the diameter of an atom of H. Also by their greater velocity which approximates 170,000 miles per second. Another characteristic is that if they are passed into a magnetic field they are deflected to the right. Their powers of penetration are far greater than the Alpha particles readily passing through sheets of lead or iron of a few millimetres thickness. Then lastly, for our consideration is the Gamma ray or X-ray which results from the disturbance of the ether lying between the particles of the atom. It seems probable that the electrons alone are responsible for this ethereal pulsation when we consider the following facts. That the electrons are found to be identical with the tiny particles which emanate from the cathode in a Crook's vacuum tube. They are negatively charged with electricity, and their velocity approximates that of light. There has been a great deal of controversy in regard to the real origin of the X-rays. The cathode ray is simply the manifestation of myriads of minute projectiles being thrown off

from the negative pole or Cathode, under high electric tension, and in high vacuum. These particles are called electrons and are identical with the electrons found in the atoms of all substances.

As stated, their velocity is most tremendous, being about 170,000 miles per second, and it is fairly well conceded that these projectiles having such great velocity, and coming in contact with some obstacle which arrests their motion, produce such a change or alteration in the electric stress of the surrounding ether, that very irregular electric discharges or pulsations take place in the ether with the manifestation of X-rays. Consequently reverting our attention again to decomposing atoms, we have the identical phenomena taking place in the spontaneous decomposition of the atoms of Ra. Ur. Th. or Polonium or any radioactive substance, that is, flying electrons from the decomposing atom, and these coming sooner or later in contact with obstacles of different kinds which arrest their motion. We can, therefore, summarize somewhat, and say that whenever we have flying electrons and these traveling at their initial velocity, and coming in contact with obstacles which arrest their motion, then we naturally expect, without regard to their origin to find accompanying this condition, an ethereal pulsation or X-ray phenomena.

This Gamma ray or X-ray, as it is called, possesses very extraordinary powers of penetration, readily passing through several inches of sheet iron, lead or aluminum. In the magnetic field, its behavior is absolutely neutral, not being deflected to the right or to the left, thus differing radically from the Alpha and Beta rays.

Another important characteristic of the Gamma or X-ray is the property of producing irritation, when allowed to impinge upon living tissue. This irritation, and at times destructive of tissue almost invariably follows, under certain conditions, especially on prolonged exposure to its rays, whether the source of the X-ray be from the Cathode rays in Crook's tube, or it is evolved as a result of flying electrons from the atoms of radioactive substances.

Finally, we again deduce the following fact. Wherever we have free active electrons, so there will we also have ethereal pulsation or X-ray with its inevitable sequel.

OIL OF EUCALYPTUS.

The tabulation of results given in the accompanying table is based on the examination of Oils of Eucalyptus, which are being submitted to the wholesale trade as U. S. P. standards.

Those oils containing phellandrene, a terpene which the Pharmacopœia states should not be present to more than a certain extent and which is detected as follows: If 2 c.c. of the oil be mixed with 4 c.c. of glacial acetic acid and 3 c.c. of a saturated aqueous solution of sodium nitrate be gradually added, the mixture when gently stirred should not form crystals of phellandrene nitrite (from U. S. P.); will in this case be found low in cyneol and extremely high in optical rotation.

The low per cent. of cyneol may be due to the nature of these oils but in some cases it is due to adulteration of the oil by the addition of castor oil.

The high optical rotation in this case is due to the excessive amount of phellandrene, the optical rotation of which is †103.1°.

Samples of this kind are usually detected by their low per cent. of cyneol which usually ranges between 38-40%; their comparative high specific gravity which ranges from 0.917 to 0.919; and, lastly, by their greater viscosity.

It seems to me, and many other chemists and pharmacists, that the Pharmacopœia does not go far enough into detail regarding the test for the presence of phellandrene in Oil of Eucalyptus.

It only states that the crystals of phellandrene nitrite should not form.

To my own estimation it should at least describe the crystals so that one could be more positive of their presence.

Those who have never seen crystals of phellandrene nitrite as they appear in the test would hardly recognize the yellowish mass which forms as such.

To the naked eye the mass seems to be non-crystalline, but under the microscope it appears otherwise.

The crystals then appear colorless acicular and are formed in concentric clusters.

Following is a method of isolation and test of identity sufficient to prove the presence of phellandrene in this case and many others:

Separate the phellandrene nitrite from the test solution and oil by filtration, wash the residue on the filter with distilled water; in which the phellandrene nitrite is insoluble; to free it of the reagents used in testing for its presence, now wash it with methyl alcohol, in which it is only slightly soluble, to free it of adhering oil.

After this treatment the residue should be practically colorless.

Now dissolve the residue in ether, in which it should be extremely soluble, and crystallize from same.

If the crystals form in concentric clusters and have a melting point of 105°C. it will suffice to prove their presence.

OIL OF EUCALYPTUS.

No.	Marked	Color	Specific Gravity	At X° C	Optical Rotation Not more than	Phellandrene	% Cyneol. Not less than
	U. S. P. Requirem't	Colorless to Pale Yellow	0.905 to 0.925	25°	+10.°	None	50%
1	Globulous	Pale Yellow	0.910	25°	+ 5.°	"	88%
3	"	"	0.909	27°	+ 5.°	"	61%
2	"	"	0.912	25°	+ 5.°	"	58%
4	"	"	0.912	25°	+ 4.7°	"	77%
5	"	"	0.920	24°	+ 4.8°	"	67%
6	"	"	0.930	26°	+ 4.7°	"	63%
7	"	"	0.929	24°	+ 4.5°	"	71%
8	"	"	0.929	25°	+ 4.3°	"	55%
9	"	"	0.929	25°	+ 4.2°	"	71%
10	Astral	Yellowish Green	0.882	26°	+42.5°	Present	20%
11	"	"	0.883	26°	+45.°	"	15%
12	"	"	0.882	26°	+42.5°	"	9%
13	"	"	0.882	26°	+42.°	"	19%
14	Globulous	Pale Yellow	0.910	26°	+55.°	None	69%

B. B. ALT, Phar. D.

GAINING THE PHYSICIAN'S CONFIDENCE.

The success of a retail business is largely dependent upon the confidence placed in the store by physicians. One of the most feasible methods of gaining this confidence is to direct attention to the quality of drugs and chemicals carried in stock, which of necessity must be of the highest quality. It is frequently the case that a physician is quite as desirous to know of such a store as the druggist is to have it known. Indeed their interests in this regard, as well as their relation to the community, are identical. There are, of course, various ways in which the subject can be introduced, but a direct circular letter on the subject is no doubt the most effectual, both from a professional and a business standpoint. In this connection we know of no higher recommendation for a prescription department, and hence for a store, than the stocking of a complete line of standard chemicals, such as those of the well-known manufacturing chemists, Powers-Weightman-Rosengarten Company, and we direct the attention of our readers to their announcement on the back cover of this edition.

PEANUT-OIL YIELD.

INFORMATION FOR STARTING QUININE INDUSTRY IN AMERICA.

SENEGAL VARIETY PRODUCES THE HEAVIEST PERCENTAGE.

Replying to American inquiries in regard to the commercial practice in Marseille, Consul General Robert P. Skinner states that no special claims are made by buyers, nor is any guaranty given by importers or sellers as to the yield of oil of the various grades of peanuts sold in that market.

From long experience it is known that Senegal peanuts in the shell yield from 32 to 33 per cent. of oil, taken on the gross receipt, including the shell. These nuts comprise the Ruffisque, Cayor, and Sine qualities. Gambia peanuts in the shell yield from 31½ to 32 per cent. of oil. The Senegal nuts yield the better qualities of oil, the value of the same being about 5 francs (96 cents) per 100 kilos (220.4 pounds) more than that of the Gambia nuts. The oil of Senegal nuts brings from 50 centimes (9.6 cents) to 1 franc (19.3 cents) per 100 kilos (220.4 pounds) more than Gambia nuts. Both grades of nuts yield from 21 to 22 per cent. of oil on the first pressing and from 10 to 11 per cent. on the second pressing. Oils of the first or cold pressing are naturally of the high grades, and the second or warm pressings supply secondary qualities.—*Consular Reports.*

CHEAP QUININE FOR BENGAL.

Referring to his former report on the encouragement extended by the British Indian Government to the cultivation of the cinchona tree and the production of quinine in India, Consul-General W. H. Michael writes from Calcutta:

The Government of Bengal has taken steps recently to extend the cultivation of cinchona and the manufacture of quinine at Sonada. The new plantation opened four years ago is now beginning to send good quantities of bark to the factory, and a further extension is now under consideration, which will make it unquestionably the finest cinchona estate in the world. The factory is at present being enlarged and equipped with additional machinery, so that ere long the output of quinine will be considerably increased, and fresh outlets for its distribution will be arranged for, thus placing packets of this precious medicine within easy reach of the poorest farmer of Bengal, the price of the packets being fixed at 1 pice each, which is one-half of a cent.

RED CROSS NOTES.

Ipecac.

When applied to the skin, ipecac irritates; blood is forced into the cutaneous capillary; the vesicle glands secrete faster than they excrete and pus appears. When continued, the irritation exhausts the ganglia, the impairment of vital energy results in the death of the tissues, and pus appears in the vesicle.

Under a law in New Zealand drug clerks are allowed to work only 52 hours a week.

In France the bill of a physician or druggist cannot be collected if more than two years old.

Tuberculosis patients who are blonde should sojourn in the North. Only brunette invalids do well in the South.

LEGIBLE PRESCRIPTIONS.

A plea for more legible prescriptions should meet with a universal response. Many druggists rely on their familiarity with the respective physicians handwriting, or guess work as to the possible combination in compounding a prescription. An adoption of the rescript recently issued by the Austrian Minister, ordering that no pharmacist shall deliver medicines unless prescriptions are legibly written, would be beneficial all around.

WORDS OF INTEREST TO PHARMACISTS.

The following list of words and meanings has been compiled from the Oxford English Dictionary, the latest section of which (Ph-Piper) includes many words of interest to pharmacists. Several of the words given are now obsolete or rarely used, while others are not now used in the sense in which they were employed originally. The uses of all the words are copiously illustrated by Dr. Murray, the learned editor of the great dictionary, to which readers of the P. J. are referred for examples.

Pharmacal.—Of the nature of, or dealing with, drugs; pharmaceutical.

Pharmaceutic.—Pertaining or relating to pharmacy; pharmaceutical; the science of pharmacy; that branch of medical science which relates to the use of medicinal drugs.

Pharmaceutics=Pharmaceutic.

Pharmaceutical.—Pertaining to or engaged in pharmacy; relating to the preparation, use, or sale of medicinal drugs; a pharmaceutical preparation; a medicinal drug.

Pharmaceutically.—In relation to, or from the point of view of, pharmacy.

Pharmaceutist.—A pharmaceutic practitioner; a pharmacist, druggist.

Pharmacian=Pharmacist.

Pharmacist.—A person skilled or engaged in pharmacy; one who prepares or dispenses medicines; a druggist or pharmaceutical chemist.

Pharmacize.—To treat with drugs, to "physic."

Pharmack.—A drug, a medicine.

Pharmacodynamic.—Relating to the powers or effects of drugs.

Pharmacodynamics.—The science or subject of the powers or effects of drugs.

Pharmacognosia=Pharmacognosy.

Pharmacognosis=Pharmacognosy.

Pharmacognosy.—The knowledge of drugs, pharmacology; especially as a branch of natural history relating to medicinal substances in their natural or unprepared state.

Pharmacognostical.—Pertaining to pharmacognosy.

Pharmacognostically.—In relation to pharmacognosy.

Pharmacognostics=Pharmacognosy.

Pharmacography.—A description of drugs.

Pharmacolite.—Hydrous arsenate of calcium.

Pharmacology.—That branch of medical science which relates to drugs, their preparation, uses, and effects; the science or theory of pharmacy.

Pharmacological.—Pertaining or relating to pharmacology.

Pharmacologically.—In relation to pharmacology.

Pharmacologist.—A person versed in pharmacology.

Pharmacomania.—A mania or craze for using or trying drugs.

Pharmacomanical.—Madly or irrationally addicted to drugs.

Pharmacomathy=Pharmacognosy.

Pharmacometer.—A vessel or contrivance for measuring drugs.

Pharmacomorphic.—Pertaining to the form or appearance of drugs.

Pharmacopedia.—The art of imparting instruction or information about drugs, or a work containing such information; the sum of scientific knowledge concerning drugs and medical preparations.

Pharmacopedic.—Relating to the study of drugs.

Pharmacopedics.—The scientific study of drugs and medicinal preparations.

Pharmacopedy.—Pharmacopedia.

Pharmacopœia.—A book containing a list of drugs, with directions for their preparation and identification; such a book officially published by authority and revised at stated times; a collection or stock of drugs; a chemical laboratory.

Pharmacopœial.—Pertaining to a pharmacopœia; recognized in, or prepared, administered, etc., according to the directions of the official Pharmacopœia.

Pharmacopœian.—Versed in the Pharmacopœia; acquainted with the use of drugs; a person versed in the Pharmacopœia.

Pharmacopœist.—The compiler of a Pharmacopœia.

Pharmacopoietic.—Pertaining to the making or compounding of drugs.

Pharmacopoietical.—Pharmacopoietic.

Pharmacopole=Pharmacopolist.

Pharmacopolic.—Drug selling.

Pharmacopolitan=Pharmacopolist.

Pharmacopolist.—A seller of drugs; an apothecary, a druggist.

Pharmacopoly.—A place where drugs are sold; an apothecary's shop.

Pharmacosiderite.—Hydrous arsenate of iron.

Pharmacotheon.—A divine medicine.

Pharmacy.—A medicine or medical potion; the use or administration of drugs or medicines; the art or practice of collecting, preparing, and dispensing drugs, especially for medicinal purposes; the making or compounding of medicines; the occupation of a druggist or pharmaceutical chemist; a place where medicines are prepared or dispensed; a drug store or dispensary.

Among the words which are marked obselete are pharmacal, pharmacian, pharmacize, pharmack, pharmacopoietic, pharmacopoly, and pharmacotheon. The same mark is attached to the third meaning of the word pharmacopœia and the first meaning of the word pharmacy, but space will not permit of further reference to the many points of interest in this section of the great dictionary.

THE ABSORBENT VALUES OF OINTMENT BASES.

Prof. Francis Hemm, in a paper read before the Missouri Pharmaceutical Association, presented the following valuable table showing the amount of water absorbed by the various ointment bases:

Lard	100 parts	Water,	15 parts.
Benzoinated lard	100 parts	Water,	17 parts.
Lard, with 5% glycerin	100 parts	Water,	10 parts.
Lard, with 2% resin	100 parts	Water,	22 parts.
Lard, with 10% vaselin	100 parts	Water,	4 parts.
Ointment	100 parts	Water,	40 parts.
Cerate	100 parts	Water,	40 parts.
Spermaceti cerate	100 parts	Water,	30 parts.
Cold cream	100 parts	Water,	50 parts.
Petrolatum	100 parts	Water,	10 parts.
With 5% yellow wax	100 parts	Water,	65 parts.
Hydrous wool-fat lanolin	100 parts	Water,	200 parts.
Anhydrous wool-fat	100 parts	Water,	300 parts.
Casein ointment	100 parts	Water,	an indefinite amount.

This table is one of considerable importance to the druggist in dispensing ointments.—*Bulletin of Phar.*

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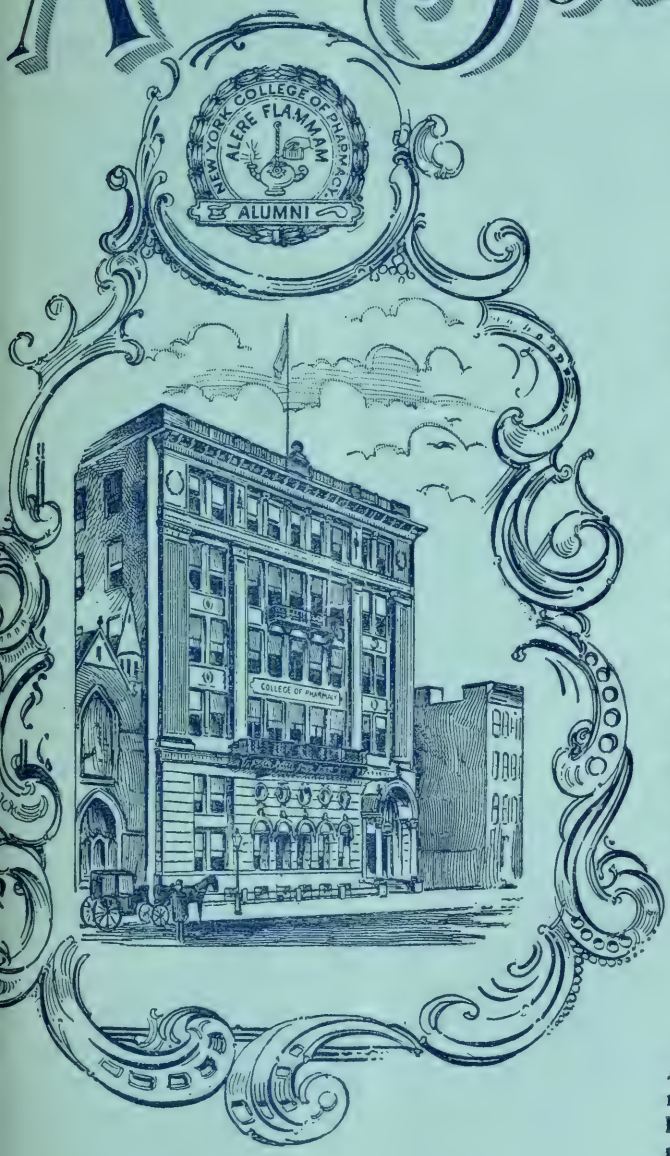

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CHAS. A. LOTZ, PH.G., EDITOR H. J. GOECKEL, PHAR D., ASSOCIATE EDITOR

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EDITORIAL.

With this issue we close a year in the history of the Alumni Journal, which has been more than we ever expected.

The past year, under the new management of the Journal has been truly a successful year, and it is due to the advertisers who so kindly aided in upbuilding your Alumni Journal and those of your readers who contributed their articles, that the success belongs—and as long as these continue to lend their assistance, then will the Journal live in success. We must again remind our readers of the necessity of patronizing those who advertise in our Journal so that they will see that they are getting returns on their investments.

We will consider it a very great favor if any of our readers will assist the Journal by securing advertisements for its pages and offer liberal inducements to those securing same—full particulars upon application to the Editor in charge.

Our next year we want to make a grander success than the past and so this appeal to the readers and their friends for their assistance in securing advertisements and articles of interest, for you know that to publish a paper of our class requires financial and scientific support, therefore, you are urged to do your utmost towards making The Alumni Journal, a Journal amongst Journals, and one which will be sought and called for by all professions.

GRADUATES FROM THE NEW YORK COLLEGE OF PHARMACY.

Table showing the number of Graduates in Pharmacy each year from 1831 to 1906:

1831..	3	1846..	2	1861..	9	1877..	55	1892..	103
1832..	4	1847..	5	1862..	4	1878..	49	1893..	112
1833..	1	1848..	1	1863..	7	1879..	65	1894..	128
1834..	2	1849..	1	1864..	2	1880..	44	1895..	105
1835..	3	1850..	0	1865..	7	1881..	65	1896..	134
1836..	7	1851..	3	1866..	5	1882..	83	1897..	127
1837..	8	1852..	1	1867..	8	1883..	60	1898..	148
1838..	3	1853..	1	1868..	7	1884..	71	1899..	109
1839..	3	1854..	4	1869..	4	1885..	73	1900..	97
1840..	1	1855..	2	1870..	11	1886..	84	1901..	125
1841..	4	1856..	3	1871..	11	1887..	81	1902..	119
1842..	3	1857..	0	1872..	9	1888..	87	1903..	94
1843..	0	1858..	2	1873..	33	1889..	106	1904..	88
1844..	4	1859..	2	1874..	35	1890..	91	1905..	110
1845..	3	1860..	5	1875..	37	1891..	119	1906..	173
				1876..	39				

Total.. 3,194.

Table showing the number of Post-Graduates receiving the degree of Doctor of Pharmacy from 1896 to 1906:

1896....	7	1899....	7	1902....	15	1905....	15
1897....	6	1900....	8	1903....	7	1906....	15
1898....	9	1901....	9	1904....	15		

Total.... 115.

Number of Graduates receiving the degree of Pharmaceutical Chemist:

1905.....	3	1906.....	10	Total.....	13.

[*Reprinted from the American Druggist and Pharmaceutical Record for October 9, 1905.*]

PERMANENT OINTMENT OF RED MERCURIC OXIDE.[1]

By Otto Raubenheimer, Ph. G., Brooklyn, N. Y.

Many druggists have experienced annoyance on account of the instability of the ointment of red mercuric oxide. We prepare a quantity and in a few days or a month, when we have occasion to use it, we find the upper part gray or black and are obliged to throw it away. In order to obtain information on this subject I presented a query at the 1904 meeting (A. Ph. A. Proceedings, vol. 52, p. 255), "How May Ung. Hydrarg. Oxid. Rub. be prepared so it will keep a nice red color?" Unfortunately this query remained unanswered, so I made experiments myself and in October, 1904, succeeded with the following formula:

Red mercuric oxide, in very fine powder	10 Gm.
Castor oil	5 Gm.
Petrolatum	85 Gm.

Triturate the red mercuric oxide with the castor oil until a perfectly smooth mixture results, then gradually incorporate the petrolatum and mix thoroughly.

In the preparation of this ointment I use a glass mortar and pestle and a horn spatula. Never use a steel spatula, as the iron will reduce the mercuric oxide to metallic mercury, thus causing the gray or black color.

Put the finished ointment into the jar, smooth the top of the ointment and cover with about 1 inch of water. Whenever you have occasion to use the ointment take it evenly off the top with a horn or rubber spatula and smooth it out again. Never dig any holes into the ointment or leave any ointment around the top of the jar by wiping the spatula thereon. I, by the way, make this a point with all my ointments.

It is not necessary to change the inch of water on top of the ointment. The water keeps the air away.

I have a jar of this ointment on hand which is almost a year old, prepared in October, 1904, and which has not changed since in the least.

[1] Presented to the American Pharmaceutical Association at the Atlantic City meeting, September, 1905.

THE ALUMNI BALL.

The Alumni Ball, held this year at the Concert Hall of Madison Square Garden, Wednesday evening, January 30th, was a scientific mixture of Harmony, Sociability, and Fraternity. The Hall was plenty large enough to hold a good sized affair and the four hundred more or less who attended the affair, were certainly at home and at ease, whether dancing or observing the dancers.

The decorations were very neat and artistic, especially those in front of the boxes of the Kappa-Psi, Classes of '07 and '08 and the Psi-Chi. The members of the latter were very much in evidence all evening, giving their yells both in song and in voice. The Kappa-Psi were more orderly, as they lacked the strength of the Psi-Chi. Graduates of the different classes gave their class yells, this being started off as usual on all such occasions by Messrs. Wendler, Binder and several others of '98.

The music was rendered by Crowley's Eighth Regiment Band, and was very good indeed.

Dancing started about 10 p. m., and kept up until the wee hours; the cotillion was lead by the President, Wm. A. Hoburg, Jr., and his sister, followed by Mr. and Mrs. Binder, Mr. and Mrs. Hitchcock, Mr. and Mrs. Lotz, Mr. O. Matthiessen and Lady, Mr. and Mrs. Haviland, Mr. and Mrs. Gregory, Mr. and Mrs. Erb, and so on down the line; it was very well executed and showed that President Hoburg participated in such functions before.

Refreshments were served in the Ante-Room where all could partake of light drinks and eatables.

Taken all in all it was a very well attended, and surely a successful affair, and the wish of all was, that they would be permitted to attend another ball like this next year. All hail to the Alumni Association of the New York College of Pharmacy and the good social and fraternal features it is imbueing upon its members and their friends.

JOHNNIE ON DOCTORS.

Doctors is men wich come when foaks is sick & they charge the saim whether they git them well or not. Doctors is of too kinds:

1 good doctors 2 cheep doctors

the cheep doctors cost you more than the good doctors the trubbel is that you cant tell the good doctors till you try them and then maybe they aint very good after all.

doctors is made in too ways. one kind goes to college and cuts up ded foaks and the other kind just takes any old mediceen in a bottle and says what wundeful cures it will make and that it is all free. but it aint free you bet you have to pay ten or moar dolars befor you git throuh.

their is a good doctor on our street but most every time he cums to our house he brings a new baby, i think that is prety meen.

ABOUT LEMONS.

If you were going down a very dark and perilous precipice at the darkest hour of night, and you saw a lemon in distress, would you give that Lemon aid?

Was to a wake last night, Mrs. Lemon was squeezed to death.

Also to a wedding last week—Miss Lemon, the bride, invited all the suckers.—*Goeckel's Originals.*

ALUMNI PIN.

Only graduates are permitted to purchase and entitled to wear this pin. It is distinct and different from a class pin, which can be worn by any member of a class. The pin is made of solid gold with blue enamel. Its style is shown on cover. Your name, year of graduation and the pin number will appear upon the reverse side. The cost is $6 if delivered, or $6.15 if sent by registered mail. Pins may be obtained upon application to Dr. George C. Diekman, 115 West Sixty-eighth street, New York City.

ALUMNI, COLLEGE AND CLASS NOTES.

CONTRIBUTORS.

Alumni Association..... .WM. A. HOBURG, Jr., 161 Halsey St., Bklyn.
Classes prior to 1892.....CHAS. S. ERB, 108 Amsterdam Ave., N. Y.
Class 1898.....E. P. WENDLER, 995 E. 165th St., N. Y.
Class 1892.....FRED BORGGREVE, 739 Sixth Ave., N. Y.
Class 1893....EUGENE F. LOHR, Ph.G., 508 Marcy Ave., B'klyn, N. Y.
Class 1894.....FRANK N. POND, 226 Ninth Ave., N. Y.
Class 1895.....GEO. J. DURR, 66 Wyckoff Ave., B'klyn.
Class 1896.....J. HOSTMAN, 204 Bowns St., Jersey City.
Class 1899.....THEODORE E. MEYERS, Dorranceton, Pa
Class 1900.....O. MATTHIESSEN, 570 E. 150th St., N. Y.
Class 1901.....ALBERT C. THOMPSON, 7 W. 64h St., N. Y.
Class 1902.....W. H. FRASER, 427 Amsterdam Ave., N. Y.
Class 1903.....I. SIGEL, 36 Christie St., N. Y.
Class 1904..... .....Q. E. D.
Class 1905.....L. G. COLES, 75 W. 5th St., Bayonne, N. J.
Class 1906.....L. E. HAMMOND, 363 W. 57th St., N. Y.

Walter Scott Kennedy and Frank G. Bradtke have been respectively elected president and vice-president of the post graduate class of 1907.

Buddy Ashton, O. Stechman, post graduates, and Roy Duckworth, passive are reported engaged to be married.

W. H. Gaul, P. G., was operated at the St. Joseph Hospital, Bronx, N. Y., for appendicitis; he is recovering.

H. W. Ferguson, '03 is now with Babcock & Co., perfumers, New York.

Herbert Lentz, '04, who has become a benedict since the last issue of "The Mask" is at present with C. A. Henrichsen, 149th St. and Amsterdam Avenue, N. Y.

Justin S. Brewer, '01, director of the Hegeman Laboratories, N. J. is another one who married this fall.

Eugene A. Dupin is with the Municipal Dep't. of Gas, Water and Electricity, N. Y. City.

S. W. Hunter is a chemist for Parke, Davis & Co., at Detroit, Mich.

John Gerrie Neil, who took the Breitenback prize of $200.00 last spring at Columbia University for attaining the highest average in his class during the Senior year for Ph. C. is now home in Dunedin, New Zealand. After leaving New York he took some special studies in England.

Walter Clyde Overton who won the Kappa Psi gold medal in the same class is now studying medicine. The Kappa Psi medal is awarded by Gamma annually to the man who attains the total highest average in his class for the entire course for the degree of Pharmaceutical Chemist at Columbia University. Both winners are members of the Fraternity.

Harry Reynolds is now with Squibb & Sons of Brooklyn, N. Y.

GRADUATE NOTES.

Dorris Wipple who holds a scholarship in Science at the Columbia University, and who is the business manager of "The 1908 Columbian" is a graduate of the College of Pharmacy.

"Genial" Paul Neilson, formerly assistant in the Pharmaceutical Dept. has opened a pharmacy at 820 Columbus Ave., N. Y. We wish him success. Nathan A. Porter is now in Oakland, California. Miss M. Mildred Hopper and Le Roy Duckworth, '03, were married on Jan. 17, at Pittsburg, Pa. Mr. Duckworth is now the proprietor of the Crystal Chemical Co. of Easton, Pa.

At the last monthly meeting of the "Fraternal Order of Owls" the semi-annual elections of officers took place. For the office of Vice-President, Mr. Chas. H. Leopold was reëlected; Treasurer, Mr. Frank Eusner, reëlected; Reporter, Mr. Henry Jansen.

Membership to the F. O. O. is open to all young men who desire to co-operate with the members in the promotion of sociability and good fellowship toward one another. Further information may be had on addressing the Secretary, Mr. Fred E. Jorgensen, 547 E. 156th street, Bronx.

A package party will be given on Wednesday Evening, March 20, 1907, 8.00 P. M., at Trinity Hall, 156th street and Trinity avenue. Everyone is invited to attend, to lend their assistance in making this the initial affair a rousing success.

Ladies requested to bring a package.

WAY FOR DRUGGISTS TO BEAT THE ICE TRUST.

Druggists who have a large soda water trade are finding that the Ice Trust is as much of an ogre as is the Coal Trust or any of the other trusts. Some druggists have found practical ways of frustrating the extortionists, and in the June issue of *The Soda Fountain* an interesting account was given of the refrigerating plant which has been installed by a prominent Philadelphia pharmacist, who for a year or more has been free from paying tribute to the Ice Trust, while at the same time he has preserved an even temperature all the time in his cooling apparatus.

This pharmacist makes ammonia do the work of the frost king by forming a layer of ice about the iron coil in a tank full of filtered water. As the ice is formed about these coils the temperature of the water about them falls, and when the thermometer registers 33 degrees the motor stops and no more ice is formed until the temperature of the water goes up a few degrees. This rise takes some time, for water absorbs and parts with heat or cold very slowly. This colled, filtered water is pumped into the tanks of the fountain where the soda water coils are located, while beneath them, in most fountains, are the syrup compartments. With this hint a soda water operator, aided by a chemist and plumber, can make himself independent of the Ice Trust.

NOTICE!

Readers are requested to enclose postage for replies to inquiries. Extra Copies are ten cents each.

Our doctor told me that he has a handsome practice and just think, I am one of the patients.

HUNTING IN HONDURAS.

By William Pruss, Ph. G., '04.

In the month of August of the past year I set out accompanied by my brother Captain P. Pruss on a hunting trip to Honduras.

Long before the date of our departure I had pictured to myself the realism of the pleasures and strenuosity of such a trip, but vivid indeed as were those mental sketches they were very far from being exaggerated when the reality was encountered.

It seldom happens that the common variety of drug clerk can boast of an unerring aim and fearless recklessness.

I am a hardworking member of the drug-clerk fraternity having a goodly knowledge as to the making up of the most abstruse perscription, but having little or no intimacy with the loading and intricate working of a Winchester repeating rifle, and yet when the story of my hunting trip comes to be written and read, it will be found that upon the memorable and strenuous hunting trip, I took my share of dangers and fortunes of the day in a manner that reflects some credit at all events on myself and my old *Alma Mater*. I say this in no spirit of boastfulness, but simply as a plain statement of facts.

After a pleasant voyage from New York on the good ship Carit 2, we reached the old fortified seaport of Truxillo in Honduras.

My vacation being limited and the hours at my disposal being consequently limited we set out, after partaking of a little refreshment and the enjoyment of a pipeful or two, by an overland route to Ceiba—an ancient city surrounded by high mountains and dense impenetrable forests.

We rested in Ceiba for two days making final preparations for our trip and enjoying the sights of the old Spanish-Mexican City—wondering at the customs and manners of its dark skinned bright-eyed inhabitants—all so strange and so un-American to us.

On the third day we set out on our trip.

I should have stated that the mountains and forests surrounding Ceiba afford shelter and cover for large herds of wild cattle and deer. Hundreds upon hundreds of wild cats and leopards are found there also, and the dare-devil sport afforded in the hunting of the latter has been the loadstone that atracted many a hardy hunter to Ceiba—an attraction which, by the way, meant death to many a reckless adventurer.

We reached the forests making aim to get to a ground which old hunters had pointed out to us as being the most likely where would be found the game we were principally in quest of—Leopards.

It was late in the afternoon when we reached our camping-ground—an ideal spot with a rich grassy carpet underneath and a cool sparkling stream gushing down the mountain.

Here we loaded our rifles, packed our ammunition belts and proceeded to business.

It is unnecessary to go into every detail of our trip, suffice it is to say that we killed numerous deer, antelope, wild cats and leopards, and that personally, I enjoyed every hour of my strenuous trip.

Everything went on gloriously, I might say hilariously, until the very evening on which we closed our hunting trip and had made arrangements to return to civilization.

On the day in question we had been away from camp from early morning, and as it was a day of considerable excitement attended with the killing of many wild cats and deer we were pretty well fagged out, when we decided on returning to camp and closing our trip. We were returning slowly and chatting in a jovial manner over the success and jollity of our excursion, when my brother suddenly stood still pointing in the direction of an unusually dense thicket of underwood exclaimed "look"! Following the direction of his hand I saw three leopard cubs staring straight at us with eyes like balls of fire.

We "sized them up" carefully and failed to see the mother, my brother insisting she was in the immediate vicinity—an insistence which made me doubly cautious. My brother caught the cubs and as he was about placing them in his hunting sack for the purpose of taking them with us, I heard a slight noise in the branches overhead, on looking up I had scarcely time to notice the wild eyed, blood thirsty mother leopard, when with a piercing howl she sprang from the bough right in the direction of my brother. The huge beast meant business and no doubt would have been successful in a very regrettable business indeed, were it not that in her anxiety she did not study her leap and sprang too far. Quick as thought I raised my rifle and fired directly into the enraged beast. My shot staggered her only, the bullet evidently not reaching the vital spot

I intended. My brother wheeled around quickly and fired right between the eyes of the now madly infuriated leopard. My brother's shot levelled the brute. With a wild death howl she rolled over, and I, to make sure that the last breath was out of the beast, fired a third time at her. She stretched out stone dead.

She was a mighty beast—a noble specimen of the untameable leopard.

When measured it was found she was the biggest specimen of her kind that had been killed in the vicinity within eight (8) years.

So ended our hunting trip. We took the skin with us to Ceiba and also the cubs. Two of the latter we disposed of in Ceiba, the third we took with us intending to bring it to New York and present to the Zoological Society. Unfortunately it died on the voyage home.

I now hold the skin of the leopard in my possession, made into a beatiful rug. Thus ending the story in part of my hunting trip to Honduras.

EXTRACT FROM SULPHURIC ACID AND ALKALI.

LUNGE.

Arsenic is found rarely, and never in more than traces, in acid which has been made from brimstone; most of the latter material, by far, is used where acid free from arsenic is wanted. On the other hand, most kinds of pyrites contain arsenic; and the acid obtained from them is therefore arsenical, but in very different degrees, according to the percentage of arsenic in the pyrites and to the mode of manufacture (page 634, second edition, London, 1891).

In most cases where sulphuric acid is employed, a small percentage of arsenic is of no consequence; for instance, in superphosphate, or in sulphate of soda to be used for alkali, or in glass making. In the latter case certainly most of the arsenic passes over into the muriatic acid, and can be traced there. When the muriatic acid is used for generating chlorine, the arsenic does no harm; for although it probably passes over, or at any rate partly, into the chloride of lime it will only occur in this as the insoluble and innocuous calcium arseniate. Much more harm is caused by the arsenic in the sulphuric and muriatic acid which is employed in the food industries; for instance, in the manufacture of starch-sugar, in the formation of molasses, for pressed yeast, for washing the regenerated char of sugar-works, etc. A. W. Hofman

has reported a poisoning-case in which bread was contaminated with arsenic by the use of arsenical muriatic acid along with soda to make the dough rise.

But even for some purely technical uses, arsenic in sulphuric (or muriatic) acid is not allowable, on the one hand, for the preparation of certain colors, for tinning iron (sheet iron cleaned with arsenical sulphuric acid is here and there covered with spots of reduced arsenic, which will not take the tin coating—see Gosage in Hofman's report, by juries, 1862, page 12); on the other hand, for the manufacture of preparations which serve for food or medicine, and into which a portion of the arsenic might pass over. To these belong tartaric, citric, phosphoric acids, milk of sulphur, sulphide of antimony, etc. (page 636, second edition, London, 1891).

PHARMACOPOEIAL CORRECTIONS.

The N. W. D. A. Committee on Standards and Tests of the U. S. Pharmacopœia and National Formulary invites you to forward as promptly as possible information in regard to such Tests or Standards, including Properties and Solubilities, as in your opinion need correction.

Criticism of Tests should be accompanied by the following data:

(1) Fault found with test (specially state solubilities of article tested).

(2) Manner in which test was applied.

(3) Suggestions as to correction.

Criticism of Standards should give reasons in detail why a change would be desirable, stating when possible the comparative cost of article of the present and proposed standards, bearing in mind that both U. S. P. & N. F. aim to secure a high medical efficiency at a reasonable cost.

In view of the fact that the Committee on Revision of the U. S. P. is at present investigating suggestions for correction; it is desirable that any criticisms you have to offer should be sent to your Committee at the earliest possible date.

If you have criticisms to offer, send them in now.

For the Committee,
THOS. F. MAIN, *Chairman*,
44 Hudson St., New York City.

THE following is a copy of the General Guarantee we have this day filed with the Secretary of Agriculture in accordance with the Rules and Regulations for the enforcement of the Pure Food and Drug Law.

New York, Oct. 22, 1903. LEHN & FINK.

WE, THE UNDERSIGNED, do hereby guarantee that the articles of food and drugs manufactured, packed, distributed and sold by us, such as

CRUDE DRUGS, whole and powdered,
ESSENTIAL OILS,
FIXED OILS,
CHEMICAL PRODUCTS,
PHARMACEUTICAL PREPARATIONS,
PROPRIETORY MEDICINES,

are not adulterated or misbranded within the meaning of the Food and Drugs Act of June 30, 1906.

Lehn & Fink

Importers, Wholesalers and Manufacturers of Drugs, Chemicals Essential Oils and Pharmaceutical Products, 120 William Street

New York, October 22nd, 1906.

ALCOHOL.

I am sending to you a few words in reference to the alcohol sold over the counter of the drug store and of its use when so purchased.

Besides the extensive use in the industrial world, the arts, etc., its use by the consumer has been for various purposes as will be herein enumerated. This list will not in any respect be complete. The main object will be to explain the principle uses when purchased in five and ten cent quantities from the druggist.

Besides being employed as an external application for rheumatic ailments and various other disorders and diseases it is used in the improperly called "warming fluids" as a substitute for the famous exhilarating beverages.

In the United States it is used as a morning drink (eye-opener?) in combinations of the following order: Alcohol, honey, and strong black coffee—mixed in the proportions as may appeal to the user's fancy or desire or as a neighborly gossip may have recommended. This serves as a morning stimulant and is used in the erroneous belief that it enables the drinker to endure severe hardships and disinclinant weather.

In Northern Germany the people use the clear alcohol, mixed in varying proportions of honey and red pepper as a diaphoretic and stimulant. In Central Germany, mixed with an equal volume of water and a little sugar or honey it becomes a beverage.

The continuous use of alcohol of such strength as above is in all probability detrimental to the health and precipitates the nitrogenous and proteolytic enzymes from their respective suspension in the gastric and intestinal tracts, inhibiting their physiologic actions.

I am sending in this short note with the hope that it may contain some information of interest. I will later send in various articles which I trust will prove interesting and instructive to the readers of "The Alumni Journal."

Thanking you for the opportunity, I am

Very truly yours,

A Graduate of 1902.

VOL. XIV. APRIL, 1907. No. 4

THE Alumni Journal

Contents

Published Monthly by the Alumni Association of the College of Pharmacy of the City of New York—Pharmaceutical Department of Columbia University.

Columbia University

THE COLLEGE OF PHARMACY

OF THE CITY OF NEW YORK

The 78th Annual Course of Instruction begins the first week in October, 1907.

The Curriculum, which was remodeled last session, has been extended, and this College now offers a very superior course of instruction in Pharmacy and the allied subjects, with facilities for practical work in its Chemical, Pharmaceutical, Microscopical and Dispensing Laboratories, which are not equalled by any other Teaching College. The Graduate Course is open to Graduates of Pharmacy who have received their degrees from a recognized College of Pharmacy.

FACULTY.

CHARLES F. CHANDLER, A.M., PH.D., M.D., I.L.D., D.Sc.
Professor of Organic Chemistry.

HENRY H. RUSBY, M.D. (Univ. of N. Y.),
Professor of Materia Medica.
Dean of the Faculty.

VIRGIL COBLENTZ, A.M., PHAR.M., PH.D., F.C.S.
Professor of Chemistry.

SMITH ELY JELLIFFE, A.M., M.D., PH.D.
Professor of Pharmacognosy.

GEORGE C. DIEKMAN, PH.G., M.D.
Professor of Pharmacy.

JOHN OEHLER, PH.G.
Adjunct Professor of Chemistry.

ARTHUR H. ELLIOTT, PH.D., F.C.S.
Professor Emeritus of Chemistry.

WILLIAM J. GIES, PH.D.
Professor of Physiological Chemistry, Columbia University.

CARLTON C. CURTIS, PH.D.
Instructor in Botany, Columbia University.

ANTON VORISEK, PHAR.D.
Professor of Analytical Chemistry.

OTHER INSTRUCTORS.

WILLIAM MANSFIELD, PHAR.D.
Instructor in Materia Medica.

OAKLEY A. MORHOUS, PHAR.D.
Instructor in Analytical Chemistry.

CURT P. WIMMER, PHAR.D.
Instructor in Pharmacy.

FREDERICK A. LESLIE, PHAR.D.
Assistant to the Dean.

... The ...

Alumni Journal

A JOURNAL OF PHARMACEUTICAL PROGRESS.

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EDITORIAL.

Elsewhere in this issue we reproduce a circular letter sent out by the College of Pharmacy announcing the addition of a new course to the curriculum to meet the demand for food analysts created by the enactment of the Federal and State Pure Food and Drug Laws. We believe that to the New York College of Pharmacy belongs the distinction of being the first institution of learning to provide an adequate course of special instruction for those desiring to enter this field of service.

As to the syllabus of instruction it can be briefly stated that it will include instructions in the legal standards for the various foods and drugs, and the microscopical and chemical methods of examination to ascertain if they conform to the standards. We expect to be able to give more detailed information in the next issue.

The result of the agitation of the Hudson River Pharmaceutical Association, in bringing the N. S. P. and National Formulary preparations to the attention of the local physicians clearly demonstrates that a great deal can be accomplished in laying aside the dog-eat-dog policy pursued by so many pharmacists and replacing it by intelligent professional co-operation. It shows what can be accomplished even in impossible (?) New York, and puts the patent medicine question "up to the druggist" in an interesting and profitable manner. The following table gives the result of the work, as found by examining the prescription files of several of the stores in the districts of activty.

Jan. 1905 percentage of proprietary prescription ..... 36.
Jan. 1906 percentage of proprietary prescription
(after 9 months work) ..... 21.
Jan. 1907 percentage of proprietary prescription ..... 11.

A decrease after two years of 69.4 per cent. of the total prescribing of patent preparations.

In each instance 500 prescriptions were examined in each store.

BY THE FACULTY.

Jerome:—Did you use any knowledge outside of the hypothetical question in interpreting it?

Prof. S. E. Jelliffe:—To some extent, yes. I had a knowledge of the alphabet to interpret the question, and I used this knowledge.

Dr. Goeckel requests the man who handed out that bunch of lemons last month as "Goeckel's Originals" to retain the largest and most juicy one for himself.

Miss Elsie Florence Henning was married to William Ferguson the evening of April 2nd at St. Luke's P. E. Church. The Ceremony was followed by a reception at the home of Mr. and Mrs. Adolph Henning, No. 527 West One Hundred and Forty eighth Street New York.

Mr. Henning is one of the Alumni's oldest active members and we extend our best wishes to himself and family and the bride and groom.

JUNIOR CLASS DAY.

The Junior Class Day exercises and entertainment will be held at the College Wednesday evening May 1st at 8 P. M.

ARTIFICIAL MINERAL WATERS.

Dr. Hallock, who is a member of the official staff of the American Chemical Society, and is associated with the Carl H. Schultz corporation of New York City, one of the largest producers of artificial mineral waters in the United States, delivered an instructive and interesting lecture before the Senior class at the College of Pharmacy on Wednesday, March 6th, 1907.

In the lecture he described the difference between an ordinary spring water and the mineral waters as being mainly in the quantity of dissolved gases and mineral constituents, the mineral waters containing the larger quantity.

The temperature of the various natural waters varies between 35° F. and 212° F. They often present remarkable appearances when emerging from the earth, by losing their gases, with more or less rapidity, according to the tension to which they were subjected, and by parting with a portion of their mineral constituents. Some of them issue from the earth with rumbling, gurgling or hissing noises; others do so only at regular intervals, and rise to a height of from twenty to forty or more feet; some ascend from the bottom of the sea, of lakes and of rivers. Still others appear many thousand feet above the level of the ocean; some break at a boiling heat thru a crust of ice and snow; others issue with icy coldness near shrubs and flowers. Some destroy vegetation in their immediate vicinity, while others penetrate and cover organic structures with calcareous deposits and thereby preserve them for study by future generations.

Pliny, more than 2,000 years ago, observed that "waters are of the same nature as the earth thru which they flow."

The physical properties of waters have attracted the attention of philosophers from an early period.

Supernatural properties were ascribed to the springs. Strange theories were propounded regarding their origin, and wonderful tales and fables were current of their curative powers.

Strabo relates that the spring of Hierapolis imparted a red color to the roots of trees and shrubs, and that the juices of the latter when mixed with water produce a purple liquor which was used for dyeing wool. Philostratus, when speaking of the battle which the Greek army fought with Telephus, on the banks of the river Caicus, states that the wounded Greek soldiers who resorted to Agamemnon's spring, near Smyrna, were all restored. According to Herodotus, a spring in the country of the Ichthyophagi or fisheaters prolonged life to beyond 120 years; it made the skin shine as if polished, and had the perfume of violets. A spring in Chios caused insanity; another in Magnesia improved the voice of singers; and the spring of Alysson was a specific for hydrophobia. The springs of Lethe and Mnemosyne are often mentioned in classical literature; the former gave oblivion and the latter memory.

Little is mentioned of mineral springs in the Old Testament. According to the Genesis, Anah, the father of Esau's wife, discovered some thermal springs in the desert, and in the second book of Kings we find mention made of a spring at Jericho which made the ground barren and was made wholesome by the Prophet Elisha throwing salt into it. But from the New Testament we learn that Jews, before Christ, used thermal waters extensively. "There lay a great multitude of impotent folks, of blind, halt and withered, in the porches of the Lake of Bethesda, by the sheep market at Jerusalem, waiting for the moving of the water; and whosoever first, after the troubling of the water, stepped in, was made whole of whatsoever disease he had." This water had a reddish-brown color from sediment of ochre, probably deposited by the escape of carbonic acid gas; sulphur was also found in the mud, and the more rapid disengagement of carbonic acid and sulphuretted hydrogen when the water was stirred up, may account for its increased curative power at such time.

The most important of the sulphurous thermals of Palestine are those of Tiberias, near the Lake of Genesareth. Their temperature varies from 86° to 130° F. They were used by the Romans, and are visited by patients from all parts of Asia Minor even at the present time. There was another thermal spring near the Dead Sea, in the country of the Edomites, called Callirhoe, or beautiful spring. This one was visited by King Herod in the hope of being cured of his sickness. According to Josephus, he caused himself to be carried across the Jordan to use the thermals of Callirhoe, which flow into the Lake Asphaltites. He, however, found it a hard road to travel and failed to recover his health.

Mineral springs play an important part in the religion of the ancients. When temples were erected to the God of Medicine, the priests of Aesculapius took good care to locate them in the vicinity of mineral springs and such places were destined both for worship and for the cure of the sick. They were not only provided with theaters and places for amusement, but also with hospitals and medical schools for the instruction of students. The most important of these were the springs of Nauphia in the sacred grove of Aesculapius. They have been described by Pausanias, and from the remains of their structures we can even at the present day judge of their former grandeur. The water of Nauphia has recently been analyzed by M. Landerer and found to contain chiefly sodium chloride, calcium carbonate and carbonic acid.

We should also mention the Castalian spring, which had a temperature of only 33°, and in which Pythia had to bathe before ascending the tripod in the steaming cave in Apollo's oracle at Delphi. There are copious exhalations of carbonic acid gas in that cave, and from the short and incoherent sentences uttered by the priestess in her excitement and paroxyms the most important prophecies were drawn by a cunning priesthood. Such were also the gas springs of Dedona, the most ancient oracle of the Greeks, and the place where Odysseus and Aeneas communicated with Hades to meet the spirits of the departed.

Roman literature tells us of the magnificence and splendor of the bathing places of Italy in the time of the emperors. The most fashionable of these places was Bajae. They were embellished with the costliest statuary and paintings. Laocoon, from the baths of Titus; the Farnesian Hercules, from those of Caracalla; and The Horse-tamer from those of Constantine, are master-pieces which have never been equaled. To judge from the ruins of Caracalla's baths, they must have resembled a small village. There were over two hundred marble columns found in them, some in a good state of preservation, and over 1,600 seats cut out of solid marble.

The fashion of bathing in hot springs gradually became almost a necessity with the Romans, and in the course of their warlike expeditions they discovered many of the most important thermals of Europe and used them as stations for their armies. We will only mention Baden-Baden (Thermae Aureliae), Wiesbaden (Aquae Matticae), Bath (Aquae Calidae), Aix-la-Chapelle (Aquae Granenses), and Spa, in Belgium (Aquae ad civitatem Tungriam).

The philosophy of springs—the theories held by natural philosophers of different ages as to their origin, composition, specific properties and therapeutical use—were based upon the state of natural science at the time. According to the great thinker Aristotle, there are in the interior of the earth a multitude of large caverns containing air. The air at the roofs of these caverns, by the cold, condenses to water and the water breaks forth at the surface wherever it can find an outlet; and his theory thruout antiquity and the middle ages was believed in implicitly. Even good old Origenes, who ascribed the origin of springs to the tears wept by fallen angels, could not materially shake the belief of Aristotle. His supposition certainly bears some improbable features. If we consider that the springs of Vichy alone discharge three millions and those of Carlsbad another three millions of cubic feet of water annually; the fallen angels must either weep very copiously or their number must be legion.

Hippocrates was very sceptical on the use of mineral waters. He accused of ignorance persons who asserted that saline waters excite the action of the bowels and readily pass off with the faeces, because as he claimed they have just the contrary effect. Waters that issue from rocks were considered as indigestible, and thermal springs to heat the system and to dry up the juices, as amongst unwholesome ingredients they contain copper, silver and gold. Galenus held the same views as Hippocrates, but his disciple Caelius Aurelianus who lived at the end of the second century already prescribed the alkaline saline waters of Ischia for stone in the bladder. Paracelsus called the gases ascending from springs "wild spirits," and remarked in his work, "De Aquis Mineralibus," 1562, that they were caused by the burning of certain minerals; and Hufeland and others who called it volcanic heat, believed it to be entirely distinct from ordinary caloris, and possessed of specific curative effects not shared by ordinary water of the same temperature. Great stress was also laid upon the electricity of thermals, tho a delicate multiplier was necessary to prove its presence. The nature of the water itself was doubted on account of the variations which were observed to exist in the boiling point of different springs, which, however, can be readily explained by the varying quantity of salines kept in solution, and by the difference of elevation. Thus Gastein water boiling at 207½° at an elevation of 3,000 feet above the level of the sea, was actually taken down by Von Graefe to the plains of Albano, in Lombardy, in order to prove that it would boil there at 212°. Baumgartner and Gessler even went so far as to claim for Gastein water a chemical composition entirely different from ordinary water. According to these savants, it contains one part of oxygen to three parts of hydrogen; and a law was enacted in the Duchy of Salzburg, in 1797, not yet repealed, threatening with the penalty of one guilder all persons who should have the temerity of calling Spa water.

Real progress in the knowledge of the composition of mineral springs was only made by the discovery of the alkalies and fixed air by Van Helmont in 1648. The demons of the ancients and the wild spirits of Paracelsus were then found to be our familiar carbonic acid gas. The great philosopher Arago proved the temperature of the springs to correspond with the depth from which they ascend; and Bergmann, Berzelius, Bischof and Struve showed their composition to depend upon the amount of carbonic acid and other gases which are dissolved in them, and upon the nature of the rocks and strata which they permeate. This same thing Pliny told to us 2,000 years ago. Struve proved this by direct experiment. By powdering the clinkstone of Bilin and subjecting it to the action of carbonic acid water under a small hydrostatic pressure, he succeeded in producing an artificial water which was identical in composition with the natural spring of Bilin. Having himself been cured by the use of a gas spring, or rather by the escaping gases, he devoted his life to the investigation and reproduction of mineral waters, and must be called the father of artificial spring waters. His artificial Carlsbad water, which he sent to Faraday, and his artificial Friedrichs-hall bitter water, which he sent to Liebig for examination, were pronounced by these distinguished philosophers to be identical in chemical composition and physiological action with the natural springs they represented.

Dr. Hallock gives Dr. Carl H. Schultz the credit of being the originator, in this country, of scientifically produced mineral waters. In 1862 he undertook the reproduction of mineral spring waters by using as a basis for his mixtures standard solutions of each ingredient, and in this way he was able to produce waters of uniform composition. Many manufacturers even at the present time use as their unit of measure in mixing their waters an ordinary shovel, which is not destined to produce results of any great accuracy.

The various conditions, beliefs and properties of the waters and modes of production were well illustrated by the lecturer.—H. J. G.

ALUMNI, COLLEGE AND CLASS NOTES.

CLASS 1898.

Never before in the History of the Alumni Association of the C. P. C., N. Y., has a ball been opened in such a unique manner as the 1907 ball.

You will ask—Why? How? Why, of course mid the din of the '98 class yell, and then the band began to play.

Among the noteworthy members of the class there were, Binder as Assistant Floor Manager, Guthrie, Drs. Vorisek, Beckary and McCoy, Gregory, Miss Rainsford, etc.

Glad to see you, Doc. "Jimmy" McCoy is back in dear old New York again and very much in touch with the College. Shows how the boys will drift back to the old place again and put young blood to keep it rolling. Has a cousin in the Senior Class.

No greater honor could be bestowed upon the Class of '98 than to place the chair of Analytical Chemistry in the hands of Dr. A. Vorisek, the $100 prize man in one of the branches.

The Doctor is well liked by the boys, too; you could see that at the ball.

Another one of our members has heaped honors upon our class, viz., Dr. Wood, who is quiz-master of Pharmacy at the N. J. College of Pharmacy. That shows the mettle of '98 stock.

Bailey is pounding away on Columbus Ave. and 78th St., trying to make more money than the Standard Oil people. Don't blame him, we all need the J. Dough.

Come boys, lets hear some news of the members of our Class. Don't lag behind. Keep the Spirit of '98 moving. Never let it sleep, but always bear in mind there are also others who stand by their Alma Mater as true warriors with colors flying on high.

Yours in Finis coronat opus,

E. P. Wendler,
995 E. 165th St.,
N. Y. C.

1906 NOTES.

Harold V. W. Goring is now at Peekskill, N. Y.

Paul E. Neilson is now established in business on Columbus Ave., between 99th and 100 Sts., N. Y. City.

Maurice M. Feinburg, '03, has opened the Ralph Pharmacy, Tinton and Westchester aves., Bronx.

Melville B. Hargrave, '02, is in business in Fulton, N. Y.

Gamma Chapter, Phi Chi Fraternity Annual Banquet held Thursday evening, March 14th, Nineteen Hundred and Seven, eight-thirty P. M. From reports, those present had a very good time and will long remember the frat. dinner at Reisenweber's, Columbus Circle, N. Y. as one of the chief events of College Days.

The photographers are now in demand. The frats. and classes are facing the camera as a preliminary to facing the exams.

1907 NOTES.

The University Glee Club is very much in demand this year. No wonder, with Goring playing the flute!

"Baby" Bliss seems to like the College so well that you can find him sitting on the stair railing almost every Junior Day. Wonder if the College is the real attraction or the Ice-Cream Parlor around the corner.

1908 NOTES.

Apparently "Rubber" Tuman doesn't get enough sleep at home—but he finds time to do it in the Pharmacy quiz.

It is reported that several juniors have purchased emery paper to smother their voices for the Glee Club.

Hear the "Darlings" of the University section gave a social tea but didn't invite the Class.

Ball time is here, prominent members of the class in training. Good catch, Ward, only your hat fell into the mud.

What happened to your nose, Smith?

The first scrap of the season was fought on Feb. 7, '07, between two members of Sections 2 and 3. You bet there was something doing.

"Hefty" Osbourne went to see the St. Patrick's parade. Surprising someone didn't hand him a lemon.

A Junior Smoker? Yes "of all sad words of tongue or pen the saddest are these,—it might have been"—but it wasn't.

P. G. NOTES.

Kennedy is going about college telling the story of the shark and the fog-horn.

My, don't "Buddy" Ashton look serious now-a-days. Wonder why. Exams.?

The following compose the Executive Committee of the Post-Graduate class: W. S. Kennedy, Chairman, Wm. Klein, C. W. Holzhauer, S. W. Hunt, O. S. Stechmann, J. T. Zimmerman, W. D. Ashton.

Freshman (meeting a professor in Subway).—"Are those micrococci in that basket"?

Professor.—"No."

"Spirogillimi"?

"No."

"Saceromisae cerivisae"?

"No."

"Generatorsphorgetirimillinollinicciian organisms"?

"No."

"What are they, please"?

"Grapes."—*Yale Record.*

The Alumni membership certificates are now all ready for the members of 1906 class, as well as several members of previous classes who have failed to claim their certificates. Apply for them to Chas. S. Erb, 105 Amsterdam avenue, New York city.

Y. M. C. A. NOTE.

On March 7th and 9th meetings were held in the Alumni Room at the College, to bring about the establishment of a branch of the Y. M. C. A. in the N. Y. College of Pharmacy. Mr. Pettit, an active member of the Students' Club of New York, is directing the movement.

It is hoped that this club will instil a little more enthusiasm into the students and brighten the social life considerably. The following students were elected as a Committee of Organization.

Strahle, '08, Chairman; Stellar, Vernon, Osbourn, Judson and Roes.

A New Course of Graduate Instruction for the Training of

FOOD AND DRUG ANALYSTS

AT THE

COLLEGE OF PHARMACY

OF THE CITY OF NEW YORK

As a result of recent legislation establishing standards of purity for foods and drugs, there has already arisen a keen and extensive demand for the services of competent chemical and microscopical analysts, services for which the ordinary graduate in pharmacy is not qualified. It has recently been declared by the chief chemist of the U. S. Department of Agriculture that the present demand for such analysts is ten times as great as the supply. This demand is certain to increase rapidly, as similar legislation is enacted by the several states and larger cities. Not only will men be required to fill regular positions as analysts, but work will be demanded in many pharmacies.

The regular Graduate Course of this College, leading to the degree of Doctor of Pharmacy, was devised, and is admirably adapted to afford a preparation for work of this kind, but this course is now open only to those who possessed a high school education or its equivalent at the time of beginning their under-graduate pharmacy course, which course must have comprised two full academic years, from October to June. Although the percentage of such graduates is steadily increasing, their present number is relatively small, and we deem it our duty to the public, as well as to our graduates, to make some additional

provision for the training of young men to meet the new demand. We have therefore arranged a course of instruction, to extend from September 30 to April 16, open to graduates of this College or of other colleges, who have received a suitable preparation for the responsible work demanded in the proposed course. The instruction, in most of its features, will be identical with that of our regular Graduate Course. Successful candidates will be awarded a certificate of proficiency as food and drug analyst.

Two important facts are to be borne in mind by those who contemplate registering for this course. The certificate will be awarded only to those who clearly demonstrate that their subsequent work will reflect credit upon our instruction and our certificate. The work, of a most practical character, will be exacting, and will require that the student have clearly in mind the information gained during his under-graduate course, especially in chemistry and microscopy. Those not so qualified, while they may succeed in gaining admission to the class, cannot reasonably expect to succeed in their work.

Believing that many graduates, especially those from other schools, will feel it necessary to refresh their memories by reviewing the work of their under-graduate course we have arranged a summer preparatory course, extending from June 8 to September 15, with an intermission of one week during the middle of the term.

This preparatory course may also be utilized by graduates desiring to enter our Graduate Class for the degree of Doctor of Pharmacy, but who are debarred therefrom by the fact that their under-graduate course consisted of two "short" years (but of not less than 25 weeks each), provided that they had the necessary high school qualification at the time of their matriculation.

The fee for the Food and Drug Course in $150.00, and must be paid in advance.

The fee for the summer Preparatory Course is $75.00, payable in advance, of which $25.00 will be credited upon the fee for the Food and Drug Course, or for the Graduate Course, when such fee is paid.

For further information, address the Secretary,

THOS. F. MAIN,

115-119 West 68th Street,

New York City.

CARBON TETRACHLORIDE
THE GREATEST OF SOLVENTS

DESCRIPTION.—Carbon Tetrachloride is a heavy, colorless, transparent liquid. Its odor is agreeable and aromatic. Its specific gravity is 1.604 and one gallon weighs 13.3 lbs. It is absolutely *fire proof, non-inflammable and non-explosive,* and its vapor extinguishes flame. Its boiling point is 77° C. It is a chemical unit or individual, and can be recovered again, unchanged, and with always the same properties, and does not separate into different fractions, as do Naphtha and Benzine. It can be evaporated off completely, without residue.

SOLUBILITY.—It is insoluble in water, alcohol of less than 75 per cent. by volume of absolute alcohol, and glycerine. It is freely soluble in acetone, glacial acetic acid, oleic acid, ethyl and amyl alcohol, chloroform, carbon disulphide, benzole, benzine, ether, aniline oil, spirits turpentine, petroleum and all petroleum oils, fixed and volatile oils, and oleorius.

USES.—Carbon Tetrachloride is one of the greatest of solvents, and dissolves oils, fats, resins, wax, gutta percha, caresine, spermacetti, paraffine, stearine, varnish, asphaltum, pitch, balsams, coal tar, pine tar, rubber, salicylic acid, carbolic acid, iodine, bromine, iodoform, bromoform, menthol, thymol, camphor, napthaline, sulphur chloride, soda and potash, soaps, ammonia, and numerous other chemicals and products. It is not acted upon by either strong acids or alkali.

Carbon Tetrachloride as an extracting medium, has found wide application in the extraction of fats and oils from oil seeds, oil cake, animal tankage, wool, wool and cotton waste, and other oil and fat bearing materials. They are extracted by Carbon Tetrachloride with the highest degree of purity, absolutely free from residual solvent and contaminating odor, taste, or "chemical smell," and the extracted materials may be produced absolutely free from solvent and with no odor or taste imparted to them.

Oil Cake extracted with Carbon Tetrachloride is a feeding stuff of excellent quality, better than unextracted Cake, in which the high oil content is worthless and generally considered objectionable, and is therefore very much better than Cake extracted with other solvents, which, because of the residual solvent, usually is of

poor taste, and has an objectionable physiological action on cattle, so the material extracted from such other solvents has to be used for purposes which command a much lower price.

It is a very excellent cleansing agent, as it does not affect in the least the most delicate colors or fabrics, lace, feathers, silk, wool, cotton, etc., and the most delicate shades of silk, satin, etc., are not affected in the slightest degree when Carbon Tetrachloride is properly applied. It is therefore of peculiar interest for dry cleaning and cleansing establishments, who have heretofore used naphtha and benzine.

Its remarkable solvent properties make it an extremely valuable constituent in rubber and gutta percha cement and in the rubber and gutta percha industries, likewise in the lacquer, varnish, and paint remover industries, and for other similar and innumerable purposes.

A Carbon Tetrachloride solution of Sulphur Chloride is a vulcanizing agent of great value.

ADVANTAGES.—Aside from its own natural remarkable advantage as a solvent, it has the additional advantage of being fireproof, non-inflammable, and non-explosive, and therefore eliminates the extreme fire insurance premiums which are charged when benzine, benzole, naphtha and similar solvents are used. In a suitable apparatus the loss of Carbon Tetrachloride is very minute, and so permits many important economies in operation, and the products produced by its use command higher selling prices and open and larger markets.

Garments cleaned with Tetrachloride of Carbon do not have the offensive smell, as when cleaned with benzine, naphtha or gasoline.

It can be mixed with turpentine, naphtha, gasoline, benzine, benzole, etc., so as to render these products non-inflammable and non-explosive at an ordinary temperature, making it of desired interest to those who are obliged to use considerable quantities of these named solvents.

PACKAGES.—Carbon Tetrachloride is packed originally in steel drums holding approximately 650 lbs. and 1350 lbs. respectively, but is also packed in small drums weighing 215 lbs., also in 10-gal., 5-gal., 2-gal. and 1-gal. cans, weighing approximately 140 lbs., 68 lbs., 27 lbs., and 14 lbs., respectively.

PACIFIC COAST RESOURCES.

MEXICO HAS MANY LATENT MATERIALS AWAITING USE.

Mr. Philip Carroll makes his first commercial report as consul at Manzanillo on the many natural resources of the Pacific coast region of Mexico, writing:

The wood of the mangrove tree, which grows in great abundance in the swamps along the Pacific coast of Mexico, contains a large percentage of tannin of superior quality, which, in my judgment, it would pay to extract. Wild limes of delicious flavor grow abundantly around Manzanillo, and in view of the immense supply the establishment of a plant to extract the juice and citric acid would render lucrative returns. Pineapples, mangoes, and other fruits abound in this vicinity, and the canning of these fruits would be a good paying industry. Sardines and mackerel of all kinds abound along the coast and an establishment to can these fish would be a good paying concern.

CUBAN PHARMACY.

Consul-General Steinhart, of Havana, furnishes information in regard to the pharmacies and drug business in Cuba. He writes:

There are 250 drug stores in Havana for the 250,000 inhabitants, and the same ratio may be accepted for the other cities of Cuba. There are also many organizations and societies which employ doctors and their own pharmacists, and dispense medicine to the society members. Physicians, however, do not often dispense medicine. The average number of prescriptions compounded is less than in the United States. The pharmacist is not permitted by law to prescribe, and the relation between physicians and pharmacists is friendly. Doctors prescribe a great amount of ready-made or patented medicine. Prescriptions are the best part of the drug business in Cuba, as pharmacists here sell less of toilet articles, cigars, etc., such are are sold in American drug stores. The customer is considered the proprietor of his prescription, which is returned to him after being entered in the prescription book. Pharmacists in the larger Cuban cities fill foreign prescriptions as well, consulting the foreign pharmacopoeia of the country from which it comes. The Cuban pharmacists generally prepare their own tinctures and ointments.

Scarcity of Drug Clerks.

Cuban pharmacies have great difficulty in obtaining good clerks. The pay is $25 to $100 per month. They are free three times a week after 6 p. m., and also every second Sunday. Pharmacies are open from 6 in the morning until 10 or 11 at night, Sundays included. The educational requirements of pharmaceutical students are as follows: The prospective student must first go through the whole course of the high school, the same as engineers, lawyers, etc. He must also put in four years at the university, and then stand a practical examination in materia medica, some microscopical examinations, in Galenical pharmacy, all the United States Pharmacopoeia, including chemistry and the full qualitative analysis and all the analytical parts.

Government Supervision.

The supervision of pharmacies by the government is nominal. A pharmacist's license can not be revoked. His store may be ordered closed, or he may be punished by a fine, but he has the right to open a new store. The standing of pharmacists socially is like that of any other professional men. The pharmaceutical boards consist of pharmacists only. The only board in Cuba at present is formed by the professors of the university. No Cuban pharmacopoeia yet exists, but the Society of Pharmacists in Cuba is engaged in the translation of the United States Pharmacopoeia from English into Spanish. When this is completed it will be put into use.

MENINGITIS.

A report by Dr. J. S. Billings, of New York, upon the epidemics of this disease in New York during 1904-5, shows that clinical investigation has thrown very little light on the disease, or has any effectual mode of treatment been discovered. A very important point that has been brought out, is that in all probability the disease is much more infectious during the first two weeks of its course.

Guided by this, the Department of Health of New York, enforces quarantine for at least the first two weeks in all cases in which the patient remains at home.

The disinfection of the room and bedding follows on termination of the disease.

GRANULAR EFFERVESCENT SALTS.

By Percy Remington, Philadelphia.

In the manufacture of effervescent salts on either the large or small scale the most tedious and troublesome part of the process is the handling of the salt after the reaction has begun and the material becomes a sticky, effervescing, cakey mass, and yet that is the psychological moment to seize to form it into granules, and the resultant product both in appearance and effectiveness is dependent upon the way the batch is handled at this time.

In all the processes used so far both in manufacturing establishments and drug stores the mass is continuously stirred at this period to form the granules and then they are forced by hand or power through sieves. This results in the production of considerable quantities of material which are not in salable condition, some being too fine and powdery and some in such large granules that they have to be subsequently broken up.

If the moist material could be converted into granules just as soon as the water of crystallization has come out of the citric acid and fermented the mass, and before the salt has lost its savor by the escape of carbonic acid gas, and if this could be done without transferring the sticky mass to another vessel, it would seem that a great gain had been made in the time and labor required in making this troublesome preparation.

To accomplish this the writer devised a machine consisting of a sieve of No. 6 mesh galvanized wire, mounted on a frame in such a way as to permit a solid bottom to be inserted. An ordinary pie roller completes the apparatus. It is to be used as follows:

After preparing the mixture it is spread uniformly on the sieve while the bottom is in place. The sieve is then placed in a hot closet or oven at the proper temperature and when the mass has begun to soften and the water has thoroughly moistened it, it is removed and the frame is placed over a receiving box, the pie roller is then passed over the mass and this forces the salt through the sieve in such a way as to cut it into uniform particles.—*Penna. State Pharm. Ass'n.*

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The Alumni Journal

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Columbia University

THE COLLEGE OF PHARMACY

OF THE CITY OF NEW YORK

The 78th Annual Course of Instruction begins the first week in October, 1907.

The Curriculum, which was remodeled last session, has been extended, and this College now offers a very superior course of instruction in Pharmacy and the allied subjects, with facilities for practical work in its Chemical, Pharmaceutical, Microscopical and Dispensing Laboratories, which are not equalled by any other Teaching College. The Graduate Course is open to Graduates of Pharmacy who have received their degrees from a recognized College of Pharmacy.

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EDITORIAL.

We are very pleased to note the generous way in which many of our readers have responded to our recent editorial, regarding material for the Journal that will interest your fellow readers. The articles thus far received have been really meritorious, some have been published and the others are to be published as rapidly as possible. Of course you will understand that it is impossible to print them all at once, so do not be offended if you do not see your article appear immediately, because space is limited in our Journal and some of the articles submitted are lengthy. We would like you to remember however that even if we have received quite a few articles, that you should still keep up the excellent work and write more, for the matter at hand will not last forever and we are here to stay, and expect the Alumni Journal to stay for many more moons or until such a time when it will have earned a substantial fortune for its workers, so that they will be in a position to retire for the remainder of their days in this world with a financial support worthy of their dignity and position.

ALUMNI OUTING.

Annual Outing, Wednesday, June 12th 1907 at Bachmann's Pavilion, Staten Island.

Everything new—Bowling and other entertainments. Prizes for Ladies and Gentlemen. Bring your friends. Take train at the ferry landing to Bachmann's Station, Staten Island.

The Alumni Outing this year will be a real departure from former outings—New place, New ideas; Old and New members and their folks; those who have never attended an Alumni Outing should do so this year and be convinced; a good time is assured to all. Remember the date—Wednesday, June 12th; reached via Staten Island Ferry, foot Whitehall Street, N. Y. City.

COMMITTEE:

W. H. WARD H. J. BINDER, JR.
THOS. M. DAVIES. E. P. WENDLER.

PAY TOO MUCH TO "EXPERTS."

METZ SAYS THEY'RE ALWAYS PRESENTING BILLS WHEN HE ISN'T LOOKING.

In an appeal for more public spirit on the part of the citizens of New York, Controller Herman A. Metz made indirect complaint last night against the payment of the public moneys to experts. The occasion was a dinner in the Astor Gallery of the Waldorf-Astoria given for the visiting chemists who are attending the American Association for the Advancement of Science. The room was crowded with the diners, many of whom are men noted in this country as chemists and scientists.

"I didn't go into politics," Mr. Metz said after he had explained that he had run to a four-alarm fire and that the adventure had caused him to be late: "I was pushed into politics. I did not want the job, but I am glad that I am on the job."

Speaking of chemists as experts, and mixing this subject with politics, Mr. Metz said: "We have experts in other branches than chemistry. Mr. Ivins served as an expert for three weeks and put in a bill for $12,000. If he had been elected Mayor he would have had to serve the city for a year for only $15,000. And, then, I have just had to pay out $43,000 for experts in the Patrick case. The experts weren't elected, but they were experts, and that was enough.

"Lawyers can get more things out of my office—when I'm not looking—than any other class of people.

"Chicago people will tell you what a fine city Chicago is, and the people of other cities tell what fine cities they belong to. New Yorkers knock their city and let their papers knock it for them. I do not feel that way. We are just at the inception of the improvements that are to be given this city, and in ten years you will not know New York. The system of rapid transit has just begun."

The favorite chant of the evening was:

Give me a spoon of saccharine, ma,
And a bottle of alkali.
For I am going to make a pie, mamma,
I'm going to make a pie;
For John will be hungry and tired, ma,
And his tissues will decompose--
So give me a gram of bitartrate,
And the carbon and cellulose.

Prof. A. A. Breneman was chairman and Dr. William Jay Schieffelin was toastmaster. Among the well known chemists among the speakers were Dr. Walker Bowman, Dr. Gustav Drobegg, C. M. Joyce, Dr. Parker McIlheny, Dr. C. S. Palmer, Dr. Hugo Schweitzer and Maximilian Toch.

The import of saccharine into Japan, in anticipation of the new tariff, from January to July last was 72,830 kin (kin = 1⅓ pounds), of which 38,326 kin was imported in July, and the total import up to September 30 is estimated at 400,000 kin. Vernacular contemporaries remark that the sweetening power of saccharine is 600 times that of sugar, so that 400,000 kin of saccharine will represent 240,000,000 kin of sugar, and if 400,000 kin of saccharine is substituted for sugar the government may lose from the sugar-consumption tax something like $7,500,000. An opinion that saccharine is injurious to health remains to be confirmed. Meanwhile the demand for the article is rapidly increasing.

Quite a lucrative business, it seems, is done in Japan in the exportation of frog skins for purses. The works controlled by a Tokyo merchant have exported as many as 130,000 skins in less than a year.

ALUMNI, COLLEGE AND CLASS NOTES.

POST GRADUATE NOTES.

F. Bradtke accompanied the Columbia Univ. Baseball team as pitcher on its Southern trip. This is the third year that he has played on the team.

Nevins is thinking seriously of starting a salt refinery to compete with the Cerebros Salt Co. Just think! 20 per cent. of Sodium Chloride!

P. R. A. Y. Pra still exerts that peculiar power of his, of causing the force of gravity to act more energetically on glassware in his immediate vicinity, than eleswhere. His neighbor usually suffers as a result.

G. Kobrick, the worthy assistant in the Pharmaceutical Lab. raves about Ibsen and wears his hair long. He should have been an artist or a poet instead of a "pill roller."

Krause has something to say about everything whether he knows anything about it or not.

The class heartily congratulates "Stubby" Ashton and Otto Stechmann on their engagements. Here's to future capsule closers.

Will Scheur return home this Summer? Perhaps, after exams. are over. He ought to go into vaudeville instead of pharmacy.

Messrs. Crolly, Hunt and Phelps belong to the militia. Did not know that pharmacists were so war-like.

Ahrens trys mighty hard to concentrate.

E. F. Thode, Reporter.

M. A. Kaehle, Ph. G., is still at Litchfield, Conn.

Chas. W. Robertson, Ph. G., '03 graduated as an M. D. from Dartmouth Medical College this Spring. He has been appointed house physician at the Wentworth Hospital of Dover, N. H.

M. B. Hargrave, Ph. G., is now in business at Fulton, N. Y.

Fred A. Wiley, Ph. G. is in Oswego, N. Y.

Nathan A. Porter, Ph. G. is in Oakland, Cal.

Dr. Oakley A. Morhous who was instructor in Analytical Chemistry during the term just closed has resigned his position. The Doctor was very popular to the students as well as to all who knew him, and it is regretted that he will not continue in the position.

As a mark of appreciation for his unstinted effort to aid the students the Juniors presented him with an open faced, 15 jewel movement gold watch with a monogram engraving, and the date of presentation and remarks engraved on the inside.

The special students in the Chemical Department presented him with a horse-shoe shaped gold scarf-pin set with pearls. Dr. Morhous will take a position with the N. Y. Consolidated Gas Company.

WEDDING BELLS.

Mr. Henry A. W. Ramsey, Ph.G., '07, Celebrates His Graduation With a Wedding.

St. Peter's Episcopal Church was the scene on April 30th of the wedding of Miss Florence Drury, daughter of Dr. and Mrs. George Drury, and Mr. Henry Arthur Willner Ramsay, son of Mr. and Mrs. George Ramsay, of No. 216 Lincoln place, Brooklyn. The church, which was filled with a brillant assemblage of guests, was elaborately decorated with calla lilies, daisies, palms and Southern smilax.

The bride wore an Empire robe of ivory white satin, combined with white messaline and chiffon cloth, held in place with a pretty spray of blossoms, and she carried a bouquet of roses and lilies of the valley. In her train of attendants were Mrs. J. Addison Woolley, as matron of honor, and six bridesmaids—Miss Sara Ivins, Miss Clara Ernst, Miss Margaret Dudley, Miss Nora Berwick, Miss Daisy Pritchard and Miss Emily S. Peck.

Mr. Guy H. Humphreys was best man, and acting as ushers were Mr. Ralph Ramsay, Mr. Harry Pratt, Mr. Harold Donaldson, Mr. Ernest Schmidt and Mr. Alfred T. Drury.

The best wishes of the Class of 1907 are extended to Mr. Ramsey and his young bride.—*Grod.*

NOTES AND COMMENTS.

H. J. Goeckel, Phar. D.

Last month's issue of the Druggist Circular contains a reprint from the Medical Record of "The Bursting of the Standardization Bubble," by Wm. J. Robinson, Ph. G., M. D., editor of the Critic and Guide.

In this article the writer attempts to prove the absurdity of standardizing gelenical preparations and strongly advocates the use of the

extracted active principles for which he claims "convenience of administration, absolute exactness of the dose administered, unchangeability, invariability thru evaporation and freedom from objectionable and irritating inert material, and more rapid absorption."

He puts the question "if aconitine does not represent the full activity of the aconite . . . then to what purpose is the standardizing for aconite?" He likewise quotes pilocarpus containing the antagonistic alkaloids pilocarpine and jaberine in which the U. S. P. directs the determination of the amount of pilocarpine but takes no account of the jaberine. Mention is likewise made of the deterioraton of extracts and the unworkable and unreliable methods of assay for aconite root, it's fluid extract, the fluid extract of ipecac and physostigma and conium.

The writer asserts "when the active principle does not represent the drug in every respect, standardizing of one active principle is worse than useless, because it gives no information as to the absolute or relative amount of the other active principles and does not provide for the removal of antagonistic principles. Standardization is unreliable, unscientific and imperfect."

Prof. H. H. Rusby of the New York College of Pharmacy replies in the same issue of the Circular. He tabulates the substances into three classes:

1. Substances not amenable to assay, a) because the active constituent is unknown; b) because the active constituents are complex; c) because there are active constituents which act antagonistic to the useful ones.

2. Substances for which the assay processes at present authorized are unsatisfactory.

3. Substances for which the assay processes are reliable.

Regarding 1. a) Selection by color, taste, and smell is quite as much standardization in its inherent nature as that by chemical assay, the method being merely less exact.—If any of the constituents upon which the properties depend were determined chemically the operator would be merely pursuing a somewhat more accurate method than those mentioned which are resorted to by every one who purchases drugs. In class 1. c) the antagonistic constituents must be separately estimated. It is necessary . . . to consider how great is the difficulty of doing this and this requires a comparison between the work of the

assayer and the work of the so called manufacturer of the active constituents he merely extracts the active constituents from the drug, which is exactly what the assayer does. Whatever difficulty is encountered by the one is exactly as likely to occur in those of the other. If the manufacturer possesses means of avoiding the difficulties the assayer may employ the same means.

As to class 2 . . . It would seen unnecessary to record the claim that the fact that a present method of assay is unsatisfactory proves nothing unless it also true that it cannot be made satisfactory. All that the Doctor says about the unsatisfactory and "unworkable" character of the present official processes is true. In some cases . . . because knowledge of the subject is in the formative condition. This is equally true of the knowledge which constitutes the working basis of the manufacturer and equal defects exist in the products which he is urging upon the medical profession with the assumption that they are perfect. At present this is not true in a legal as it is in a scientific sense; the Pharmacopoeia has in many instances gone contrary to its best lights, inaccurate processes having been introduced when perfect and accurate ones were available.

It is perfectly well established that commercial supplies in general of aconitine, digitalin, strophantine, aspidospermine, pelletierine, physostigmine, picrotoxia, santonin, etc., etc., are so unreliable that one would not think it necessary to mention the fact but for the assumption in Dr. Robinson's paper that this is not the case.

For Diastase, anylopsin, trypsin, pepsin, etc. in which the active constituent cannot be extracted by any known process, the standardization methods work very well . . . Altho the commercial method concerns itself with only one constituent, while therapeutics must consider others, the fact that one can be thus definitely fixed proves that the others can be. We may then compare the desirability of using the assayed preparation with that of using the extracted constituent. This being the essence of the question, it is admitted that in many cases the latter method is greatly to be preferred and that theoretically this is the objective toawrd which we are working. This concession is, however, very different from saying that standardization is not necessary, that it has no field of usefulness, or that it is to be condemned as incompetent because it has not yet passed the formative state.

Prof. Rusby cites the assay of Belladonna in which the U. S. P. directs to extract with only three portions of chloroform, which do not remove all of the alkaloids.

The commentor thinks that all who have had occasion to assay Belladonna and have attempted to follow the U. S. P. directions have found the results to be unsatisfactory. Not only do the three portions of chloroform not extract all of the alkaloidal principles but the exact separation of the two liquids is hardly possible because of the intense green color of the two liquids.

Another point of criticism is that the Pharmacopoeia does not subject the acid extraction to a washing with ether to remove the greater portion of the interfering coloring matter, resulting in a final residue or extract of a yellowish color, which color is imparted to the solution to be titrated. The Pharmacopoeia then specifies to use hematoxylon as an indicator and to titrate until the addition of one drop of volumetric solution produces a permanent violet to purple color. An adherence to the prescribed methods will not give this result as the yellowish color of the solution with the blue will give a greenish color, until the solution has been over titrated.

Regarding the deterioration of extracts such as belladonna, hyoscyamus, etc., the commentor has found it to be true chiefly of the solid extracts and not of the dry, powdered preparations. In the case of the solid extracts it is possible that the deterioration results from the preparation having the alcohol eliminated and considerable water retained, thereby bringing about a decomposition of the active principles.

The Federal Pure Food and Drug Act of June 30, 1906 and the subsequent enactments of the various States, making the U. S. P. methods and standards, the legal ones place the assayist in a peculiar position. If he changes the Pharmacopoeial process ever so little to obtain better results, he is not complying with the legal requirements and consequently if he is called upon to testify in court, his testimony will probably not stand. On the other hand if he attempts to follow the Pharmacopoeial methods in detail as he must to get U. S. P. results, he will again be uncertain of the results of the assays.

Ownership and Refilling of Prescriptions.

The following method has been proposed and adopted by many pharmacists, to solve the question of "Who owns the prescription?" and how to place the evil of refilling up to the physician.

On the face of the prescription blank is printed in small type that

> "The conditions under which this prescription is written will be found on the reverse side hereof."

On the reverse side appears the notice that

> "This prescription is written for the party whose name appears thereon, for the present indications only; hence it is not to be renewed without my written consent, and no copy is to be given.
>
> "The pharmacist compounding will kindly preserve the prescription for reference."

At a recent meeting in Philadelphia a pharmacist also proposed to attach a label to prescription containers when dispensing, stating that

> "More harm than good is often done by repeating a prescription, and it is well to consult your physician before refilling."

Mr. D. E. Roelkey, a member of the Class of 1903 at the New York College of Pharmacy, has been appointed Chemist of the Department of Charities of New York.

Our readers will, no doubt, recall that this position was originally occupied by the late Dr. Charles Rice. After his death Dr. Dryfus held the position for a short time.

Since leaving the College of Pharmacy, Mr. Roelkey has devoted himself to the study of Chemistry. In the fall of 1903 he was appointed Instructor in organic chemistry at the Fordham University. He later received his bachelor's degree from this Institution.

For the past three years he has been with the Department of Water Supply in the laboratory of Dr. Jackson; during which time he has also been studying at the School of Medicine of Columbia University and is about to receive the degree of Doctor of Philosophy for his work.

The efforts of this man speak very laudably for him. Seven years ago Mr. Roelkey left his home at the historic town of Frederick, Maryland, and came to New York. While attending the College of Pharmacy he was a junior assistant in the Department of which he is now the head.

It is indeed a pleasure to see that many of our graduates are taking a lively part in the activities of the world. It speaks well for our College.

EUGENE A. DUPIN, Phar. D.

DEATH OF T. D. BUHL ENDS NOTABLE CAREER.

NEW YORK, April 7.—Theodore D. Buhl, president of the Buhl Malleable Iron Works, of Detroit, president of the Detroit National bank and also of the firm of Parke, Davis & Co., chemical and drug manufacturers, dropped dead today on the street near the Waldorf-Astoria hotel, where he had been a guest. Death was due to apoplexy.

Accompanied by his wife and granddaughter, Elizabeth Warren, his brother-in-law, F. H. Walker, and the latter's wife, Mr. Buhl arrived in this city from Boston Saturday night to meet Mr. and Mrs. J. Harrington Walker, who were already at the Hotel Manhattan. The Walkers registered at the Holland house, and Mr. Buhl, with his wife and granddaughter, went to the Waldorf-Astoria hotel.

Following luncheon today Mr. Buhl who appeared in good health and spirits, remained about the rotunda of the hotel for about two hours talking with business associates. Shortly after 3 o'clock he told Mrs. Buhl that he felt like taking a walk. His wife decided to remain in her room. Mr. Buhl left the hotel and started to walk west in Thirty-fourth street toward Broadway, when in front of the Astor National bank next door to the hotel, he fell dead.

M. A. McCusker, assistant manager of the Waldorf-Astoria, who was leaving the hotel at the time, saw Mr. Buhl fall, and summoning two cabmen, carried the body into the rotunda, where it was examined by Dr. Robert Adauss, house physician at the Waldorf, and Dr. Stewart, of the New York Hospital. They stated that death had followed a stroke of apoplexy.

Mrs. Buld was prostrated by the news of her husband's death. Word was sent to Mr. Walker, who was waiting at the Grand Central depot for his train for Detroit. He hurried to the hotel, and with the permission of the coroner, assumed charge of the body. The Buhls had planned to spend the week here, where Mr. Buhl had business to transact.

ALUMNI DAY EXERCISES

HELD WEDNESDAY EVENING, MAY 1, 1907

COLLEGE OF PHARMACY

LECTURE HALL

PROGRAM

PART FIRST

1 OVERTURE—Piano.....MR. BENJAMIN LOWENTHAL
2 MR. CHRIS. GREEN.....Instrumental Comedian
3 MISS MADELEINE BURDETTE.....Prima Donna Vocalist
4 AWARDING PRIZES—

WILLIAM A. HOBURG, JR.

President Alumni Association

5 MR. JOHN F. HEANEY.....Humorous Stories
6 MISS DORA PELLETIER.....Imitation of Celebrities

PART SECOND.

1 MR. A. J. MARTINE.....The World's Gratest Mimic
2 MR. CHRIS. GREEN.....Musical Imitations
3 READING ROLL OF HONOR—

C. P. WIMMER, PHAR. D.

4 MISS MADELEINE BURDETTE.....Vocal Selection
5 MR. JOHN F. HEANEY.....Humorous Stories and Songs
6 MR. A. J. MARTYNE.....Ventriloquial Oddities

DANCING AT THE CONCLUSION OF THE ENTERTAINMENT

The entertainment was particulary high class, and very good in every way Dr. Diekman was not present, so the Honor Roll was read by Dr. C. P. Wimmer instead.

JUNIOR PRIZES

		1100 possible points	
1	MR. E. C. OSBORN	1005	91.36%
2	MR. N. E. TRUMAN	1000	90.90%
3	MRS. ESTELLE WISENDANGER	987	89.73%

PRIZES—
1 TORSION BALANCE—
2 NATIONAL STANDARD DISPENSATORY—
3 CULBRETHS MATERIA MEDICA—

JUNIOR ROLL OF HONOR

		1100	
1	MR. E. C. OSBORN	1005	91.36%
2	MR. N. E. TRUMAN	1000	90.90%
3	MRS. ESTELLE WISENDANGER	987	89.73%
4	MR. LOUIS BLATZ	959	87.19%
5	MR. ARTHUR L. HENRIKSEN	955	86.82%
6	MRS. LAURA B. HORNBY	941	85.55%
7	MISS DAISY E. KEMBLE	939	85.37%
8	MR. GEORGE A. LINDSAY	933	84.82%
9	MR. W. McK. SMITH	918	83.46%
10	MR. JOHN H. HECKER	911	82.82%
11	MISS VIRGINIA BAKER	887	80.64%
12	MR. F. LE ROY TIFFANY	885	80.46%
13	MISS VIOLA BREUNIG	865	78.64%
13	MISS JENNIE McSWEENEY	865	78.64%

MAKING WINE FROM FIGS.

Consul Maxwell Blake, of Funchal, advises that some interest has been aroused in the island of Madeira as the result of experiments conducted by an Italian chemist, Professor Pagisci, who declares that the juice of the fig under proper treatment can be converted into a wine of excellent taste.

The professor states that its flavor is agreeable, that it is very rich in phosphate matter and almost wholly destitute of tannic acid, qualities that render it especially nourishing to invalids and children. The pulp is said also to create a new food for milch cows and fowls. The fresh fig contains only about 25 per cent. of sugar, but after it has been dried and prepared for the making of wine it yields 80 per cent. sugar.

A PREMIUM PUT ON CAPACITY.

In this day and age business is done on a larger and still larger scale. Great manufacturing establishments are arising and often employing several thousand persons of both sexes. Under such conditions there is a tendency toward the loss of individuality and the sacrifice of personal opportunity. To prevent and offset such efforts is the constant aim of some of the more high-minded establishments. A few years ago Parke, Davis & Co. distributed stock to some of its employees on favorable terms, and more recently this house has begun the awarding of prizes for suggestions bearing in any way upon the manufacture of goods or the conduct of the business. Last month the first grist of semi-annual prizes was distributed. Twenty-one awards, ranging from $5 to $50 in gold, were given to the employees among the rank and file for suggestions of varying merit. Five prizes, ranging from $5 to $50, were awarded to heads and assistant heads of departments. Great interest was manifested in the contest. The suggestions, when originally accepted by the firm, were paid for at the rate of $1 each whether they won prizes afterwards or not. Far more valuable than the mere monetary rewards, however, is the opportunity presented the employee to show the stuff that is in him, and to win recognition and promotion if he is deserving.—*Bulletin of Pharmacy.*

DENATURALIZED ALCOHOL.

The acting Commissioner of Internal Revenue, Robert Williams, Jr., has issued an official statement in which he says that the regulations authorized by the Act of June 7 are now being prepared, but they will not be ready for general distribution until about Oct. 1, 1906. We quote from the statement, as follows:

"Persons who desire to manufacture distilled spirits for any purpose must comply with all the provisions of the law relating to the setting up of distilleries and the operation of same.

"The distillery must be constructed in the manner now prescribed by the law and the regulations. The usual distiller's bond must be given; the distillery must be surveyed by a duly authorized officer; a distillery warehouse must be established; a storekeeper-gauger or a storekeeper and gauger must be asigned to duty at the distillery; the product must be entered in distillery bonded warehouse, and, in fact, all of the provisions of the law relating to the setting up and the operation of registered distilleries, the manufacture of distilled spirits at such distilleries, and the depositing of such spirits in distillery bonded warehouse must be complied with.

"The new law simply provides that alcohol, of such proof as may be determined, may be withdrawn free of tax provided it is denatured after it is so withdrawn in such manner that it can not be used as a beverage or in the manufacture of liquid medical preparations.

"The conditions under which such alcohol may be withdrawn, denatured, and put upon the market are to be prescribed by regulations by the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury.

Professor—What is the chemical term for methyl orange?

Student—A jaw breaker.—E. A. D.

A Willing Husband.—"Boss, Ah's lookin' foh work."

"All right, there's a ton of coal on the walk that must be brought up."

"But, boss, dat's no work foh a lady; wife does washin'."—*Houston Post.*

"What is a finishing school?"

"It is a place where girls who have any lingering respect for their parents go to have it removed."—*Life.*

FRANK G. RYAN.

Board of Directors Choose Him President Tuesday Afternoon to Succeed the Late Theodore D. Buhl.

Frank G. Ryan was elected president of Parke, Davis & Co. at the directors' meeting held Tuesday afternoon, to succeed the late Theodore D. Buhl, who died last week. The selection of Mr. Ryan to head this concern, which is the largest pharmaceutical manufacturing company in the world, means a great deal to all the lines of business and professions to which it caters, as he has had a life-long training for the position in which he has been placed.

Mr. Ryan was born at Marcellus Falls, N. Y., Dec. 26, 1867, and after a public school education at Elmira, N. Y., entered the drug business as an apprentice at the age of 15. During the years 1880-82, he was affiliated with Brown & Dawson, of New York. In 1882, he left to attend the Philadelphia College of Pharmacy, from which he graduated two years later at the age of 23.

He was made assistant to Professor of Pharmacy Remington, of that college, taking charge of an optional course in commercial training, which was inaugurated at that time. Besides this work he also became a lecturer for the Woman's Medical College, of Philadelphia.

Mr. Ryan has been a prominent member of the American Pharmaceutical Association since joining the body in 1882. The year following he was elected secretary of the scientific section, and a little later was made chairman of the Committee on Weights and Measures, an office to which he has been appointed many times since.

After leaving the Philadelphia College of Pharmacy in June of 1900, he became associated with Parke, Davis & Co., where his rise has been remarkable. He was chief pharmacist, having general charge of the manufacturing operations, but when William Warren, former manager of the institution, died in November, 1903, Mr. Ryan was selected to fill the latter's place on the Board of Directors. In August, 1905, he was made secretary, and then vice-president.

Mr. Ryan was chosen to head the company, because of his thorough scientific training and his keen business judgment and executive ability. He is spoken of as possessing the rare combinations of scientific knowledge and executive ability. The change will make another vacancy on the Board of Directors of the corporation, but no one is yet selected to fill the place. With the advancement of Mr. Ryan, Mr. E. G. Swift, present manager of the concern, was also promoted, being given the additional office of secretary.

COMMENCEMENT NUMBER

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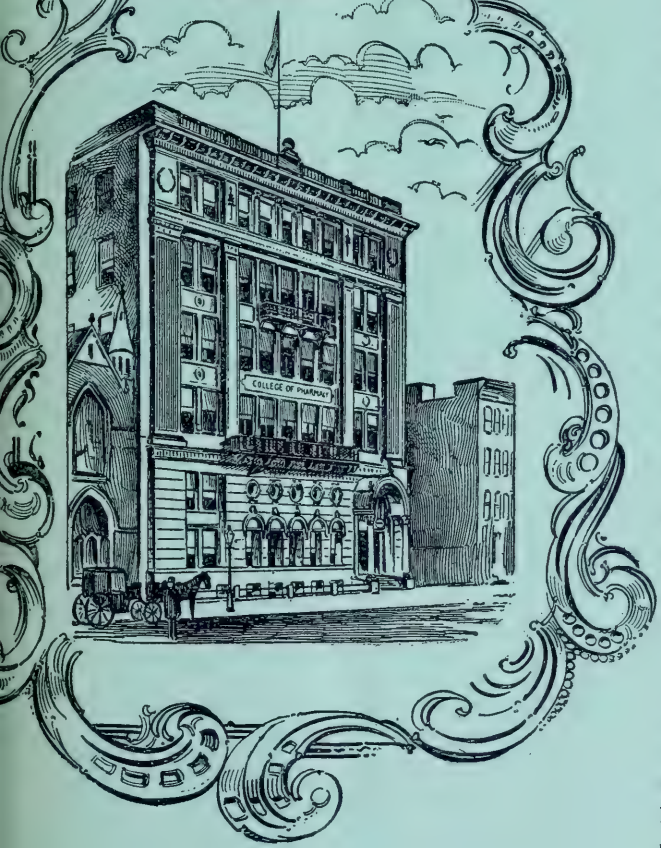
THE Alumni Journal



Contents

Published Monthly by the Alumni Association of the College of Pharmacy of the City of New York—Pharmaceutical Department of Columbia University.

Columbia University

THE COLLEGE OF PHARMACY

OF THE CITY OF NEW YORK

The 78th Annual Course of Instruction begins the first week in October, 1907.

The Curriculum, which was remodeled last session, has been extended, and this College now offers a very superior course of instruction in Pharmacy and the allied subjects, with facilities for practical work in its Chemical, Pharmaceutical, Microscopical and Dispensing Laboratories, which are not equalled by any other Teaching College. The Graduate Course is open to Graduates of Pharmacy who have received their degrees from a recognized College of Pharmacy.

FACULTY.

CHARLES F. CHANDLER, A.M., PH.D., M.D., I.L.D., D.Sc.
Professor of Organic Chemistry.

HENRY H. RUSBY, M.D. (Univ. of N. Y.),
Professor of Materia Medica.
Dean of the Faculty.

VIRGIL COBLENTZ, A.M., PHAR.M., PH.D., F.C.S.
Professor of Chemistry.

SMITH ELY JELLIFFE, A.M., M.D., PH.D.
Professor of Pharmacognosy.

GEORGE C. DIEKMAN, PH.G., M.D.
Professor of Pharmacy.

JOHN OEHLER, PH.G.
Adjunct Professor of Chemistry.

ARTHUR H. ELLIOTT, PH.D., F.C.S.
Professor Emeritus of Chemistry.

WILLIAM J. GIES, PH.D.
Professor of Physiological Chemistry, Columbia University.

CARLTON C. CURTIS, PH.D.
Instructor in Botany, Columbia University.

ANTON VORISEK, PHAR.D.
Professor of Analytical Chemistry.

OTHER INSTRUCTORS.

WILLIAM MANSFIELD, PHAR.D.
Instructor in Materia Medica.

OAKLEY A. MORHOUS, PHAR.D.
Instructor in Analytical Chemistry.

CURT P. WIMMER, PHAR.D.
Instructor in Pharmacy.

FREDERICK A. LESLIE, PHAR.D.
Assistant to the Dean.

... The ...

Alumni Journal

A JOURNAL OF PHARMACEUTICAL PROGRESS.

Published monthly by the Alumni Association of the College of Pharmacy of the City of New York.
Pharmaceutical Department of Columbia University.

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CHAS. A. LOTZ, PH.G., EDITOR H. J. GOECKEL, PHAR.D., ASSOCIATE EDITOR

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COLUMBIA UNIVERSITY
SEVENTY-SEVENTH ANNUAL COMMENCEMENT OF THE COLLEGE OF PHARMACY OF THE CITY OF NEW YORK.

Carnegie Music Hall, New York, Fifty-Seventh Street and Seventh Avenue, Thursday Evening, May Second, Nineteen Hundred and Seven at Eight o'clock.

PROGRAM.

Overture—"Stiffelio" ..... Verdi

Selection—From "The Belle of Mayfair".... Stuart

ENTRANCE OF THE TRUSTEES AND FACULTY OF THE COLLEGE

March—"Admiral's Flag" ..... Friedman

ENTRANCE OF THE GRADUATING CLASS

Conducted by Hieronimus A. Herold, Ph. G.

ENTRANCE OF THE GRADUATE CLASS

Conducted by William H. Ebbitt, Ph. G.

At 8.30 o'clock.—March—"Spring Blossoms".. Von Blon

PRAYER.

Reverend Frank Oliver Hall.

Let us unite in prayer:

Seeking strength for the battle of life, we turn to thee, O God, who are the ever present help. Life is a battle in which we must all take part. There are many things that help; and for these things we give our hearty thanks. Home helps, school helps, the church helps, college helps, the applause and the approval of friends help. We thank thee for all of these things and what they have been to our lives. There are many things that hinder. Temptation hinders. We ask thy pardon, O God, inasmuch as we have known these helps and these hindrances that we have prayed so continually that Thou lead us not into temptation and that we have gone into temptation of our own free will and we pray that thy blessing rest upon us, adding this help and that we may turn our backs upon what hinders our success. We are not satisfied with the world in which we live. We desire above all things to seek thy kingdom come, and working for the bringing in of thy kingdom, so may we give ourselves to that aim. We pray for thy benediction and thy blessing, upon this evening's exercises, but we pray especially that thy blessing may rest upon these young men who are about to make their entrance upon the activities of the world's life. May they become true to the highest ideals. We ask this in the name of the Nazarene. Amen!

Selections—From "The Red Mill" .....Herbert

ADDRESS.

President Nicholas Murray Butler, Ph. D.

On behalf of the Trustees and the Faculty of the College of Pharmacy of the City of New York, it is my agreeable duty to welcome you to the Seventy-seventh Commencement of the College. For more than three-quarters of a century this College has stedaily maintained in this city and from its platform in this city in the State and Nation, the highest ideals of training for a useful profession among men. Our college deserves well not only of the profession which has fostered and cared for it but of the community which it has served through its successive generations of well trained and devoted graduates. It is worth while remembering

to-night that whatever may be your personal interest in these exercises because of the presence of some individual, you are in addition assisting at a ceremony which goes back many hundreds of years. As you are well aware, it was in the middle ages that the learned men, the artists or artisans of every kind, organized themselves into guilds. Those guilds not only took charge of the common trade or profession but they supervised the training of the young men who were to enter upon that trade or profession, and this College represents that oldest of educational traditions in which the men who know and who practice oversee and care for the training of those who are to come after them; and what you are to witness to-night is the admission into a profession for which they have been trained by a body of men who have commended themselves to their elders and who have made the standards of excellence which those elders have fixed because they have themselves found them to be necessary and useful. Therefore, I beg you to remember that this evening is not only the academic anniversary of an individual or of a class, but it represents another stage in the history of the development of the calling of the pharmacist and the pharmaceutical chemist. Like the lawyer, like the physician, like the engineer, like the doctor, when their test of successful preparation lies in the fact that the elders believe that a useful and sufficient foundation for the career has been laid.

The trustees are present to-night not only to grace this occasion by their presence but formally to represent the approval of the profession from which they are chosen by the young men who have chosen to enter that same profession.

To this Seventy-seventh Annual Commencement I bid you a hearty and cordial welcome.

Novelette—"Paddy Whack" .....Lampe

ROLL OF GRADUATES IN PHARMACY.

Secretary Thomas F. Main, Ph. G.

Mr. President:

The students whose names I am about to read have complied with the requirements of the law and the College of Pharmacy and are now presented to received at your hands the degree of Graduate in Pharmacy.

Class of 1907.

Arthur A. Ahrens, Yonkers, N. Y.; Joseph Altman, New York, N. Y.; Roscoe M. Annis, St. Johnsbury, Vt.; Charles W. Ayers, Bennington, Vt.; Charles W. Ballard, New York, N. Y.; Vincenzo Benincasa, New York, N. Y.; Russell B. Black, New York, N. Y.; Victor J. Bliden, Brooklyn, N. Y.; A. Richard Bliss, Jr., Brooklyn, N. Y.; Charles W. Brodhead, New York, N. Y.; William H. Burns, New York, N. Y.; Salvatore Collica, New York, N. Y.; George A. Daly, Little Falls, N. Y.; Howard C. De Clark, Brooklyn, N. Y.; William G. DeLamater, New York, N. Y.; Harry B. Dengler, Little Falls, N. Y.; Thomas Di Giovanna, New York, N. Y; Walter H. Dippel, Sag Harbor, N. Y.; Philip Doepfner, New York, N. Y.; Siegfried Ehrenberg, New York, N. Y.; David A. Eolis, New York, N. Y.; Agostino Figallo, New York, N. Y.; Arthur A. Fraser, Napanee, Ontario, Canada; Benjamin Garbov, New York, N. Y.; Hiram K. Gaynor, Jr., Jersey City, N. J.; Paul J. Gillman, New York, N. Y.; Harry Goldwater, New York, N. Y.; Howard D. Goring, Wappingers Falls, N. Y.; Arpad A. Heller, New York, N. Y.; Frank P. Hoffmann, New York, N. Y.; Wm. H. Hulse, Washingtonville, N. Y.; Edward Hurley, Red Bank, N. J.; Theodore A. Jost, Mt. Vernon, N. Y.; Charles G. Judge, Long Island City, N. Y.; Herman Juster, New York, N. Y.; William F. Keating, New York, N. Y.; Ralph C. Kirkendall, Berwick, Pa.; John E. Lamouree, Tuxedo Park, N. Y.; Andrew Libertone, New Brighton, N. Y.; Hyman Lipsky, Brooklyn, N. Y.; Louis Lissman, New York, N. Y.;Louis H. Loewenstein, New York, N. Y.; Angel Lopez, New York, N. Y.; Merritt W. Lozier, Newburgh, N. Y.; John B. Maffay, New York, N. Y.; Wade H. Marr, No. Brighton, Me., Anthony Mashin, New York, N. Y.; M. Ygnacio Medina, New York, N. Y.; William U. Meier, Butler, N. J.; Henry S. Miller, New York, N. Y.; Samuel E. Motsard, New York, N. Y.; Albert Nesy, New York, N. Y.; Harry A. Newcomb, Tolland, Conn.; Louis Ordmann, New York, N. Y.; Fred Plum, Bellefontaine, O.; Henry A. M. Ramsey, Brooklyn, N. Y.; David Ratner, New York, N. Y.; Jacob Reiss, New York, N. Y.; Alter S. Resler, New York, N. Y.; Morris Resnick, New York, N. Y.; Clarence J. Ritter, Yonkers, N. Y.; Matthew H. Robinson, Elizabeth, N. J.; Uriel Russin, New York, N. Y.; Geogre Ruths, New York, N. Y.; Enrico Samarelli, New York, N. Y.; Meyer J. Samuelson, New York, N. Y.; Ernest C. W. Schmidt, Flatbush, N. Y.; Henry Schwartz, New York, N. Y.; Salvatore Sellaro, New York, N. Y.; Eben E. Slade, Whitesville, N. Y.; Herman Smithline, New York, N. Y.; Edward D. Steen, Highland Falls, N. Y.; Reuben W. Sterritt, Ossining, N. Y.; Louise S. Suhr, West Hoboken, N. J.; Samuel R. Sykes, New York, N. Y.; Harry Teitelbaum, Union Hill, N. J.; William A. Towner, Brewster, N. Y.; Lee W. Twiggar, Ossining, N. Y.; Donald C. Twiss, Ilion, N. Y.; Horace G. Weir, Springfield, O.; Pinckney C. Wray, Martinsville, Va.

CONFERRING DEGREE OF GRADUATE IN PHARMACY.

President Nicholas Murray Butler, Ph. D.

By virtue of the authority conferred upon me by the Legislature of the State of New York and by direction of the Board of Trustees of the College of Pharmacy of the City of New York, I hereby declare you to be Graduates in Pharmacy of the College of Pharmacy of the City of New York.

ROLL OF DOCTORS OF PHARMACY.

SECRETARY THOMAS F. MAIN, PH. G.

Mr. President:

The Graduates in Pharmacy whose names I am about to read have complied with the requirements of the Law and the College and are now presented to receive at you hands the degree of Doctor of Pharmacy.

DOCTORS OF PHARMACY.

George J. Ahrens, Yonkers, N. Y.; Leo Boeder, Williamsbridge, N. Y.; Alexander M. Bonnyman, Warwick, N. Y.; Frank George Bradtke, New York, N. Y.; Arthur Creuse Brown, Brooklyn, N. Y.; Harry Edward Faiella, New York, N. Y.; William Henry Gaul, Yonkers, N. Y.; Charles William Holzhauer, Newark, N. J.; Henry Truex Hopkins, Keyport, N. J.; Sidney Kirby Hunt, Middletown, N. Y.; Samuel E. Karp, Scranton, Pa.; William Klein, Rockaway Beach, N. Y.; George Kobrick, New York, N. Y.; George William Krause, New York, N. Y.; Charles Krepela, New York, N. Y.; Alexander Levinsohn, New York, N. Y.; James Campbell, Paterson, N. J.; Edward Horace Milne, Newark, N. J.; Charles Edward Phelps, Middletown, N. Y.; Peter Angelo R. Pra, Passaic, N. J.; Charles Alexander Schenck, Mount Vernon, N. Y.; Joseph Sidney Scheuer, Berryville, Va.; Robert Charles Schmadel, New York, N. Y.; Oscar H. W. A. Stechmann, Jersey City, N. J.; Ernest Thomas Taborelli, West Hoboken, N. J.; Eide Frederick Thode, New York, N. Y.; John Trivigno, New York, N. Y.; John Theodore Zimmerman, New York, N. Y.; Henry Zlinkoff, New York, N. Y.

CONFERRING DEGREE OF DOCTOR OF PHARMACY.

PRESIDENT NICHOLAS MURRAY BUTLER, PH. D.

By virtue of the authority conferred upon me by the Legislature of the State of New York and by direction of the Trustees of the College of Pharmacy of the City of New York, I now declare you to be Doctors of Pharmacy of the College of Pharmacy of the City of New York.

MELODIES—FROM "THE PARISIAN MODEL".....*Hoffman.*

AWARDING THE ALUMNI PRIZES.

PRESIDENT OF THE ALUMNI ASSOCIATION, WILLIAM A. HOBURG, JR., PH. G.

Mr. President, Members of the Faculty, Trustees of the College, Fellow Graduates, Ladies and Gentlemen:

The objects of this Association are to advance the interests of the College of Pharmacy of the City of New York; to bring the graduates into a close fellowship and to promote sociability and good feeling

among them; also to advance the science and art of pharmacy as well as to encourage and assist the under-graduate. We, of the Alumni Association are the children of this College of Pharmacy, although some of us have become quite old children, though hale and hearty. In this connnection I would like to refer to one of our hale and hearty old children, the honorable President of our Association who is with us this evening and who graduated in 1849. I refer to Mr. Ewen McIntyre.

As members of former graduates, we naturally take a very deep interest in the progress and success of the students and in this connection I have to-night a very plesant duty to perform in presenting to the three successful students the prizes which we annually award as an incentive and reward for good and faithful work. These three prizes consist of a gold, a silver and a bronze medal and are awarded or presented to the three students having the highest general average in their examinations or the three students standing first, second and third upon the Roll of Honor. I understand that at the recent examinations a possible total of 1200 points could be made. When you consider that these 1200 points represent twelve different subjects, all equally difficult, you may well imagine that it is quite a siege, if I may call it so, to go through and pass such an examination successfully. As I call the names of the three students they will kindly rise and step to the front of the stage. The first prize or a gold medal is awarded to Mr. Russell Black. Mr. Black has obtained a total of 1115 points or 92.91. The second prize or silver medal goes to Mr. Alter S. Resler. Mr. Resler obtained a total of 1100 points or 91.66. The third prize or bronze medal has been won by Mr. Arthur A. Frazer. Mr. Frazer has obtained a total of 1057 points or 88.08.

My dear Fellow Graduates: I extend to you the heartiest congratulations and best wishes of the Alumni Association. Let the distinction you have achieved and the success you have won be an incentive to you for high work in the profession which you have chosen. Be honest, faithful and true.' Have courage to do right as you see fit. Uphold the dignity of your profession and of your Alma Mater and may success crown your efforts.

Cornet Solo—"Selected." By Mr. Henry W. Smith.

READING ROLL OF HONOR.

Dean Henry Hurd Rusby, M. D.

Ladies and Gentlemen:

In presenting to you this evening the Honor Students of our class of 1907, I feel called upon to direct your attention to this occasion as one of very great importance in the history of the college. You are the guests this evening of the first class to graduate from this college under the new law which requires that every student entering a School of Pharmacy in this state shall have enjoyed the advantages of at best, some education in a high school, the minimum requirement being at the present time, one year. This new condition means a great deal to the College of Pharmacy, but it means more to the profession and very much more to those who are depending upon the profession for their pharmaceutical service; because this same law which provides that a student of pharmacy possess the equivalent of one year in a high school, also forbids our Board of Pharmacy to accept for examination or license, the graduates of other colleges who have not enjoyed equal privileges, and so it means for the state of New York, ultimately, a high class of pharmaceutical service. So far as our college is concerned, the condition is not by any means effective in one direction, only because this law for a short time at least will very greatly curtail our revenues from the fees of students. At the present time I think we are not far from being one-half as rich from this source as we used to be during an average year. We make the sacrifice not only willingly but gladly, because we are sensible of very great advantages which more than compensate for this temporary disadvantage.

During the past two years, especially the past year, we have looked into the faces of students all of whom were intelligent, some of them very intelligent; because I must tell you that it is the object of our college to try to induce students to remain in a high school until they have graduated, and the percentage of such students in our classes is steadily increasing. About 25% of the members of the present junior class have graduated from high schools. You will thus see that we have good reasons to be grateful, in spite of the money loss which has been entailed upon us.

Coming now to speak of the twelve young gentlemen and the one young lady, our lone star, whose names appear upon the Roll of Honor, I want to tell you that they have undergone a very severe examination,

an examination theoretical and at the same time practical. They have undergone examinations in Pharmaceutical Chemistry, Analytical Chemistry, Organic and Inorganic, Materia Medica, Toxicology and Pharmacognosy, both commercial and microscopical—the detection of minute particles of drugs by the use of the compound microscope, as well as in theoretical pharmacy, practical pharmacy and dispensing pharmacy. Even the list of subjects is formidable and I leave you to judge if the students here have not accomplished a great deal in a single week.

Assuming that a student answered every question and performed every task in the most acceptable manner, the total number of marks that he could secure would be 1,200, making a percentage, of course, of 100. Now when I read this list and give you the number of marks out of this possible 1,200, which the students have secured, you may judge whether they have done well. You have already learned that Mr. Black obtained 1,115 points or 92.97%. I shall not read you the number of marks and the percentage of the entire list, but I will tell you that the last man secured 989 marks or 82.41%, and I can assure you that considering the difficulty of the examination and the severe manner in which the marks were recorded, this is a very high record indeed. The remaining names are as follows: Alter S. Resler (1,100 marks or 91.66%), Arthur A. Fraser (1,057 marks or 88.08%), Meyer J. Samuelson (1,034 marks or 86.16%), Charles W. Ballard (1,030 marks or 85.83%), Louise Seline Suhr (1,020 marks or 85%), Arpad Arthur Heller (1,017 marks or 84.75%), David A. Eolis (1,007 marks or 83.91%), Fred Plum (1,005 marks or 83.75%), Henry S. Miller (1,001 marks or 83.41%), George A. Daly (998 marks or 83.16%), Roscoe M. Annis (997 marks or 83.08%), Henry Schwartz (989 marks or 82.41%).

I congratulate these students upon having attained these honors and I ask you to keep in mind the names upon the list and see in a few moments which of them have secured prizes.

Patrol—"Siamese Guard Mount".....Linke

ADDRESS TO THE GRADUATES.

By President Nicholas Murray Butler, Ph. D.

To the instruction and counsel which these graduates and Doctors of Pharmacy have received, it is least necessary for me to add a very few words. In those few words I should like to carry to them the message which I think it

most important that every beginner in the work of life should hear; namely, the message of individual responsibility toward the profession one has chosen and toward life itself.

During the years when we are at school and college, while we hear much of these things, we are all apt to treat them lightly and carelessly, and it is only when some specific occurrence takes place in our own experience to bring the lesson of responsibility home that we realize just what it means. As I pointed out earlier in the evening, these men are now members of an old and responsible calling which serves the public in many ways. It is very interesting to see how these callings or professions with which we are familiar have developed from their different beginnings and have come to take on the form which they now have. There was a time when the physician himself was the pharmacist so far as there were pharmacists, nurses so far as there were nurses, specialists and general practitioner all in one, but now with the advance of science and art the development of the needs of man and the pressure of society upon us, this one calling has broken itself up into many separate parts, and today, instead of finding different manifold activities gathered into one pair of hands, we find them divided among a dozen.

The pharmacist today takes his place in the service of society as one of the aids and helpers of a great profession of medicine which in all its forms stands closer to human life in moments both of joy and sorrow than any other single career can possibly do. Let us observe the series and we will have a series of responsibility which this fact necessarily carries with it. Lack of knowledge, lack of power or lack of judgment at a critical moment, a mistake made through haste or carelessness may imperil or save human life. Not only lives, but many may turn on the knowledge and self-control and quick-wittedness of the well-trained pharmacist or pharmaceutical chemist; and remember that while that life may be unknown to you or to me, to someone in the world it the most precious of all lives. That responsibility and that possibility for service rests upon human beings imperfect like you and me, trained as well as science and art can train them, but still depending in the last resort upon that hidden power which tries knowledge and which makes what we know really practical and worth while. That characteristic, which, for lack of a better word, we call character. It is a man's character that comes out when he is put to the test of skill or knowledge or quick judgment and hours of careful scientific preparation. It is thus that the long months of careful training in the laboratory begin to teach their lessons not only of knowledge but of those habits and that power which constitute character. Thus it is that the lessons and recitations which have been heard, together bear their fruit in specific man, and the man rises to the full height of his professional responsibility and is worthy of association with his elders when he responds to the call and shows himself able to be a man and serve society by the use of his knowledge and character.

But, my friends, if we were to stop there we should have covered only one-half of the problem which lies before this company of hopeful and ambitious men. We should have taught the unfortunate and imperfect lesson that a man need only attend to his own concerns to be a useful, helpful and successful citizen. The contrary is the fact. We are just beginning to see in this country of ours how unfortunate are the results when men concern themselves wholly and solely with their own affairs from their own point of view and forget their responsibility to the public as a whole. That responsibility we express in terms of citizenship, and the educated man or trained professional man, whether he be engineer or architect or clergyman or teacher or lawyer or physician or pharmacist, who is not at once a professional man and a citizen, has only responded to a part of the possibilities which lie before him; and I know that if the ideals of this profession, which is primarily a profession of useful service, mean anything; if they find expression, as I know they did, in the teaching and example of those who have gone before this class, then the responsibility which rests upon these men is the two-fold responsibility of good professional men and good

citizens, alert, open-minded, fair, generous, kindly, hopeful, ready to put a shoulder to the wheel and carry things on, ready to help, to advise, to co-operate, looking upward and making their profession of service a constant means of personal growth. A man whose growth ends when the school or college door closes behind him is not useful very long. All that the best of our schools and colleges can do, after all, is to prepare the soil and sow the seed, to teach the fundamental things, the elementary principles, the method, the point of view, and then comes that extraordinary education which you and I call experience, that which we learn by daily contact with our problems, be they personal or be they professional, and that experience, if you look it squarely in the face, as every honest man must, teaches its lesson again of responsibility—responsibility for what you have learned, responsibility for what you can do, responsibility for your own conception of yourself, responsibility to society, responsibility to God and to your fellow. And that is, after all, the main spring to the success of business life, whether it be pharmacy or banking, and whether it be law, medicine or agriculture. So it is that the one word which I should like to impress upon those who have joined the ranks of the profession of pharmacy tonight is the word "responsibility." It will stand a lot of thinking over, a lot of talking about, a lot of examination by one and all, and the man who in his profession and in his life feels a sense of responsibility and acts up to it has proved the worth of his manhood and made good use of his education.

And so, my friends, I say to you, feel your sense of responsibility for what you know, the sense of responsibility for what you can do, and, feeling it, the rest is secure.

Excerpts—From "The Spring Chicken".....Carle

AWARDING THE TRUSTEES SPECIAL PRIZES.

William Mansfield, Phar. D.

Mr. President, Trustees, Members of the Faculty, Students, Ladies and Gentlemen:

You have already been told how the thirteen students have earned a position on the roll of honor. The trustees of this college award annually $100 to the best examination in Pharmacy, $100 to the best examination in Chemistry, and $100 to the best examination in Materia Medica. These prizes are contested for at a special examination held in the different departments of the college. A student may be very proficient in his theoretical knowledge of the subject, but he will not win a prize if he is not able to show a practical knowledge of this subject at this examination. Any of the members of the honor roll may try one or all of these special examinations, the prizes being awarded to the student showing the highest proficiency in the different departments. As I call the names of those students who have attained the highest proficiency in the different departments, they will kindly step to the front of the platform. The student who has attained the highest proficiency in Pharmacy is Mr. Fred Plum. The student who has attained the highest proficiency in Chemistry is Mr. Alter S. Resler. The student who has attained the highest proficiency in Materia Medica

is Mr. Russell B. Black. These three students besides attaining the highest proficiency in the three subjects, Mr. Plum stood second in the highest proficiency in Materia Medica. Mr. Resler stood second in the highest proficiency in Pharmacy, and Mr. Black stood second in the highest proficiency in Chemistry. Mr. Plum throughout the term work you have not only shown marked proficiency in this subject, but you have also demonstrated at the final or practical examination your knowledge of the subject of Pharmacy. It therefore gives me great pleasure to present to you the prize of $100 for the best examination in Pharmacy.

Mr. Resler, you throughout the term have also demonstrated your ability to solve the numerous and intricate problems involved in Chemistry, and you also demonstrated at this competitive examination your knowledge and your ability to solve these problems in Chemistry. It therefore gives me great pleasure to present to you $100 for attaining the highest proficiency in the practical examination in Chemistry. Mr. Black has demonstrated his ability not only in the laboratory but in the class room and also in the practical examination that he is able not only to judge of the actions of medicines and select crude specimens of drugs, but he is also able to recognize under the miscroscope minute particles of powdered drugs. It therefore affords me the greatest pleasure to award to Mr. Black the $100 prize for attaining the highest proficiency in the subject of Materia Medica.

Characteristic Piece—"Whispering Flowers"....Von Blon

AWARDING FACULTY GRADUATE PRIZE.

Anton Vorisek, Phar. D.

Mr. President, Members of the Board of Trustees, Members of the Faculty, Honored Guests, Fellow Graduates, Ladies and Gentlemen:

The Faculty Graduate prize, although annually provided for is not given every year. It is given under certain specified conditions which are enumerated in the Annual Bulletin of Information of the College of Pharmacy of the City of New York. Graduate students who desire to compete for these prizes must submit an original thesis involving practical work. The prize is awarded to the student who has attained the best general average. However, the Faculty reserves the right to withhold the prize if in its judgment none of the theses is satisfactory.

The man to whom this prize will be awarded this year has fulfilled all these requirements. He belongs to a distinct type of the student species which is characterized by zeal, industry and devotion to study. Students of this kind are never idle. They are always self-reliant and almost always self-supporting. During the college term they are never very prominent except on the graduation day, when, as if by magic, they rise to the top and occupy their well-earned positions of honor. A typical representative of a student of this kind is Charles Krepela. Mr. Krepela is well-known to his teachers. He has had some excellent examples to follow, as his sister, brother and brother-in-law are all graduates of this college. Mr. Krepela matriculated as junior student of this college in 1904. He entered the senior class the following fall and became post-graduate student last fall. At the end of his junior year his name appeared on the roll of honor. It again appeared on the roll of honor at the conclusion of his senior year, and, in addition to this high distinction, he received the silver medal and $100 in gold. the Trustees' special prize. When Dr. Krepela became in possession of that gold he became thoughtful. He soon decided that he would make this small fortune the nucleus of a larger one. He selected what he thought a safe and paying investment. Last year he went to the College of Pharmacy to purchase with that $100 his membership in the graduate class. You may ask: Did he realize on this investment? You see him here to-night, reaping some of the rewards of this adventure. Let that be sufficient evidence of his sound judgment.

Dr. Krepela's standing in all the departments of the post-graduate work was excellent. The thesis he submitted treats of the "Bleaching of Skin." The contents of this work revealed that an industrious pharmacist using spare moments, using time that others take for relaxation has invaded other fields of activity. The intricate problems of leather chemistry which concern themselves with bleaching and tanning held him fascinated. Dr. Krepela studied and made experiments. Developing his own method of bleaching fine grades of skin, he has been sufficiently successful to interest a manufacturer who offered him financial support. Thus early has he selected for himself a wider field of usefulness.

Dr. Krepela, agreeable to the wishes of the Faculty of this College, I take pleasure in presenting you with the Faculty Graduate Prize—an Analytical Balance. Your efforts were deemed worthy of the reward. Whether you employ this instrument to employ for you

the daily bread, or whether you use it for scientific investigation, you will be constantly depended upon its true adjustments, its stability and accuracy. Whatever stand in your future career may be allotted to you, let this exponent of truth constantly remind you that your stability, your honesty, and your integrity should be such that others may safely rely upon them. You realize that this wonderful product of human genius and skill, though it is made to last you a life time, may suffer destruction almost instantaneously. To you its material value must appear insignificant when compared with that permanent, moral effect, that inspiring and uplifting stimulus of the distinction which this reward places upon you. You also realize that all these rewards and all these honors which you have received from this college have a distinct meaning. Since they must be well deserved and fairly won, what are they but the expression of infinite justice? And do you not realize that your own deep-hidden expectations of reward for honest and worthy efforts, that your hopes, your trust in good and upright men are finding realization?

Let me give you an echo of the President's Message! "Keep your balance in proper equilibrium." Another balance, one by which your account with this institution must once be settled is out of equilibrium. I see its bearer strongly inclined in your direction. The pay suspended from the lowered arm is heavily loaded with honors and rewards. Will this balance ever be adjusted?

Let me assure you, Kr. Krepela, that by living a clean and manly life, devoting yourself to your chosen work, and remaining true and loyal to the institution whence you are setting forth on a promising career, you may hope to establish perfect equilibrium between yourself, this institution and all mankind. Let me congratulate you.

March—"General Mix-up, U. S. A."..... Allen

VALEDICTORY ADDRESS.

Valedictorian—George A. Daly, Ph.G.

Gentlemen of the Board of Trustees:

Fate ordained that we should meet in mutual friendship; it now ordains that we must part to pursue what I hope will ever be the even tenor of our way.

Occupied in the pursuit of science, we have scarcely been awake to the greatness of our institution which you gentlemen have founded and fostered with the greatest of care.

It is with unfeigned sorrow mingled with pleasure that we leave this time-honored institution to which our hearts are bound by golden links of the tenderest association. Sorrow to know that we are to bid a long, a last farewell to those true and tried companions whose cheerful countenances and encouraging words so often dispelled the humid shades which at times overhang the student's pathway while endeavoring to grope through the many labyrinths of knowledge.

A pride to think that we go forth to engage in the more active scenes of life, and as we hope to accomplish the missions for which the God of fate may have us destined.

It is not necessary for us at this time to raise our voices in praise of our Alma Mater, for, like the shaft of Bunker Hill, on a memorable occasion, it seems to me that the institution itself is the orator of the hour, yea, an orator more eloquent than I.

Its walls speak; they tell us of hundreds and thousands who in the spring time of youth gathered to pursue the silent walks of pharmacy and chemistry.

Mr. Dean:

We thank you sincerely for your kind and loving attentions to us during these past years and trust that the class of nineteen-seven will always hold an honored place in your memory, as we still continue to respect and cherish those, whose loving counsels have warned us that life is not a bed of roses, that underneath each gayly-tinted petal lies a thorn, ready to bruise the unsuspecting fingers reached to pluck its beguiling beauty.

Gentlemen of the Faculty:

Honored professors, whose inspiring words have so often smoothed the rugged pathway of knowledge, we have no befitting language with which to address you on this occasion. Formal words are inadequate to express the gratitude we feel. But oft in memory's enchanted bowers will we see again the dear old place, the loving teachers whose lives were a constant incentive to noble deeds, and whose helping words will shine as beacon lights amid the storm-tossed billows of life.

Gentlemen of the Graduate Class:

Fellow students, loved companions of our happiest days while tugging slowly up the hill of knowledge, to you I would speak one parting word, though my overpowered feelings would flee the task. Your mission is a noble one. To you the God of fate has entrusted the power of wielding the destinies of nations, and of shaping the character of the world.

(Continued on page 88)

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THE Alumni Journal

Contents

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Columbia University

IN THE CITY OF NEW YORK

COLLEGE OF PHARMACY

The Seventy-eighth Annual Course of Instruction will begin on September 30th, 1907, under more favorable conditions than any which have existed in our previous history. The State law requiring one year of secondary school work before entrance to the pharmacy course has given us a superior class of students, capable of utilizing the higher grade of instruction offered by the Faculty.

The steady elevation of the educational standard that has been in progress in this College during recent years places us in a perfect position to meet the new demands for service under the recently enacted food and drug laws. Those demands are met by our graduate course of one year, leading to the degree of Doctor of Pharmacy, and by our Food and Drug Course also of one year, and open to graduates only. For those graduates who feel the need of a review before entering upon this work, we have this year inaugurated a summer preparatory course of twelve weeks.

Under the direction of a faculty consisting of four professors of Chemistry and one professor each in Pharmacy, Materia Medica, Pharmacognosy and Bacteriology, with well trained assistants, our Graduates in Pharmacy and Pharmaceutical Chemistry of our two-year course, are fully prepared to meet any board examinations, and those taking the advanced course are qualified to fill positions as analysts in chemical and microscopical work.

For information, address,

THOS. F. MAIN, Secretary,
115-119 West 68th St., New York, N. Y.

... The ...

Alumni Journal

A JOURNAL OF PHARMACEUTICAL PROGRESS.

Published monthly by the Alumni Association of the College of Pharmacy of the City of New York.

Pharmaceutical Department of Columbia University.

PUBLISHED AT 43 FULTON ST., NEW YORK CITY.

CHAS. A. LOTZ, PH.G., EDITOR H. J. GOECKEL, PHAR.D., ASSOCIATE EDITOR

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ALUMNI ASSOCIATION.

Minutes of the stated meeting of the Alumni Association of the College of Pharmacy of the City of New York, held Wednesday, April 10th, 1907, in the Alumni Room, at 8:30 P. M.

President Hoburg in the chair.

Minutes of the Executive Board Meeting of March 13th, 1907, were accepted as read.

Minutes of the Executive Board meetings for the past year, upon motion were postponed.

President's Address: The President's address was accepted and ordered placed on file.

Treasurer's Report: The report, upon motion, was accepted as read and referred to the Auditing Committee.

Auditing Committee: The Chair appointed Messrs. Dickman and Henning on the Auditing Committee.

Committee on Papers and Queries: Progress.

Committee on Publications: Progress.

Entertainment Committee: Mr. Erb revived the entertainments and dances given during the year. Upon motion, duly seconded, the Treasurer was authorized to reimburse the Committtee for expenses incurred. Carried.

Property Committee: The Chairman of the Committee called the attention of the Association to the condition of the decorations of the Alumni Room, besides, presenting an itomized inventory of the property of the Association. The insurance of $1,000 on the property of the Association had been removed for five years instead of three years. The report was received, approved as read and ordered placed on file. It was moved, seconded and carried that a Committee of three be appointed to investigate the condition of the decorations of the Alumni Room, with power to proceed. The Chair appointed as such Committee, Messrs. Erb, Diekman and Ferguson.

Hanging Committtee: Progres.

Medal and Prize Committee: The Chairman recommended that the book prizes be properly engrossed, and upon motion, it was ordered; also, that the second prize consist of The National Standard Dispensatory. Carried. It was ordered that the matter of engrossing inscription on the glass plate of the Springer-Torison balance be left in the hands of the Prize Committee.

Alumni Day Committee: Progress.

Outing Committee: The Chair appointed the Outing Committee as follows:

Fred Borggreve, Chairman.
W. H. Ward,
E. P. Wendler,
T. M. Davies,
H. J. Binder.

Mr. Borggreve announced that arrangements had been made to hold the Annual Outing on June 12th, 1907, (second Wednesday) at Bachmann's Pavilion, Bachmann's Station, S. I. The report was received and accepted.

Alumni Cup Case Committee: Progress.

Committee on Commercial Interests: Progress.

Committee on Statistics: Progress.

Censors: Mr. Henning announced that the Censors were carefully looking through the advance copy of the Alumni Journal for each month.

Membership Roll: Progress.

It was moved, seconded and carried that the Secretary, Treasurer and Registrar be continued as a Committee to complete the work of correcting the roll of members and to report at a future meeting.

Registrar: The Registrar's report was accepted and ordered placed on file.

It was moved, seconded and carried that the Association rise, in honor of the dead members for the past year.

It was moved, seconded and carried that the annual election of officers be postponed until the finish of the regular order of business.

It was moved, seconded and carried that a stenographer be secured to be present at the Annual Commencement for a sum not to exceed $8.00.

A recess of five minutes was declared.

Election of Officers: The Chair appointed Messrs, Borggreve and Ward tellers.

President: The following nominations were seconded: H. J. Binder and W. A. Hoburg, Jr.

Moved, seconded and carried that the nominations be closed; Mr. Binder withdraws with the consent of Mr. Wendler, his nominator.

Moved, seconded and carried that one affirmative ballot be cast for W. A. Hoburg, Jr.

Mr. Hoburg was elected President for the ensuing year and accepted.

Moved, seconded and carried that one affirmative ballot be cast for Mr. Ewen McIntyre, for Honorary President.

Mr. McIntyre was elected.

First Vice-President: Mr. Binder's nomination was seconded.

Moved, seconded and carried that one affirmative ballot be cast for Mr. Binder.

Mr. Binder was elected and accepted.

Second Vice-President: Nominations of Mr. E. P. Wendler and Dr. Leo W. Geisler were seconded.

Moved, seconded and carried that the nominations be closed.

Upon ballot, Mr. Wendler received ten votes and Dr. Geisler fourteen votes. Dr. Geisler was elected and accepted.

Third Vice-President: Dr. Eide F. Thode's nomination was seconded.

Moved, seconded and carried, that the nominations be closed.

Moved, seconded and carried that one affirmative ballot be cast for Dr. Eide F. Thode. Dr. Thode was elected and accepted.

Secretary: Dr. H. B. Ferguson's nomination was seconded.

Moved, seconded and carried that one affirmative ballot be cast for Dr. Ferguson.

Dr. Ferguson was elected and accepted.

Treasurer: Mr. Erb's nomination was seconded.

Moved, seconded and carried that one affirmative ballot be cast for Mr. Erb.

Mr. Erb was elected and accepted.

Registrar: Dr. George C. Diekman's nomination was seconded.

Moved, seconded and carried that one affirmative ballot be cast for Mr. Diekman.

The election of Dr. H. B. Ferguson, as Secretary, left a vacancy in the Executive Board.

Dr. C. P. Wimmer's nomination for a member of the Executive Board, term to expire 1909, was seconded.

Moved, seconded and carried that one affirmative ballot be cast for Dr. Wimmer.

Dr. Wimmer was elected and accepted.

Executive Board to serve three years: The nominations of Philip Fitz and William Pruss were seconded.

Moved, seconded and carried that one affirmative ballot be cast for Messrs. Fitz and Pruss.

Messrs. Fitz and Pruss were elected and Mr. Pruss accepted Mr. Fitz, being absent.

The tellers were discharged with the thanks of the Association.

At 11:30 P. M., there being no further business before the meeting, it was moved, seconded and carried to adjourn, subject to the call of the Chair.

H. B. Ferguson,
Secretary.

THE MOTOR FACE.

A few days ago a well-known personage was motoring in Derbyshire when a policeman stopped him.

"You'll have to take off that mask," said the officer, "it's frightening every one who sees it."

"But I am not wearing one!" explained the unfortunate offender. —Sketch.

DENATURED ALCOHOL.

There are at present two general formulas for denatured alcohol in use, either one of which may be used by any manufacturer, who can use denatured alcohol.

The first and most common one is made up as follows:

FORMULA NO. 1.

Ethyl Alcohol	100 gallons.
Methyl "	10 "
Benzine	½ "

Where such a formula as this is required in an aqueous solution the benzine is of course thrown out, giving the solution a milky appearance. In this case the other general formula may be used.

FORMULA NO. 2.

Ethyl Alcohol	100 gallons.
Methyl "	2 "
Pyridine Bases	½ "

Whenever generally denatured alcohol is ordered Formula No. 1 will be shipped unless Formula No. 2 is specially ordered.

In addition to these two general formulas for denatured alcohol a number of special formulas have been authorized to be used in the manufacture of certain classes of goods. In order to buy these specially denatured alcohols it is necessary, of course, to obtain a permit first from your Collector of Internal Revenue, a simple permit to use denatured alcohol will not suffice. Some of the special formulas are as follows:

FORMULA NO. 3.

For the manufacture of celluloid, pyralin and similar products.

Ethyl Alcohol	100 gallons.
Methyl "	5 "
Camphor	7 lbs.

FORMULAR NO. 4.

For use in the manufacture of transparent soap.

Ethyl Alcohol	100 gallons.
Methyl "	5 "
Castor Oil	1 "
36° Be Caustic Soda Solution	½ "

FORMULA No. 5.

For the manufacture of shellac varnishes.

Ethyl Alcohol	100 gallons.
Methyl "	5 "

FORMULA No. 6.

For the manufacture of smoking and chewing tobacco.

Ethyl Alcohol	100 gallons.
A mixture made as follows:	1 "
Aqueous Solution containing 40% Nicotine	12 "
Acid Yellow Dye	0.4 lb.
Tetrazo Brilliant Blue 12 B Conct.	0.4 "
Water to make	100 gallons.

FORMULA No. 7.

For the manufacture of photo-engravings.

Ethyl Alcohol	100 gallons.
Sulphuric Ether	65 lbs.
Cadmium Iodide	3 "
Ammonium "	3 "

FORMULA No. 8.

For the manufacture of fulminate of mercury.

Ethyl Alcohol	100 gallons.
Methyl "	3 "
Pyridine Bases	½ "

We shall be pleased to accept orders for any of these different formulas from any one having necessary permits to use the products.

FORMULA No. 9.

For use in the manufacture of watches.
For use in the manufacture of Photographic Dry Plates.

Ethyl Alcohol	100 gallons.
Methyl "	5 "
Cyanide of Potassium,	1½ lbs.
Patent Blue "B"	⅛ ounce.

For use in the manufacture of photographic dry plates.

FORMULA NO. 10.

Ethyl Alcohol ..... 100 gallons.
Methyl " ..... 5 "

FORMULA NO. 11.

For use in the manufacture of Sulphonmethane.
Ethyl Alcohol ..... 100 gallons.
Pyridine Bases ..... 1 "
Coal Tar Benzol ..... 1 "

We can supply Denatured Alcohol from any authorized formula in any quantitties.—From Things Chemical.

A NEW USE FOR ACETANILIDE.

The fact has recently been brought to our attention that Acetanilide, as strange as it may seem, has been found to be an excellent preservative for Hydrogen Peroxide. It has always been a difficult matter with manufacturers to find some harmless substance which would have the property of retarding the decomposition of this preparation and the use of Acetanilide is no doubt largely responsible for the great improvement which has been made in preparations of Hydrogen Peroxide, during the last two years. In consequence of this improvement, its field of usefulness will no doubt become much broader, both in the hands of physicians and by the laity, as a general antiseptic. Solutions of Hydrogen Peroxide should not be unduly exposed, but the bottles should be kept well stoppered to prevent organic matter getting into them and they should be stored during the hot summer months in a reasonably cool place.

AS BOLD AS ANY.

They were just coming out of the theatre after seeing a performance of "When Knights Were Bold." "Oh, George," sighed the romantic maiden, "how I wish you were one of the old-time knights so that you could do something brave to show your love for me."

"What more do you want?" asked George. "Haven't I agreed to marry you, and me only getting $10 a week?"—Tatler.

TO ENTER THE COLLEGE OF PHARMACY OF THE CITY OF NEW YORK.

(University Course—leading to the degree of Pharmaceutical Chemist).

Total requirements.....12 points

The candidate *must* offer 12 points from the subjects following, subject to the restriction that to offer an advanced subject will involve offering either at the same time or earlier the corresponding elementary subject:

English	counting	3	points
Elementary French	"	2	"
Elementary German	"	2	"
Elementary Greek	"	3	"
Elementary History	"	2	"
Elementary Latin	"	4	"
or	"	2	"
Elementary Mathematics	"	3	"
Elementary Physics	"	1	point
Intermediate French	"	1	"
Intermediate German	"	1	"
Advanced Greek	"	1	"
Advanced History	"	1	"
Advanced Latin	"	1	"
Advanced Mathematics	"	1	"
Advanced Physics	"	1	"
Botany	"	1	"
Chemistry	"	1	"
Drawing	"	1	"
Physiography	"	1	"
Spanish	"	2	points
Zoology	"	1	point
		36	

ONE ON THE TEACHER.

A teacher in an East End school found great difficulty in getting any answers from an eleven-year-old member of his class.

"How is it," he asked, "that you never know your lesson? When I was your age I could answer any question put to me," added the teacher.

"Yes," replied the urchin, "but you had a different teacher to what I have."—Tatler.

LUCIEN MERRIAM ROYCE.

Born in Bristol, December 21st, 1838, son of Enos and Sarah Elizabeth (Atwater) Royce. Died suddenly (of acute indigestion that affected the heart) at his place of business Meriden, Conn., May 23rd, 1907.

In 1855, he came to Hartford and accepted a position with the wholesale drug firm of Williams and Hall (now Williams and Carleton) with whom he remained till the beginning of the war.

In August 25th, 1862, he enlisted as a private in Company A, 25th Conn., Vols., and served with the regiment in Louisiana. He was promoted to be Hospital Steward in charge of a Hospital at Baton Rouge, and was honorably discharged in 1863, having served the nine months for which the regiment enlisted.

In November 1863, he was appointed Surgeon's Steward, in the U. S. Navy and was ordered in medical charge of the U. S. S. "Acacia," and served on board that ship till May 1865, in the South Atlantic Squardron at the Siege of Charleston. The "Acacia" captured the three blockade runners, the "Julia", the "Pocahontas", and the "Dear", and the Doctor (Mr. Royce) shared in the prize money.

In 1866, he graduated from the New York College of Pharmacy, (now incorporated in Columbia University) being one of its first graduates. He was the chief organizer of the Alumni Association of the College of Pharmacy and a charter member. He was secretary of the Association, 1875-1876; registrar 1876 and 1883; treasurer 1882-1884; president, 1884-1885; treasurer 1885-1889.

He was a member of the American Pharmaceutical Association.

He invented and patented a process for refining petroleum oil, a process practically the same as that now in use—He was in charge of the City Department of the Wholesale Drug firm of McKesson and Robbins, New York, for twenty-five years. Then for five years, he was with Tarrant and Co., wholesale druggists, New York.

He established two retail drug stores of his own in Brooklyn, New York.

He moved with his family to Madison, Conn., where he had a drug store for four years.

Then he took his family to 731 Asylum Avenue, Hartford, Conn., in which city he made his home with his business in Meriden Conn.

He died while at his place of business and after an illness of only five minutes.

Funeral services were held at All Saints Memorial Episcopal Church, Meriden, Conn., of which he was a member. Mr Phelps, the rector (and an intimate friend of Mr. Royce's) officiated. The four bearers in Meriden were members of Merriam Post, G. A. R., Meriden, and one of them was of the same regiment, the 25th Conn. Vols.

The interment was in the family lot at Elm Grove Cemetery, Poquonock, Conn., where a second service was held in the Memorial Chapel. The bearers were: Mr. Aaron Cook, Company A, 25th Conn. Vols., tent-mate of Mr. Royce in Louisiana; Mr. Francis Allen from the Army and Navy Club, of which Mr. Royce was a member. Mr. Chas. Williams, Wholesale Druggist. Mr. Burrill, Past-Commander of Robert O. Tyler Post, Hartford, Conn. Robert O. Tyler Post of Hartford, sent a silk flag and their Post Bugler sounded "taps" at the grave.

U. S. Grant Post of New York of which Mr. Royce was a member, sent a deligate with a silk flag and a bunting flag with a marker for the grave.

Members of the G. A. R. from Meriden, Manchester, Windsor and Hartford, attended the funeral.

Major McManus of the 25th Conn. Vols., was present.

Mr. Royce leaves a wife, Emma Hollister Royce (they were married at Poquonock, Conn., October 15th, 1872), two daughters, Helen Elizabeth Royce and Lucy Atwater Royce, and a son, Robert Hollister Royce.

GOLD BRICKS & WHEAT.

So many special offers come to a druggist, that it sometimes taxes his judgment to discriminate between the good propositions and the "gold bricks." Half the success in the drug business lies in knowing what to accept and what to reject. Here is a special proposition that you can't afford to turn down: Five and two and one-half per cent. off on Fletcher's Castoria, if purchased in gross lots and everybody knows that the genuine Castoria is the wheat on the druggist's shelves. Any jobber will extend you these terms.

THE BEST FICTION.

The fond husband was seeing his wife off with the children for their holiday in the country. As she got into the train he said, "But, my dear, won't you take some fiction to read?"

"Oh, no," she responded sweetly, "I shall depend on your letters from home."—Judy.

SUSIE F.—Here is a formula for brittle finger nails: Take equal parts of refined pitch and myrrh, or of turpentine and myrrh melted, and mix together and spread upon the nails at night. Remove in the morning with a little olive oil. Make the paste, for which I give you formula, and spread upon the nails at night. Sometimes this paste will nourish the nails and make them stronger.

CHINESE DIFFERENCES.

(From the Minneapolis Journal.)

His compass points south.
In saluting you he puts on his hat.
Walking with you, he keeps out of step.
He shakes his own hands instead of yours.
He says east-south instead of south-east.
To be polite he asks your age and income.
He throws away the flesh of the melon and eats the seeds.
His women often wear trousers, while he often wears a gown.
He presents coffins to his friends as your present cigars or books.

ALCOHOL MADE OUT OF SAWDUST, SAYS WILEY.

Government Expert Says It Is Not Wood Alcohol, but the Genuine Stuff.

WASHINGTON, March 8.—"'Glorious opportunities lost,' is the name for a song that the drinking men of the country can sing with great pathos," said Dr. Wiley, the pure food expert, of the Agricultural Department, to-day, "for science has just discovered that sawdust is good material for the manufacture of alcohol.

"It's not wood alcohol," declared the expert, "but the genuine stuff. It cannot be told by taste, smell or chemical analysis from the alcohol made from Indian corn.

"Just stop and think for a moment of the millions of tons of sawdust that have gone to waste. Sawmills, when the mountains of sawdust got too high around them, had to be moved to escape the sawdust. You cannot burn it. It has no commercial value. But it makes good alcohol and a new industry has come into being.

"Sawdust alcohol is now being manufactured commercially in Pennsylvania and the industry is expected to spring up and thrive in all sawmill communities."

ANTI OPIUM MOVEMENT.

MALAY CHINESE KILLING THE TRADE—PLANT USED FOR CURE.

The anti opium movement in Malay, says a Penang correspondent, can only be described as colossal.

So rapidly has it spread and so popular has it become that it reminds one more of a Welsh revival than a movement undertaken by the stolid Chinese. When the news of the movement first came from China a few enthusiasts took up the matter in Singapore and opened a free hospital for the cure of smokers, but very little progress was made. A few weeks ago, however, a well-to-do Chinaman in Kuala Lumpur, the capital of Selangor, received from China specimens of a plant which was said to be a cure for the opium habit. A short search revealed the fact that the plant grew freely in Selangor in a wild state, and in a very short time a quantity was obtained and active operations commenced. The leaves of the plant, which appears to be a shrub somewhat akin to gambier, are exposed to the sun for a day, then chopped fine and roasted, after which an infusion is made and the specific is ready for use. The first man experimented upon was a cooly employed by a European lady, and although he was a confirmed opium smoker he was pronounced cured in a week.

Now an anti opium society has been formed in Kuala Lumpur, and the specific is distributed free, while so great has become the demand for the "opium plant," as the Chinese call it, that those who gather the leaves in the jungle demand $10 per picul (133⅓ pounds) for them. The dispensaries established for the distribution of the specific are hard pushed to keep up with the demand, the applicants in Kuala Lumpur alone numbering over 2,000 daily. The anti opiumists claim to have cured, in the few short weeks since the plant was discovered, over 14,000 people in the Kuala Lumpur district alone, and the statement appears to be corroborated by the fact, which is vouched for by a partner in the opium farm, who is naturally deeply interested in the matter, that the receipts of the opium shops in and around Kuala Lumpur have fallen off by two-thirds, while several shops have had to close for lack of custom.

The Federated Malay States will not be very much affected even if the opium habit be entirely stamped out, for they do not depend upon opium to any great extent for their revenue; but in the Straits Settlements matters will be very different, for the opium farm is the prin-

cipal source of revenue, and although the farmers have not yet been affected like the opium dealers in Selangor, they are distinctly apprehensive as to the effect the spread of the anti-opium movement and the introduction of the specific in the colony will have upon their sales. A month will show whether they really have anything to fear, for the movement may die out as rapidly as it has sprung up, or it may result in the ruin of the opium farmers and the consequent embarrassment of the colonial government.—*Consular Reports.*

LONGS AND SHORTS.

Thackeray was 6 feet 4 inches. So was Fielding. Scott, Walt Whitman and Tennyson were six-footers. Goethe, the elder Dumas, Robert Burns and Longfellow were 5 feet 10 inches. J. M. Barrie is only 5 feet 5 inches, and Kipling only 5 feet 6 inches. Edwin Abbey has the same height as Barrie, so has Alma-Tadema. Lord Curzon is 6 feet 1 inch. George Westinghouse is over 6 feet 2 inches, Andrew Carnegie is 5 feet 4½ inches, President Roosevelt is 5 feet 9 inches. Mr. Gladstone was 5 feet 9 inches. Sir Henry Irving was an inch taller. Edmund Burke and Oliver Cromwell were 5 feet 10½ inches, which, by the way, is the height of the present Prime Minister of England, Sir Henry Campbell-Bannerman. Wellington was half an inch taller than Napoleon. That trio of great admirals, Nelson, Blake and Sydney Smith, were a little under 5 feet 6 inches. Bismarck was a tall man, but not so tall as George Washington, who was 6 feet 3 inches. Sargent, the great painter, is 6 feet; Carlyle, Darwin, Huxley and Ruskin were six-footers.—*Halifax News.*

It was not long ago discovered that by means of a simple chemical treatment ordinary gelatin can be solidified. In this form it resembles celluloid, but it is not inflammable, and is, therefore, not dangerous to handle, as celluloid is. It can be colored, spotted, or streaked, as desired, so as to imitate tortoise shell, coral, mother-of-pearl and other natural products.

Identified.—"This," remarked Mr. Softe, "is my photograph with my two French poodles. You recognize me, eh?"

"I think so," said Miss Caine. "You are the one with the hat on, are you not?"—*Casset's Journal.*

AT EVENTIDE.

By M. A. Maitland.

The day's declining, yet how short it seems
Since morn awoke amid the misty hills—
Since pleasant ways were mine by woods and rills,
Ere Youth had awakened from her blissful dreams
To scale the rocks and breast the turgid streams,
And all the turmoil was so far away
That measures out man's weary little day—
Brief day, that yet with mighty import teems!

Still past our shortened sight the sun shines on
And other valleys with his radiance fills,
So gloaming here may be for us the dawn
Of glory on the Everlasting Hills.
Take cheer, dear heart, nor yield thee to repining,
Let Faith shine brighter as the day's declining!

CHINA AGAIN ABOLISHES OPIUM.

China has again decreed the abolition of the culture of the opium poppy and the use of opium or its products in any of its forms, save medicinal. This action, which comes in the shape of an imperial edict, was the direct result of the report of the Chinese commission appointed to visit this country and Europe, and the edict is signed by the heads of both civil and military affairs. This is not the first attempt of China to free herself from the effects of the opium trade. The first effort was made in 1839. That result led to a war with Great Britain, which profited by the export of opium to China, and as a result of the war the edict was recalled and China had to pay an indemnity of about $6,000,000. The Chinese commission which visited England last year found public sentiment far different from what it was three-quarters of a century ago. Hence the issue of this second edict, the abolition of the opium trade, both in the way of home products and imports.—*Consular Reports.*

Two is Company.—Aunt: "Tommy! How cruel! Why did you cut that poor worm in two?"

Tommy: "He seemed so lonely."—*Punch.*

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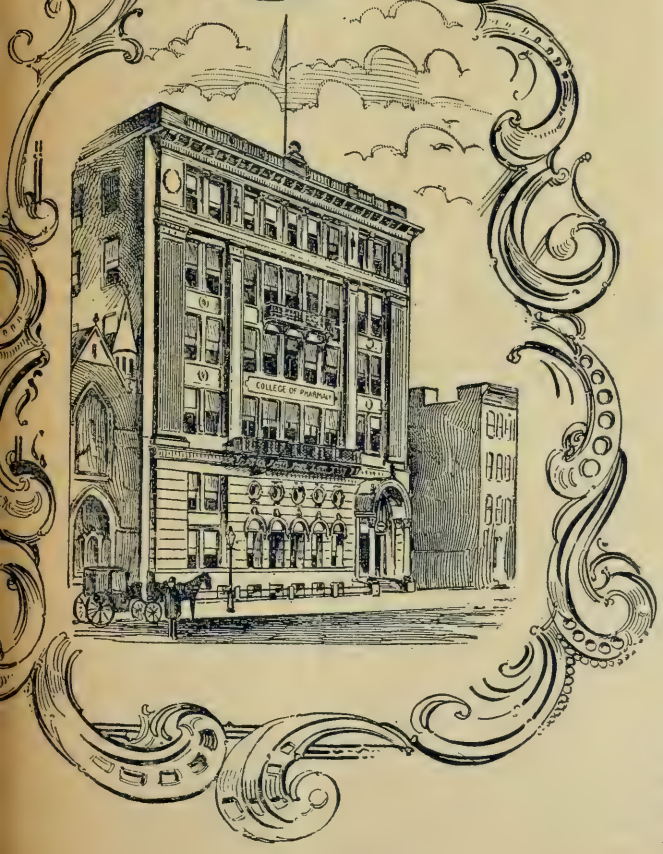
THE Alumni Journal



Contents

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NOTES ON RUBBER.

FREDERICK A. LESLIE. Phar. D.

Professor Maximilian Toch delivered an interesting and instructive lecture on Rubber at the College of Pharmacy on April 10th, last.

In beginning his lecture, he stated that his subject was one of great "Elasticity" and as the time allowed for the lecture was limited, he would have to "cut it short" as possible.

Rubber has become almost indispensable in the arts and in the line of surgical appliances, although it is never used for internal medication, excepting as a mechanical agent as a stomach tube etc.

In the drug store we find hot water bags, fountain syringes, tubing, gloves, hard rubber syringes, nipples, stoppers, plasters, catheters, bougies, trusses, sheeting, rubber dam, bandages, etc., all of which are made from the simple plant juice.—rubber, the official name and definition of which is "Elastica". The prepared milk-juice of several spices of *Hevea* Aublet (Fam. *Euphorbiaceae*), known in commerce as "Para Rubber".

The milk-juice containing about 50% of water is heated on long sticks over a smoky fire, the sticks being kept in a continual round and round movement until the rubber has become thick and plastic. The

sticks are again dipped into the collected juice and then heated in the same manner; the process being kept up until a large roll or loaf of rubber is obtained. This constituted the crude rubber of commerce. It has a characteristic odor somewhat resembling pyroligneous acid,— This odor is developed by the heating process, to which it is subjected.

The Para rubber is the best of all varieties.

The chemical composition is chiefly that of a terpene ($C_{10}H_{16}$), but its molecular composition is unknown. The formula given by Prof. Toch is $(C_{10}H_{16})_{11}$.

The research work on this useful substance is limited, there being only about four books on the subject.

Clouths, (German), *"Rubber, Gutta Percа and Balata";* Pearson on *Raw Material;* Hinriques *"Analysis of Rubber"* and C. O. Weber, *"Chemistry of Rubber".*

The Journal of the Society of Chemical Industry, (of Great Britian), also offers quite some contributions of value on this subject.

Rubber substitutes may be made by vulcanizing some of the more common fixed oils such as rape seed, cotton seed, or linseed, with sulphur chloride in the presence of a catalytric agent as manganese, lead or zinc compounds.

RUBBER SUBSTITUTES.

The "bloom" generally found on rubber articles of commerce is due to minute particles of sulphur coming to the surface. A solution of sodium hydroxide and glycerine will be found beneficial in its removal.

It comes to the market of the world in the form of balls or loaves.

The Para varieties consist of about 98% of terpenes and only 2% of resin, while some African varieties yield as high as 41% of resin.

Rubber is sheeted by passing it between roller cylinders, which also rids it of soluble salts, such as nitrates, nitrites, sulphates etc., an essential feature.

The pure article has a specific Gravity of $_{1}920$—$_{1}925$ and therefore floats when thrown into water. A "filled" rubber has a higher gravity and will on this account sink in water, thus affording a simple means of distinguishing between them.

It is an absorber of water and is therefore not water-proof, but it is damp-proof. It will absorb about 25% of water. If the water is hot, it will soften the rubber and also combine with it chemically, while cold water will neither soften it or combine with it.

In 1832, Reidstorf made the discovery that combining sulphur and rubber, gave a non-sticky product.

Goodyear likewise obtained a hard rubber—vulcanized—when these substances were heated together.

Rubber does not, as is commonly thought, dissolve in solvents as carbon-disulphide, but rather the reverse—the carbon disulphide dissolves in the rubber.

VULCANIZED RUBBER.

It is vulcanized by combining with it sulphur in varying proportions and at a temperature of about 315 °F. This sulphur combines as a solution. If the rubber article be bent a very fine deposit will be noticed to come to the point of bending. This deposit when examined under the microscope will be seen to consist of small crystals of sulphur.

Too great an excess of sulphur is liable to produce brittleness.

RUBBER COLOURING.

For red rubber, sequi sulphide of antimony ($Sb_2 S_3$) is used to a great extent; for producing a chocolate color sulphide of iron is used.

FILLERS.

The products contain a varying quality of "filler", for instance, "Floor-tile" consists of only 8% of rubber and 92% of filler and is very resistable to wear.

White lead has been used as a filler but yields a spongy mass. "Sublimed Lead" is now more used for this purpose, and consists of lead oxid, 20 parts, lead sulphate, 75 parts and zinc oxid, 5 parts.

The inner tube of an "Auto" tire contains zinc oxid and an iron oxide ($Fe_2 O_3$). It is highly elastic and retains the air, while the outer tube of the tire consists of about eight layers of duck, 50% vulcanized rubber and 50% of filler, giving an extremely resistable protective covering for the inner tube

Large quantities of silica or heavy spar ($Ba S O_4$), are used in the manufacture of rubber goods. Some white rubber-tubing has been found to contain as much as 7% of zinc oxid as filler.

The various fiillers are zinc oxid ($Zn O$), gypsum ($Ca SO_4$), whiting ($Ca CO_3$), talc, magnesium carbonate, heavy spar ($Ba SO_4$), silica and litharge.

The lead oxid is used for rubber tires and seems to make them more flexible.

Black rubber contains lamp black or bone black, the latter being about 75 to 80% tracalic phosphate [$Ca_3 (PO_4)_2$] and the rest carbon.

ANALYSIS OF RUBBER.

As was previously stated Para rubber contains only 2% of resin while some African varieties yield up to 41%.

To get the rubber into a state suitable for analysis is the first thing to be considered. This may be accomplished by cutting the rubber into thin pieces and passing thru a very sharp sausage machine; or better still by rasping the sample with a sharp file.

Resin is determined by dissolving out the rubber with acetone and extracting the residue in a Sohxlet Apparatus for the resin.

In the vulcanization varying proportions of sulphur are used. This accounts for the fact that we may have combined sulphur, excess of free sulphur and total sulphur.

It becomes necessary to separate and estimate each individually.

Determining Free Sulphur:—A weighed amount of rubber is boiled with 60 to 70 cc. of 5% alcoholic potassium in a flask having five or six feet of glass tubing connected thru the stopper to act as an upright condenser. The boiling is continued for five or six hours, then allowed to cool and neutralized with hydrochloric acid (H. Cl.) hot Barium Choloride ($Ba Cl_2$) solution added and the sulphur is estimated from the precipitate.

Total Sulphur:—Another weighed quantity of the sample is mixed with sodium carbonate, carbon, and manganese dioxide; placed in a crucible, covered, and heated, very gently at first, gradually increasing the heat and continue about one to two hours. Then cool, extract with hot water, neutralize solution with hydrohloric acid, add hot barium chloride solution and proceed as in determination of free sulphur.

Hard Rubber:—A solution of powdered (rasped) rubber in 90% benzol should yield a green transparent color if pure. If it is impure the solution will be colored dark brown.

The presence of tar or pitch in rubber shoes may be detected by adding some benzine to the sample, producing a green fluorescence.

In the earlier part of Prof. Toch's lecture reference was made to "Factice or Oily Rubber Substitutes" in which various oils are used.

It is necessary to be able to detect an oily substitute when occasion requires it.

A known quantity of the sample is digested in alcoholic potassium hydroride for twelve to fifteen hours. An excess of normal acid solution is then run in and the mixture is allowed to stand for about twenty-four hours, and the liberation of free fatty acids will be seen to have formed in the beaker. This would indicate the presence of an oily substitute and not a pure rubber.

Rubber Fillers:—Most of the fillers can be detected and identified by extracting the finely divided sample with a strong inorganic acid (H Cl or HNO_3), evaporating off the excess and replacing it by water. The metals are then determined by the regular methods. Another method is to first char the samples and then extract with acid.

The compound microscope will be found to be a great aid in the detection of various precipitates and powders obtained in the analysis of rubber.

HUMAN BILLBOARDS.

Some of us are made on the order of billboards; a flashy front with a vacant lot behind.—Hogwallow Kentuckian.

This is the age of condensed foods. We are now to have condensed eggs. Chemists compute that 70 per cent. of eggs is water, and that by evaporating this and canning the remainder the product can be kept for an indefinite time. There are no shells and no bad eggs, nothing, in fact, but canned chemicals. It may be a matter of sentiment, but we opine that most men will prefer the fruit of the hen, to that of the laboratory. The canned concoction may be just as nutritive, but there is something about the good old egg, sunny side up, that appeals to the imagination.—*N. Y. Press.*

German Foot Powder.—Policemen, mail carriers and others whose occupation keeps them on their feet a great deal often are troubled with chafed, sore and blistered feet, especially in extremely hot weather, no matter how comfortably their shoes may fit. A powder is used in the German army for sifting into the shoes and stockings of the foot soldiers, called "Fusstreupulver," and consists of three parts of salicylic acid, ten parts starch and eighty-seven parts pulverized soapstone. It keeps the feet dry, prevents chafing and rapidly heals sore spots. Finely pulverized soapstone alone is very good.

IN THE N. Y. C. P. AND ALUMNI LIMELIGHT.

The oldest, perhaps one of the most successful and surely the most popular graduate of the College of Pharmacy of New York, is our venerable friend and brother alumni member, Ewen McIntyre.

Born at Johnstown, Montgomery County (now Fulton County), State of New York, February 17th, 1825; his parents were James and Ann Campbell McIntyre; his father was the head of the clan McIntyre of Scotland, and can be traced back as occupying the farm Glenoe from the thirteenth century until the death of his great grandfather in the latter part of the seventeenth century.

Ewen McIntyre attended his district school off and on until fifteen years of age, and then for about three years the Johnstown Academy, walking the distance from his home daily, almost three miles; this academy was founded by Queen Ann, the Queen giving the Bell, and Sir William Johnson, the Indian Colonial Agent of Great Britain, for the then western part of New York, erecting the building, which is still standing, but is now used as a glove factory.

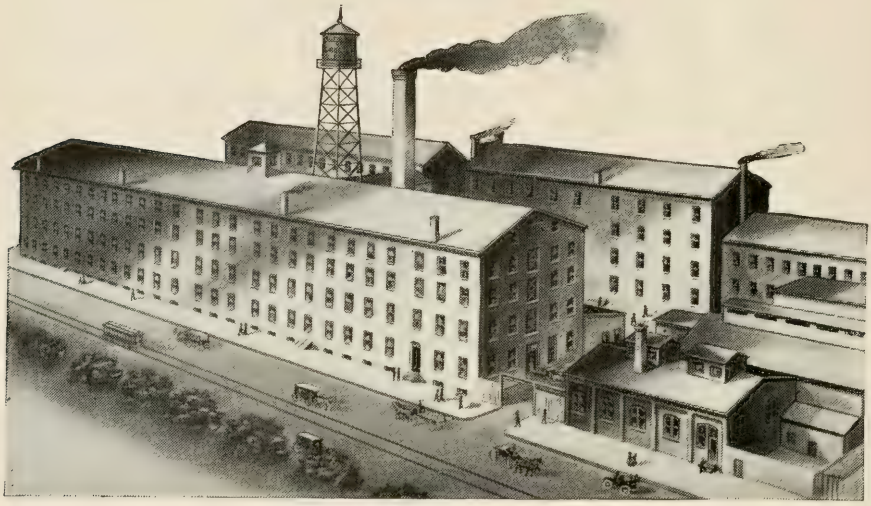
In 1842 (April) he came to New York City and entered, as an apprentice, the pharmacy of George D. Coggeshall, at the corner of Rose and Pearl Streets, serving his apprenticeship of four years, living as was then the custom in the family of the employer; he remained with Mr. Coggeshall three years more as clerk; during this period he attended the New York College of Pharmacy and graduated in 1847, leaving Mr. Coggeshall in 1849.

After much and careful consideration he decided to open a pharmacy of his own, which he did on Broadway and Eighteenth Street in April 1849, having the experience of hearing the troops march by the door the night before opening to put down the Forrest and McCready riots at Astor Place where several were killed and many of the lookers on wounded; among the number the party that put in the gas fixtures at the store a few days before.

Broadway and Eighteenth Street then was considered out of the city, the stages making the experiment of extending their route from Twelfth Street (then the limit) to Thirty-second Street that spring. Cows were kept and milk sold on the southwest corner of Eighteenth Street. Pegs kept on the opposite corner a large dance house that had been a factory, where Arnold & Constable now have their store; on the northeast corner was a seed store that had been there many years, and at this corner some two years after Mr. McIntyre found a life partner, who not only is the mother of a large family but as well largely contributed to whatever of success he has achieved, and still remains with him after more than fifty-five years of companionship together.

No doubt he has lived in a wonderful period of the world's history and has seen great changes; he when a boy sitting on his father's doorstep has seen the pioneers that were settling the great West—Ohio, Indiana, Illinois—from the eastern States pass with their covered wagons, their families and all they possessed, counting often more than thirty a day; he has seen the second railroad built for business in this country from Schenectady to Utica, and even as late as 1843 the train was drawn up the hill at Schenectady by removing the engine and attaching a rope to the train, hauling the train to the top of the hill, aided by a carload of stone going down; after the train reached the top of the hill, the rope was removed and another engine hitched on which took the train to Albany, the end of the road; he has seen the introduction of matches, the old flint and steel being the way to get a fire or keep some fire or live coals over by covering them with ashes or go to a neighbor; the telegraph, telephone, the excitement on the discovery of gold in California, the great growth of a city above where he commenced business larger than the city below Eighteenth Street; advance in chemistry, surgery and medicine, and the many changes, making possible the wonderful age in which we now live. It would hardly seem possible that the next seventy-five years should make so great and wonderful changes and progress, and still why not? May he and his family be blessed with many more years of life, health and happiness.

ADDITIONAL LABORATORIES OF THE H. K. MULFORD COMPANY.



PHARMACEUTICAL LABORATORIES, No.2
CATHARINE AND ELEVENTH STREETS, PHILADELPHIA

The H. K. Mulford Company have recently added to their laboratory facilities by purchasing the above property at Eleventh and Catharine Streets, Philadelphia.

Here will be stored the crude drugs, the grinding and milling departments, and the manufacturing of fluid, solid and powdered extracts, tinctures, synthetic products, etc.

These additional buildings will enable the firm to greatly increase their manufacturing facilities in the Thirteenth Street laboratories, provide additional shipping facilities and increase the scope of their Research and Standardization Laboratories.

The Biological Laboratories at Glenolden are used for the preparation of Antitoxins, Curative Sera and Vaccines. The physiological laboratory for testing drugs on animals is also located at Glenolden.

The recent National and State legislation requires the observance of the standards of the U. S. Pharmacopœia and National Formulary. As the expense of standardization work on a small scale is almost prohibitive, druggists generally are dependent upon the large manufacturing houses provided with scientific departments and facilities for assaying and testing drugs.

Realizing the importance of adopting standards for the character, quality and strength of medicinal drugs, chemicals and preparations of the same, the H. K. Mulford Company provided facilities for standardization work early in its history. Their foresight is now being amply rewarded by the increased demand for their products.

As the demand for the Mulford products is entirely due to the requirements of the medical and pharmaceutical professions, the fact that they are obliged to greatly increase their facilities at this time is the best evidence of the confidence reposed in the house.

DECISION A BLOW AT DRUG COMBINE.

CINCINNATI, Ohio, March 6.—The drug combine was given a hard blow by the sweeping decision by Judge Lurton, in the Federal Appellate Court. The decision completely knocks out the system of special contracts, which has been heretofore the subject of favorable decisions in at least twenty United States courts.

The case decided is that of Samuel B. Hartman, of Columbus, Ohio, against John D. Park & Sons, this city. Hartman won in the lower court and the Parks took the appeal.

Hartman is the manufacturer of proprietary medicines. These he put on the market through a system of contracts intended, it was claimed, to maintain prices. Each jobber, it was asserted, is required to sign a written agreement to sell only to retailers whose names shall be furnished by him, and who shall have signed a retailer's agreement with him, obliging them to sell only to consumers at a price named by him.

It was charged that the defendant company refused to enter into any contract with the complainant and was therefore not entitled to buy or deal in his medicines.

Judge Lurton's decision is that the contract was in the nature of a monopoly and a restraint of trade, as it maintained prices and controlled sales.—Times.

It is easy enuf to stand up for Truth when with the throng and to the admiration of men, but O how much harder when with the solitary stillness of our inner being and to the respect of our truer selves.—E. A. Dupin.

ALUMNI, CLASS AND COLLEGE NOTES.

1907 NOTES.

Dr. E. Bischof has purchased the oldest hotel on L. I. at Roslyn, the Mansion House, which is very large and has a fine view of the surrounding country. Would like to meet the boys here and have a smile or spend their vacation.

SONGS AND THEIR INTERPRETATION.

"I hates to get up early in the mornin".....Eade.
"Down where the Wurzburger flows".....Brooks.
"Can't you see I'm lonely".....Brownell.
"Poor John".....The Janitor.
"Home ain't nothing like this".....Breakie.
"When love is young in springtime".....Burroughs.
"Why don't you try".....Del Vecchio.
"Making eyes".....Bikowsky.
"If time was money I'd be a millionaire".....Meeker.
"Tell me about the Exams.....The School.
"Asleep in the deep".....Barth.
"It ain't all honey, and it ain't all jam.....The University Course.
"Every day is ladies' day with me".....Cooper.
"Love me and the world is mine".....Stiller.
"I was happy till I met her".....Alpers.
"Somewhere, somebody's waiting for you".....Allen.
"It's nice to have a sweetheart".....Dalton.
"How dry I am".....Lambrides.
"Please go way and let me sleep".....Bongartz.
"I never did notin to nobody".....Blauer.
"I'm trying so hard to forget".....Kaufman.

ALUMNI PINS.

As previously stated Alumni Pins can be had from the Registrar, Dr. Geo. C. Diekman, 115 West 68th Street, New York City. Price $6 each, by registered mail $6.15 each, with patent safety clasp attachment 20 cents extra. All Alumni members should have one.

PICKLING WITH HYDROFLUORIC ACID.

Iron wire and iron sheet is almost universally pickled with sulphuric acid. In such work there is only a smooth even surface from which iron scale is the only material to be removed. Sulphuric acid does this in a very satisfactory manner and at a very low cost, and there is no immediate likelihood that any other chemical will replace it. The sulphuric acid *attacks the sheet and wire,* rather than the scale, by eating away beneath the scale, so that the scale (or iron oxide) is undermined and falls to the bottom of the tank. The workman judges his pickling by the rapidity with which gas bubbles up through the solution. This gas is hydrogen formed by sulphuric acid acting on iron. Sulphuric acid and iron oxide or iron scale give off no gas when they combine.

While this method is quite suitable for iron wire, it is far from satisfactory when applied to castings. Here there is an irregular surface instead of a smooth one, a considerable amount of sand clings to and is imbedded in the outer surface, and we have more or less scale, all of which must be removed before the casting is machined. Sulphuric acid can only remove the scale and sand *by eating away the iron beneath.* While this goes on slowly, the acid is rapidly attacking unprotected surfaces, blow holes and flows, to the detriment of the casting.

On account of these defects many foundrymen now use hydrofluoric acid, or a mixture of hydrofluoric and sulphuric acids, on their castings. Hydrofluoric acid *attacks the sand and scale directly,* and has very little action on iron, so that flows and blow holes are not increased in size and surfaces unprotected by scale are left intact.

The hydrofluoric acid is used cold (keep above freezing point) in the same lead lined tanks that would be used for sulphuric acid. The strength required varies with the kind of sand and amount of scale; usually about a two per cent solution is used (fourteen gallons water to one gallon ordinary thirty per cent acid), but the foreman in charge will probably find by trial that his particular castings require a little stronger or little weaker solution to get the best effects.

The first castings placed in the solution should be clean in from twenty to thirty minutes; they are then immediately dipped in hot water (containing a little lime if desired) and will then dry without rusting and without affecting any galvanizing or painting which may subsequently be applied.

For many grades of castings an addition of a small amount of sulphuric acid to the hydrofluoric acid has been found desirable. The amount added is not enough to attack iron rapidly, but it does loosen a portion of the scale and sand and allow it to drop away without being acted on by the hydrofluoric acid, so saving the latter. Our chemists have prepared a mixture which is particularly suitable and we will market it under the name of FLOURINE PICKLE. Of course, we can supply the pure acid and special mixtures when desired.

From Things Chemical.

BENZIN, NAPHTHA AND GASOLINE.[1]

BY OTTO RAUBENHEIMER, PH. G.,
Brooklyn, N. Y.

Much confusion exists in regard to the products termed respectively benzin, naphtha and gasoline. I have repeatedly sent to paint stores and even to drug stores and asked for gasoline and received instead ordinary benzin. When I would return it as not the fluid asked for I would be invariably told that it was "all the same."

Benzin, naphtha and gasoline may be compared to 94 per cent. alcohol, deodorized alcohol and absolute alcohol. If a customer asked for absolute alcohol the pharmacist would not think of giving him 94 per cent. alcohol in place of it, but the very same pharmacist would have no hesitation about dispensing benzin for gasoline. Of course, he might make the argument that gasoline was too explosive and too highly inflammable, and therefore too dangerous, to use. The customer, however, ought to be told these facts and warned not to use it in a room in which a light is burning. For cleansing purposes it is best to use it outdoors. In addition, a red danger label ought to be attached to the container.

Let us consider for a moment the difference between benzin, naphtha and gasoline. When crude oil is subjected to fractional distillation the very lightest hydrocarbons distil over first, the product being called gasoline. The next distillate, of a heavier specific gravity, is naphtha, and the next heavier is benzin, the last and heaviest being kerosene.

The specific gravity of these liquids is ordinarily taken with a Baumé hydrometer for liquids lighter than water, or what is called

[1] Presented to the American Pharmaceutical Association, 1905.

a coal oil hydrometer. It is graduated from 10 degrees at bottom of the stem to 100 degrees at the upper part. The lighter the liquid the deeper the coal oil hydrometer will sink into it.

The instrument is adjusted for liquids at a temperature of 60 degrees F. To correct differences arising from a change of temperature 1 degree Baumé is added for every 10 degrees of temperature below 60 degrees F. For fluids at a temperature above 60 degrees F. 1 degree Baumé must be subtracted.

As I use considerable quantities of benzin, naphtha and gasoline in one branch of my business I have devised a simple method of distinguishing these three hydrocarbons—namely, by taking the Baumé degree standard. The following figures represent approximately standard readings:

60 to 69 degrees B. = benzin, usually 62 degrees.
70 to 79 degrees B. = naphtha, usually 76 degrees.
80 to 89 degrees B. = gasoline, usually 86 degrees.

I hope that these figures will be of service to the profession, especially since most of the reference books reveal confusion as to the difference between benzin, naphtha and gasoline.

GINSENG AT HONGKONG.

THE PRICES RECEIVED FOR AMERICAN ROOTS.

Consul-General Amos P. Wilder, of Hongkong, in response to numerous American inquiries as to the trade in ginseng, with especial reference to the cultivated root, prices and importations, reports as follows:

The ginseng business is largely in the hands of the Chinese, the firms at Hongkong and Canton having American connections. [The five leading Hongkong Chinese firms in the ginseng importing business are named by Mr. Wilder, as also the leading "European" importing concern, and all the addresses are obtainable from the Bureau of Manufactures.] I am authorized to say that American growers may correspond with the European concern direct relative to large direct shipments. They receive goods only on consignment and have some forty years standing in this industry. This firm, as do the Chinese, buy in bulk and distribute through jobbers to the medicine shops, which abound in all Chinese communities. The Cantonese have prestige in cleaning and preparing the root for market.

Last year the best quality of ginseng brought from $2,000 to $2,300 Mexican per picul (equal to 133 1-3 pounds), but selected roots have brought $2,400 to $2,550. It is estimated here that growers should net about $7.25 gold per pound. The buying price of ginseng is uncertain. There being no standard no price can be fixed. The American-Chinese shippers have the practice of withholding the ginseng to accord with the demand in China. Owing to failures among Chinese merchants since the war and the confusion in San Francisco trade in this industry has been slack and prices have fallen off. If the root is perfect and unbroken it is preferred. Much stress should be laid on shipping clean, perfect, and attractive roots. Size, weight, and appearance are factors in securing best prices, the larger and heavier the root the better. When the shipment arrives the importer invites jobbers to inspect the same. The roots are imported in air-tight casks in weights of about 100 pounds. It is certain that there are many different qualities of ginseng and the price is difficult to fix, except on inspection in China.

As to wild and cultivated roots, two or three years ago when cultivated ginseng was new buyers made no distinction and the price ruled the same; but having learned of the new industry, experts here assure me the roots can readily be distinguished. They say that the wild root is darker in color and rougher. The wild is preferred. Experts now allege a prejudice against the cultivated root, affirming that the wild root has a sweeter taste. The cultivated roots being larger and heavier, they first earned large prices, but are now at a disadvantage, although marketable. The cultivated is as yet but a small percentage of the entire importations, but is increasing. Seventy-five per cent. of all importations are in the hands of the Chinese. Small growers in America will do best to sell to the collecting buyers in New York, Cincinnati, and other cities. Hongkong annual importations are now about 100,000 pounds.

The imports of ginseng at Hongkong during the past ten years have been as follows, for twelve months ending June 30:

A New York dentist demands settlement of a bill for $2,110. A physician recently asked a fee at the rate of $300 a day. Not much fear that the sick will die disgracefully rich.

GIRLS I HAVE KNOWN.

The liveliest girl I ever met
  Was charming Annie Mation;
Exceedingly sweet was Carry Mel;
  Helpful Amelia Ration.

Nicer than Jenny Rossity
  It would be hard to find;
Lovely was Rhoda Dendron, too,
  One of the flower kind.

I did not fancy Polly Gon;
  Too angular was she;
And I could never take at all
  To Annie Mosity.

I rather liked Miss Sara Nade;
  Her voice was full of charm;
Hester Ical too nervous was;
  She filled me with alarm.

E. Lucy Date was clear of face;
  Her skin was like a shell;
Miss Ella Gant was rather nice,
  Tho she was awful swell.

A clinging girl was Jessie Mine;
  I asked her me to marry
In vain—now life is full of fights,
  For I'm joined to Millie Tarry.

—*Boston Transcript.*

THE DEMAND FOR SOAP.

The demand for soap in India is on the increase, as it is also reported to be in China. Some Indian capital is moving toward meeting the demand by the erection of soap factories. This opens a demand for American-made machinery for making soap, and also suggests the importance of India to soap manufacturers in the United States as a field for their trade. An agent of tar soap in America

recently went through India and placed orders for tons of this soap, which, I understand, is giving good satisfaction. While on this subject it is proper to say that the most eminent physicians in Calcutta ascribe several forms of aggravating skin diseases to the effect of the irritating quality of the water used for ablution purposes. This fact has created a demand for certain soaps of American manufacturers that possess healing qualities. But none of these soaps quite measure up to the requirements. A study of the problem by a soap chemist, acting in conjunction with a physician of repute who understands the disease caused by the water, should be able to produce a soap that would find extensive sale in India when brought effectively to the attention of consumers.

CUMMIN SEED.

Superior Quality of Malta's Product.

Consul John H. Grant, of Valetta, reports that Malta raises a very fine grade of cummin seed, for which those islands have been noted for many years. He writes:

As far back as 1745 a noted French writer upon agricultural topics referred to Malta as being an exporter of one of the best grades of cummin seed known. At the present day the seed is raised solely for exportation, not being in demand for local use. Much of it is consumed in Germany, France and England. Two-thirds of the quantity exported goes to Germany. Occasionally fair-sized orders are filled here for the United States, being obtained through German houses. The principal grade exported is that known as the clean seed, which seems to give so much satisfaction that it is constantly in demand. American houses using cummin seed might deal to better advantage if business were done directly with the Maltese merchants. The past season Morocco has not produced either in grade or quantity anywhere near its normal amount of cummin seed. As prices in that market for this article are high, purchasers must, at least for the present, look elsewhere for their supplies. On the other hand, the Malta crop is above normal conditions, and farmers are about to take advantage of the decrease elsewhere by planting larger crops for the coming season. It is said that the price per cantara (175 pounds) in the market of Morocco at present is $34.06. The price is much less in Malta.

VOL. XIV. SEPTEMBER, 1907. No. 9

The Alumni Journal

Contents

Published Monthly by the Alumni Association of the College of Pharmacy of the City of New York—Pharmaceutical Department of Columbia University.

Columbia University

IN THE CITY OF NEW YORK

COLLEGE OF PHARMACY

The Seventy-eighth Annual Course of Instruction will begin on September 30th, 1907, under more favorable conditions than any which have existed in our previous history. The State law requiring one year of secondary school work before entrance to the pharmacy course has given us a superior class of students, capable of utilizing the higher grade of instruction offered by the Faculty.

The steady elevation of the educational standard that has been in progress in this College during recent years places us in a perfect position to meet the new demands for service under the recently enacted food and drug laws. Those demands are met by our graduate course of one year, leading to the degree of Doctor of Pharmacy, and by our Food and Drug Course also of one year, and open to graduates only. For those graduates who feel the need of a review before entering upon this work, we have this year inaugurated a summer preparatory course of twelve weeks.

Under the direction of a faculty consisting of four professors of Chemistry and one professor each in Pharmacy, Materia Medica, Pharmacognosy and Bacteriology, with well trained assistants, our Graduates in Pharmacy and Pharmaceutical Chemistry of our two-year course, are fully prepared to meet any board examinations, and those taking the advanced course are qualified to fill positions as analysts in chemical and microscopical work.

For information, address,

THOS. F. MAIN, Secretary,
115-119 West 68th St., New York, N. Y.

... The ...

Alumni Journal

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New York, August twentieth.

My Dear Mr. Editor:

I am not a member of the Alumni Association or a graduate of your College of Pharmacy but I have the greatest hope of being both in a few years. I have been receiving your Alumni Journal for some time and am pleased to state that it has most invariably contained instructive information, and although I am not advanced far enough to contribute any scientific paper to your Journal, I am going to write about a very pleasant trip I had during my vacation this summer, and if you think it worthy of space, I am sure that it will interest some of my brother Pharmaceutists.

Taking the Hudson River Day Line boat we had a delightful trip up the Hudson as far as Albany; the weather and scenery were superb; from Albany we went by trolley to Schenectady, a trip of about one hour, through a very nice country.

We used Schenectady as a central point as from there you can travel in all directions for miles by trolley; of course our first day was spent seeing the old town of Schenectady, where the second railroad in the world was built, running from Schenectady to Albany. This is a city of about 75,000 inhabitants, its principal business being the General Electric Works and the American Locomotive Works.

On the second day we procured a pass to go through the General Electric Works. We were not permitted to take our cameras along, because the G. E. people have patent machinery which they fear emissaries of a rival company will get photographs of, and infringe upon. The office building of G. E. Works is about the size of the New York Post Office, and has an office force of about 500. The total number of people employed is about 16,000.

They have about 120 shops where everything connected with electricity is made from the minutest part to the largest turbine motor. The smallest shop occupies three acres of floor space, and the largest eleven acres. This building is 300 feet wide by 600 feet long.

Passing from one building to the other you see the various parts of electrical appliances made and to enumerate the very many different things would take up too much space—some of the most notable ones are electrical mine engines which resemble very much the steam engines formerly in use on the New York "L" roads, large turbine motors about 20 feet in diameter and weighing about twenty tons each—one can see these made from start to finish, as well as seeing them put to the test, because everything which leaves the shops completed, must go through the test to see if it works properly; these larger pieces are all moved by electrical traveling cranes, which are powerful and strong enough to lift as much as one hundred tons; all the shops are of brick or concrete and fireproof. They have their own emergency hospital as well as fire department.

The third day we secured a pass to go through the American Locomotive Works; this is not so extensive as the G. E. Works, but yet it is the largest probably in the world; they employ about 6,000 people and have about twenty shops. These are very long—some as long as two city blocks; here is built everything for the smallest as well as the largest locomotive in the world, as well as the largest automobile ever built; space will not permit any detailed account of the various shops.

The balance of our time was spent taking trolley rides to Saratoga Springs where we partook of the various waters—Saratoga Lake—Balston Lake—and some minor places of interest to a sightseer.

Did we forget Albany—well not much, for who ever goes up state without stopping at Albany? We employed a guide to conduct us through the Capitol building. He explained to us that the building took thirty-one years to complete, and cost $18,000,000.

The senate chamber cost approximately one million dollars, the assembly room about $800,000.

The various stairways cost from $300,000 to one million each; it is indeed a grand piece of architecture, not two pieces of stone or wood inside are alike, no two rooms, stairways, corridors or lobbies are alike; the furnishings, and everything connected with each room are not duplicated anywhere in the building; the masonry and woodwork come from all over the world, and from every state in the Union.

We had the great pleasure of shaking hands with the Governor, who is always pleased to give a glad hand and smile to a New Yorker. He is a very amiable person, and one cannot but be impressed with his congeniality and I think that the time is not far off when we shall see him occupying the President's Chair in Washington.

We spent the balance of our time trolleying to Troy and various other little sections around that part of the country and thus ended our vacation.

Yours sincerely,

AMOS. P. DUNKEL.

ICHTHYOL.

Ichthyol maintains its position in spite of the increased competition caused by the introduction of substitutes during the past year. Extensive scientific researches, both chemical (Thal, Lüders) and therapeutic (Schwarzenbach, Goldman, Hirschkron, Brodsky), have demonstrated that the substitutes are not equivalent to ichthyol in action or composition. Moreover, in the United States, where it was attempted to pass the ichthyol substitutes under the tariff as being identical with ichthyol, the Board of General Appraisers decided that these substitutes differed from ichthyol in many respects, and could therefore not be passed as ichthyol. It would be advisable therefore to avoid any claim that the so-called substitutes are identical with ichthyol.—*Gehe's Handels-Bericht*, 1907.

ALUMNI, CLASS AND COLLEGE NOTES.

P. G. 1906.

Once a druggist always a druggist. Dr. Nat. Siegel, (P. G. 1906) who until recently was assisting Prof. Coblentz in the Chemical Laboratory is back in the drug business to stay. He refused a position as chemist in the Department of Agriculture of the State of New York, and is now managing C. E. Kessler's Pharmacy at 34th Street and 2nd Ave., N. Y. City. He has been Mr. Kessler's right hand man for the past eight years and now has an interest in the business.

1903.

Le Roy Duckworth is spending the summer back in the wilds of Penn'a, in the Pocono Mountains. He finds shooting game and fishing trout far more interesting than rolling pills.

A. G. Gilmore is now living at Bar Harbor, Maine.

1904.

Geo. L. Wilson is the senior Apothecary at the Roosevelt Hospital, N. Y.

1905.

Max Sugarman is still at 143rd St. and Seventh Ave. He is the proprietor of the Rosemary Pharmacy.

1906.

Ralph C. Kirkendall is now with S. S. Dichter at New Rochelle, N. Y.

GENERAL.

H. Phillip Hill, Jr., of New York, a graduate of N. Y. C. P. received his degree as an M. D. from the Maryland Medical College last Spring.

Vanilla beans have materially lost in favor with manufacturers since the introduction of artificial or synthetic vanillin. The new Pure Drug and Food Law will require all vanilla flavors containing synthetic vanillin, tonka beans or coumarin to be labeled "Chemical Compound." This has caused a greatly increased demand for vanilla beans, but as yet the price remains about the same. The Mexican vanilla growers will loudly applaud the new law, for they have been much discouraged during the past few years on account of the inroads which synthetic chemistry has made upon their business by giving the world vanillin.

THE OPIUM CURE

INVESTIGATION OF THE NEW PLANT SAID TO CURE THE DRUG HABIT.

The recent publication in Consular and Trade Reports of an account from the China Telegraph of the discovery of an indigenous plant in the Malay Peninsula, which had successfully cured many Chinese of the opium habit, caused numerous American inquiries for further information about this plant. The following article in the London Times from Edward Morell Holmes, curator of the Pharmaceutical Society of Great Britain, will therefore be of interest:

Hitherto the name of the plant used as a cure for the opium habit in the Straits Settlements does not appear to have been made known. Specimens of the plant in flower and fruit have been presented to the museum of this society by L. Wray, curator of the Taiping Museum, Perak. This gentleman, who is a careful botanist, has identified the plant as Combretum sundaicum, Miquel. It accords well with Miquel's description, and there can be no doubt that it belongs to that species. It is a woody climber, with opposite leaves, in size and shape somewhat resembling that of the pear tree, and bears globular clusters of small white flowers arranged in panicles, the flower being followed by a red fruit about an inch long, furnished with four longitudinal wings.

The plant is abundant on the plains around Kuala Lumpur, in Salangore, Malay Peninsula. The properties of the Combretaceæ, the natural order to which it belongs, are very little known; some are used in malarial fevers, two are known to possess vermifuge properties, and one is used for poisoning bats. As soon as a large quantity of the plant arrives the leaves will be subjected to chemical analysis and physiological investigation, and its actual value or otherwise determined. Meanwhile a few peliminary tests applied in the research laboratory of the Pharmaceutical Society to the small quantity of the leaves available indicate only the presence of an astringent principle, and a coloring matter which do not afford a definite proof of the presence of any alkaloid or glucoside, although the leaves appear to contain some substance as yet unknown to chemists.

What Constitutes a Dose?—M. I. Wilbert claims that an average dose means a quantity which can be doubled, tripled or quadrupled at one time. Dr. C. B. Lowe says that it is necessary to take into consideration the length of time required for the elimination of the drug from the system.

SUCCESSFUL N. Y. C. P. GRADUATES.

Of the younger members of the faculty of the College of Pharmacy of the City of New York it is very hard indeed to tell who is the best and most fitted for the position which they respectively occupy, for they have all passed through such a thorough preliminary training. and all have demonstrated their various abilities in the Pharmaceutical and Chemical lines that it is extremely difficult to find such a corps of Professors and Instructors as are now following their vocations as such in our grand College; and as opportunity presents we will endeavor to outline from time to time the life history of those who come under our notice—one of these is Dr. Curt P. Wimmer. Dr. Wimmer was born July 2nd, 1879, in Salzungen, Germany; he received his early education in the schools of his native town passing through the different grades, equivalent to our Primary, Grammar and High Schools, subsequently going to Kassel and attended the courses of instruction at the "Ober-real-schule." At the age of seventeen he passed his final examination (Arbiturium) with such high honors, that the faculty absolved him entirely from the customary additional written and verbal tests; he then entered the field of Pharmacy, becoming duly apprenticed and after serving in this capacity for some time. decided to come to the United States, arriving in New York City early in the year 1898.

This same year he entered upon a continuation of his pharmaceutical career in a retail pharmacy in New York. In the fall of 1900 he entered upon the Junior course in the New York College of Pharmacy, the following term entering the Senior class and graduating with the class of 1902, his name appearing on the "Honor Roll."

Subsequently he entered the employ of Messrs. McKesson and Robbins, working in their Laboratories for some time, leaving them to accept a position in the Prescription Department of one of the Jungmann Pharmacies.

In the fall of 1903 he enrolled as a member of the Post Graduate Class of the College of Pharmacy of the City of New York, and in the Spring of 1904 the Degree of Phar. D. (Doctor of Pharmacy) was conferred upon him, together with an award of the faculty prize. It may be well to state that this is a very distinguished honor, as the faculty award this prize only when a student shows especial merit and such was the case with Dr. Curt P. Wimmer.

After receiving the degree of Phar. D. he re-entered the employ of Dr. Jungmann, being placed in charge of the Physiological and Pharmaceutical Laboratories, which position he occupied until shortly before assuming his present duties, those of Instructor in Pharmacy in the College of Pharmacy of the City of New York, which is indeed a very distinguished honor.

The Educational Department of the State of New York has valued his foreign school certificate as the equivalent of sixty-regents count.

He is licensed by examination to practice pharmacy in the States of New York and New Jersey, and may he long live to propound the knowledge which he gained in our own College to the many graduates who must necessarily follow in our footsteps, for who is better able to teach Pharmacy to the students than one who has received his own instruction in the same College in which he is now engaged as instructor?

Lucy Triplett recently applied for a divorce in a Western court. It is evident she could no longer stand for the suggestion implied by such a name.

PHARMACY COUNCIL OF THE STATE OF NEW YORK.

Education Department, Albany, N. Y., January 7, 1907.

Present—Messrs. Anderson, Gregory, Diekman (representing New York Pharmacy), Bradley (representing Albany), and H. L. Taylor.

Voted—That Dr. Anderson be chairman, Dr. Taylor, secretary. After an informal discussion of several items of interest to the schools

Voted—That matriculation in any pharmacy school of the State entitles the matriculate to enter any other school of pharmacy of the State.

Voted—That colleges of pharmacy registered in full may admit to equivalent standing students of other registered schools on certified evidence of the work done.

Voted—To adjourn.

WILLIAM C. ANDERSON, Chairman.
H. L. TAYLOR, Secretary.

State Board of Pharmacy

Albany, January 7, 1907, 8:30 A. M., Capitol

Pursuant to call of Chairman Gregory, December 24, 1906

Present—Messrs. Gregory, Bigelow, Tuthill, Bradt and Taylor.

Voted—That minutes be approved without further reading.

Voted—(1) That the application for registration of the Department of Pharmacy, C. P. & S., San Francisco, Cal., Dean D. A. Hodgehead, 2435 Sacramento St., in full in group 1 be approved.

(2) The registration of Howard University, Pharmaceutic College, Washington, D. C., be continued on condition that the practice of allowing one year to graduates of medicine be discontinued, and that lists of students entitled to such allowance be filed with the Education Department.

(3) That registration of Purdue School of Pharmacy, La Fayette, Ind., Dean Arthur L. Green, be authorized on further evidence of their meeting the requirements in full.

(4) The registration of Notre Dame College of Pharmacy, Ind., President Cavanaugh, in full be continued.

(5) The registration of the Pharmacy Department of Ferris Institute of Big Rapids, Mich., be held pending further investigation.

(6) The Department of Pharmacy of Medico Chirurgical College, Philadelphia, Dean I. V. Stanley Stanislaus, be continued in group 1, class two.

(7) That the Pharmaceutic Department of the South Dakota Agricultural College, Brookings, S. D., Dean B. T. Whitehead, be registered in full in group 1.

Voted—That all schools now registered be notified of the advance requirements exacted of the New York schools, and that to continue as registered schools all schools without the State must meet the requirements exacted of those within the State.

Voted—To add to the requirements for registration the regulation that all schools without the State be required to furnish lists of matriculates as is required of the New York schools.

Voted—That information regarding the registration by the ad interim committee as approved by the State board be furnished the pharmaceutic journals for the information of the general public.

Voted—That the rule requiring algebra after January 1st, 1907, for admission to registered pharmacy schools be rescinded.

Voted—That the question "shall matriculates of pharmacy schools prior to January 1st, 1905, have right of migration on repeated failure to maintain professional standing?" be referred to the Pharmacy Council.

Voted—That the committee rise and report to the State Board.

WILLIS G. GREGORY, Chairman.
H. L. TAYLOR, Secretary.

A word of explanation to the reader may be helpful. The amendment of the New York pharmacy statute 1904, brought that board into connection with the Education Department with several items of administration uncertain. A conference of the several interests involved by the statute was called prior to the date of its becoming effective, which resulted in agreements that have proven helpful to all interests and have established most harmonious relations between them.

When the law became effective the State board in conference with the Education Department formulated a method of administration and appointed a committee to act in the interim between the regular meetings of the board and known as the "ad interim committee." At the same time the Education Department organized a council representing the interests of the pharmacy schools of the State to consider the questions involving their interests.

The following report of the last meetings of these committees has been ratified by the respective bodies to which they are responsible.

LABORATORY NOTES.

By Charles E. Vanderkleed.

In answer to the query as to whether spirit prepared from concentrated nitrous ether meets the pharmacopœial standard for strength, my answer would be that it does, provided the proper precautions be taken. In examination of the 80 per cent. concentrated nitrous ether covering several years, I have never found a sample under strength. The contents of each bottle of the concentrated ether require dilution with 19 volumes of alcohol to produce a 4 per cent. spirit. The best method is as follows:

Wash the bottle of concentrated ether until perfectly clean on the outside, and place it on ice or in a refrigerator. Pour 15 or 16 volumes of cold alcohol into a wide-mouthed container that can be tightly stoppered. A specimen jar, or even a crock provided with a rubber casket and heavy covers answers very well. Tie a cord to the neck of the well-chilled bottle. Remove the stopper and plunge it, mouth upwards, below the surface of the alcohol in the jar. Allow the bottle to remain submerged for a few minutes, gently giving it a vertical motion with the attached cord. The contents of the bottle will have become so diluted, by diffusion, that the bottle may be removed and emptied into the rest of the mixture without loss by evaporation.

After securing uniformity of the mixture a portion should be removed and subjected to the pharmacopœial method of assay, the remainder in the meantime being securely stoppered. Then the calculated amount of alcohol to make the finished product assay 4 per cent. may be added. Unless made in very small quantities for immediate use it is advisable to make the finished product to assay slightly above 4 per cent.

A nitrometer is not absolutely necessary in carrying out the official assay process. An inverted burette which has been carefully calibrated from the 50 Cc. mark to the glass stop cock will answer the purpose equally well, it being necessary only to attach a small funnel by means of a short piece of rubber tubing to the outlet through which the spirit of nitrous ether and the reagents may be introduced.

In the U. S. P. calculations of the ethyl nitrate strength in the assay process corrections are made for temperature and for barometric pressure, but none is made for vapor tension. When the latter correction is made, the results are slightly lower, but this omission is not of much consequence where only comparative results are desired.

THE ASSAY OF PEPSIN U. S. P.

In making the U. S. P. assay of pepsin care must be taken to disintegrate thoroughly the coagulated egg albumen in order to be fair with the pepsin sample. To do this well by means of a glass rod tipped with cork or rubber tubing as the pharmacopœia directs is very difficult. A few vigorous shakes will accomplish the result more effectually. On the other hand, to insure the stringency of the U. S. P. test, the method of agitation every ten minutes during the digestion, by inverting the bottle once, should be rigidly adhered to. A more vigorous shaking every ten minutes gives the sample too great an advantage.

VALUE OF IODEOSIN AS AN INDICATOR IN ALKALOIDAL ASSAYS.

It is to be regretted that our new Pharmacopœia does not more emphatically advocate the use of iodeosin as an indicator in pharmaceutical assaying. In the assays of nux vomica and physostigma and their preparations, iodeosin is directed, but in the case of belladonna, henbane, stramonium, scopola, coca, and pilocarpus the use of iodeosin is made optional. It is in in the assay of drugs containing mydriatic alkaloids that I deem its use especially desirable. Although directions for making iodeosin indicator are to be found in the appendix of the Pharmacopœia I prefer to make the titration as follows:

A solution of alkaloidal residue in excess of standard acid is transferred to an 8-ounce bottle, diluted to about 100 Cc. with distilled water, about 30 Cc. of ether added, and lastly 5 to 8 drops of a 5 per cent. solution of iodeosin in alcohol. The bottle is stoppered and vigorously shaken after each addition of centi-normal potassi. The end reaction is marked by the appearance of a rose pink tinting the lower aqueous layer. The ether, which I prefer to use in amounts somewhat in excess of those advocated in the U. S. P., serves the double purpose of holding the indicator itself in position while the aqueous layer is still acid, and of dissolving and holding in solution the coloring matter present in the alkaloidal residue being titrated, thereby enabling the color change of the end reaction to be more clearly seen in the practically colorless lower layer.

I have found, however, that the most delicate reading can be obtained with this indicator by observing the color change in the agitated mixture of water-ether layers. In this way I have been able in assay work to note the end reaction on the addition of two drops (about 1-20 Cc.) of N—100 alkali, the milky looking mixture during the vigorous shak-

ing forming a good background for bringing out the delicate color change. I believe that iodeosin used in this way ranks far above all other indicators for general use in drug assay work, and results such as this are extremely useful in the assay, for instance, of henbane leaf, where 1-20 Cc. of N—100 alkali may be equivalent to more than 3 per cent. of the total alkaloid present in the solution being titrated.—*Penna. State Pharm. Ass'n.*

TALES OF A SAMPLING MAN.

On a cupboard shelf stood a bottle of olive oil; it had been there for weeks. So long had the oil stood there unnoticed, of apparently no value, it was with a qualm of emotion that it was obliged to move wallward one morning as things in front were pushed back to make room for a bottle of—olive oil.

Regularly, three times a day, a young man came with a spoon to the cupboard and took from the new bottle of oil. Patiently the old bottle watched the attentions to the new one, until the contents of the latter were but half its capacity, then, over the china and glass things in front of it, to the remarkable oil it cried:

"Do you know I am here? Does the one who brought you know I am here?"

"Both your impetuous queries might be answered in the affirmative," said the one addressed, with a pompous air, "and further discourse may be obviated by me telling you that I am an exceptional olive oil, and my patron knows it from the sample and the circulars he received from the druggist."

"You are not a bit better than I am!" cried the indignant oil in the rear, "and I don't care by how many samples and circulars you were represented to be, for you're not."

"Why, sir," sneered the advertised oil, "I was imported from Southern France."

"So was I!"

"But," continued the sampled oil in a tone meant to silence the other, "I was expressed from the variety longifolia."

"Memories of a far-famed olive! So was I!"

Moral: What a thing is does not count, unless you make people realize what it is.—Reprinted from *Western Druggist.*

HOW DIAMONDS ARE FABRICATED.

The manufacture of diamonds has been successfully performed by one of the many modern chemists who have essayed it. M. Henri Moissan, the diamond maker in question, is about to see his life work commemorated by the presentation of a medal, which his pupils have decided to offer to him on the occasion of the twentieth anniversary of his successful isolation of fluorine.

The value of M. Moissan's work has been further acknowledged by the award to him of the Noebel Prize for chemistry.

But the isolation of fluorine is only one of M. Moissan's claims to distinction. The electric furnace, which nowadays plays so large a part in industrial processes, owes more to him than to any other experimenter.

Mr. Moissan's pattern of electric furnace consists in its simplest form of two blocks of lime or limestone, forming the body of the furnace, through which an arc was formed between carbon electrodes. The peculiarity of M. Moissan's furnace was that it was able to produce far higher temperatures than had previously been attained. As much as a hundred horse power was used to concentrate its energy on a small charge, and in this way a temperature was reached only limited by the boiling point of carbon, which lies between six and seven thousand degrees Fahrenheit.

At this tremendous temperature, which is probably not far off that which exists in the sun's atmosphere, the most refractory metals are converted into vapor, and chemical changes or combinations are produced which are quite impossible at the comparatively low temperature of ordinary furnaces.

The most interesting, though not the most industrially important, of the researches which M. Moissan has carried out in his electric furnace is the manufacture of artificial diamonds. We have long known that the diamond is only a piece of crystallized carbon. If we could melt carbon and allow it to cool slowly, there is no doubt that it would solidify into the brilliant crystals which we call diamonds. Unfortunately, carbon cannot be melted at all under ordinary conditions. It is one of the few elements which pass directly from the solid to the gaseous condition—like iodine. M. Moissan, like earlier investigators, had therefore, to abandon the idea of thus forming diamonds.

But there is another way of producing crystals. Instead of melting the substance which we desire to crystallize, it is sufficient to dissolve it and allow it to crystallize out of the solution by evaporating the latter. The crystals of barley sugar, which are to be seen in every confectioner's window, are thus produced. Molten iron happens to be a good solvent for carbon, which is usually set free when it cools in the form of graphite scales. M. Moissan, however, hit upon the brilliant idea of making the molten iron charged with carbon cool under great pressure. This pressure is easily obtained by using the property which cast iron shares with water and a few other bodies, that it expands instead of contracting at the moment when it solidifies.

M. Moissan thus melted iron, mixed with carbon, in his electric furnace, at a temperature of about 7,000 degrees Fahrenheit, and then plunged it into water or molten lead. This sudden cooling solidified the outer skin of the ingot. The expansion of the inner part, still liquid, on solidifying within this hard skin, produced enormous pressure, and it was found that the carbon under this pressure actually crystallized into minute diamonds. The largest yet made is only about one-fifth of an inch in diameter, but they are genuine diamonds, and M. Moissan is thus the first and only diamond maker.

The same process in nature gives rise to the discovery of tiny diamonds in many iron meteorites, like the huge one which fell at Coon Butte, in Arizona, and which an expedition is now on its way to dig up. Probably the gems of Kimberley have been produced in a similar fashion; but it is extremely doubtful whether we shall ever be able to imitate these vast cosmic processes in our laboratories, and the owners of diamond necklaces need not be in immediate fear of a sudden fall in the value of their jewels on this account.—W. E. Garrett Fisher in The London Mail.

PINK TEA FOR FARM HANDS.

The wife of a farmer had a sister come from Chicago to make a visit. One day the threshers came, and the guest insisted on doing the work alone and sent her sister away to rest. When twenty-seven threshers filed into supper that night they found a sandwich tied with ribbon, one chicken croquette, one cheeseball the size of a marble and a buttonhole bouquet at each plate.—*Emporia (Kansas) Gazette.*

BOOK REVIEWS.

A Compend of Materia Medica, Therapeutics and Prescription Writing. By Samuel O. L. Potter, M. D., M. R. C. P. Lond. P. Blakeston's & Co., 1012 Walnut St., Phila., Pa. Cloth. P. P. 292, $1.00.

This ready and concise treatise has especial reference to the physiological action of drugs, is based on the eighth revision of the U. S. P. and includes many unofficial remedies besides.

The book has already passed through six editions, this being the seventh revised and enlarged.

Twelve new articles and forty-three new paragraphs on important drugs have been inserted, and sixteen articles have been rewritten. All obsolete matter has been removed, but the insertion of so much new matter, and the adoption of a wider face type, have added thirty-seven pages to the book. The new matter has reference to Animal Extracts, Boric Acid, Ethyl Chloride, Formaldehyde, Methylene Blue, Musk, Oxygen Senega, Sera, Sumbol, Uric acid Eliminants, and Urinary Sedatives.

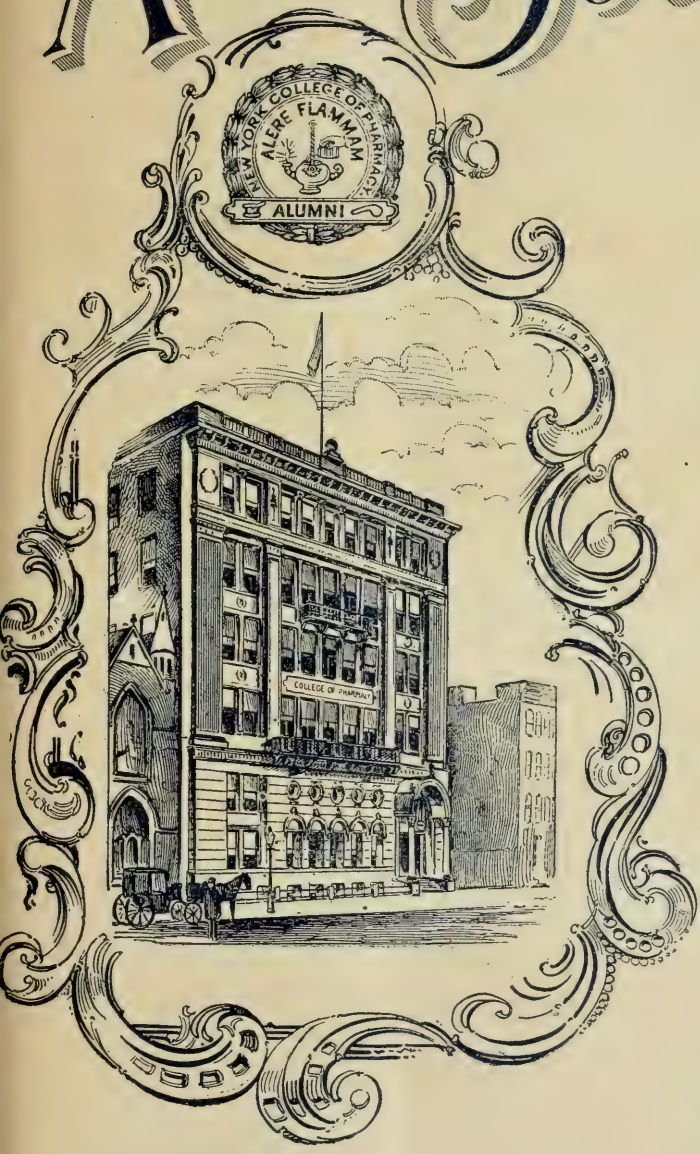
The newer remedies are discussed at length and the text is so arranged and indexed that any subject may be consulted with readiness and convenience. While the book is intended primarily for medical students, yet students of pharmacy, clerks and pharmacists in general will find it an important adjunct to their library. Especially is the book to be commended to those preparing for college or state board examinations.

SNAKE-BITE REMEDY.

This time, according to the *Montreal Pharmaceutical Journal*, it is just the common, broad-leaved, dooryard plantain, *Plantago major* Lin. The modus operandi is to apply a poultice of the leaves to the bite and to chew a few leaves, swallowing the juice. Presumably the green leaf is preferred. It is said that this remedy was discovered by a colored boy who had been watching a fight between a rattlesnake and a mongoose; every time the mongoose was bitten it left the rattler to eat a few plantain leaves, when it would return to the fight. We give it for what it is worth.

VOL. XIV. OCTOBER, 1907. No. 10

THE Alumni Journal



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Published Monthly by the Alumni Association of the College of Pharmacy of the City of New York—Pharmaceutical Department of Columbia University.

Columbia University

IN THE CITY OF NEW YORK

COLLEGE OF PHARMACY

The Seventy-eighth Annual Course of Instruction will begin on September 30th, 1907, under more favorable conditions than any which have existed in our previous history. The State law requiring one year of secondary school work before entrance to the pharmacy course has given us a superior class of students, capable of utilizing the higher grade of instruction offered by the Faculty.

The steady elevation of the educational standard that has been in progress in this College during recent years places us in a perfect position to meet the new demands for service under the recently enacted food and drug laws. Those demands are met by our graduate course of one year, leading to the degree of Doctor of Pharmacy, and by our Food and Drug Course also of one year, and open to graduates only. For those graduates who feel the need of a review before entering upon this work, we have this year inaugurated a summer preparatory course of twelve weeks.

Under the direction of a faculty consisting of four professors of Chemistry and one professor each in Pharmacy, Materia Medica, Pharmacognosy and Bacteriology, with well trained assistants, our Graduates in Pharmacy and Pharmaceutical Chemistry of our two-year course, are fully prepared to meet any board examinations, and those taking the advanced course are qualified to fill positions as analysts in chemical and microscopical work.

For information, address,

THOS. F. MAIN, Secretary,
115-119 West 68th St., New York, N. Y.

... The ...

Alumni Journal

A JOURNAL OF PHARMACEUTICAL PROGRESS.

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Pharmaceutical Department of Columbia University.

PUBLISHED AT 43 FULTON ST., NEW YORK CITY.

CHAS. A. LOTZ, PH.G., EDITOR H. J. GOECKEL, PHAR D., ASSOCIATE EDITOR

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EDITORIAL.

Vacation time is over and those of us who were fortunate enough to secure a few days or week's holiday are now back in harness again; however, your Alumni Journal has been busy right along, intends to keep pace with father time, and will try to keep you informed as to the progress and events in Pharmaceutical history. In order to do this we must depend partially on our readers who have been kind enough from time to time to contribute an article or two, and we hope that the interest so far shown will not abate.

Beginning with the October issue we will publish monthly a serial story written by one of our brethren, who certainly displays literary ability of no mean merit; read it for yourself and be convinced; you may think it strange that we print the article mentioned, but as it pertains to the travels of a knight of the Mortar and Pestle we consider it of interest to publish it.

Again we remind you to be good to those who contribute to our advertising pages. Enough said.

GREETING.

On behalf of the Alumni Association we extend to the members of the junior and senior classes a hearty welcome.

You are to be congratulated upon having become members of the classes of the College of Pharmacy of the City of New York branch of the famous Columbia University.

You are to be congratulated also for having proven by your regent's certificates that you are an intelligent lot of young men (and we believe also some ladies). The regent's laws now cover the field of Pharmacy in this State, and it is not an easy matter to become a member of the classes without the pre-requisite amount of knowledge, which is required by the State Board of Regents, to entitle you to entrance upon a course of instruction in our grand College.

We trust that after you have passed through all your classes, you will become members of the Alumni Association of this College, which is an association of graduates of our College.

This association was founded in 1874 for the purpose of perpetuating the happy days of College life, and bringing together once a month as many of the graduates as possible, to talk over old times, to hear about new discoveries in our field, and listen to such instructive entertainment or discourses as may be presented at the monthly meetings.

For those who are compelled to go out of the city this journal will keep you posted on all the important events which take place, and you are urged to send in all the news of student life at all times which you may gather, and keep your relatives and friends posted on what you are doing.

EDITOR.

BOOK REVIEWS.

We are in receipt of Merck's 1907 Index (advance copy of 3rd edition). This is a 500 page cloth covered handsomely bound edition, excellent paper. An encyclopedia for the Chemist, Pharmacist and Physician, of chemicals and drugs used in Chemistry, Industry, Arts and Medicines. It is smaller than the 1896 edition but, nevertheless, full of useful information.

ALL COCAINE PREPARATIONS MUST BE LABELED "POISON" IN RED INK.

Some time ago the Drug Trade Section of the New York Board of Trade and Transportation asked the New York State Board of Pharmacy for a construction of the provisions of the new anti-cocaine law, which becomes operative September 1. The State Board subsequently submitted the matter to the Attorney-General, who delivered an opinion in the following terms:

ALBANY, August 15, 1907.

Warren L. Bradt, Esq., Secretary, New York State Board of Pharmacy, Albany, N. Y.

Dear Sir:

Your communication at hand in which you ask whether that part of Section 405-a of the Penal Code, which reads as follows:

> * * * "except, however, that such alkaloid cocaine or its salts, and alpha or beta eucaine or their salts may lawfully be sold at wholesale upon the written order of a licensed pharmacist or licensed druggist, duly registered practicing physician, licensed veterinarian or licensed dentist, provided that the wholesale dealer shall affix or cause to be affixed to the bottle, box, vessel or package containing the article sold, and upon the outside wrapper of the package as originally put up, a label distinctly displaying the name and quantity of cocaine or its salts, alpha or beta eucaine or their salts, sold, and the word 'poison' with the name and place of business of the seller, all printed in red ink," * * *

requires the wholesaler to affix a label on admixtures of cocaine or its salts, and alpha or beta eucaine or their salts.

I am of the opinion that it was the intention of the Legislature to require wholesalers to label cocaine or its salts and alpha or beta eucaine or their salts, whether mixed or unmixed with other articles.

Yours truly,
W. S. JACKSON, Attorney-General

"What changed her into a new woman? She hasn't been one long." "No; it was the knowledge that she was getting old."—Puck.

ALUMNI, CLASS AND COLLEGE NOTES.

Otto Raubenheimer, Class of 1888, read several good papers at the last meeting of the American Pharmaceutical Association. These will be published in our journal later.

P. Goldberg has purchased a drug store at Edgewater, N. J., where he would be pleased to meet any of our fellow members

Oscar Matthiessen has been operating and manipulating the pill machine down at Arverne, L. I., this summer.

Wm. Pruss has purchased the Brener Pharmacy at 11 Hamburg Avenue, Brooklyn.

CLASS REPORTERS!

There was a time when our various class reporters found items to send in to the editors; but when, oh when, was this? We hope that the new classes will get busy and show the old vets. what real live notes are.—Associate Editor.

ALUMNI PINS.

The registrar calls our attention to the Alumni Pins (improved) with a patent fastening clasp—unless you lose this clasp you cannot lose your pin. Those who have not an Alumni Pin and are members of the Alumni Association would do well to address the registrar for information regarding these Alumni Pins. Said information though is not really necessary. Just send $6 for one, or 20 cents extra for patent safety clasp, and 15 cents for registered postage to our registrar, Prof. Geo. C. Diekman, 115 West 68th Street, New York.

STANDARD AMERICAN CHEMICALS.

In the manufacture of chemicals, as to standard of quality, conservative methods, variety and extent of their productions, the well known house of Powers-Weighman-Rosengarten Company maintains an enviable reputation.

For more than three-quarters of a century their label has held undisputed supremacy in its field, denoted by the preference of physicians, pharmacists, manufacturers and the awards of merit conferred upon their products wherever exhibited.

Fully recognizing the constant advancement in therapeutics, their list comprises not only staple products, but also the newer chemicals

which have proved of value to medical science, and their line of goods is carried in stock by jobbers throughout the country.

The history of the house is in many respects identical with that of the origin and growth of American Chemical industry.

Powers & Weighman, and Rosengarten & Sons introduced into this country the manufacture of Morphine Sulphate and Quinine Sulphate, and their successors are to-day one of the largest producers in the world of these Chemicals, which are respectively the recognized standard brands of the American market.

Not less important is the relation of the Company to the manufacture of many other staple Chemicals, such, for example, as that of Acid Citric, Bismuth Subnitrate, Strychnine, and Potassium Iodide.

At a time when there is increased employment of Codeine and its Salts, we call attention to the announcement of the P-W-R-Co. relating to this subject, on the back cover of this issue.

PERUVIAN-BALSAM.

It is a well known fact that the genuine Balsam has become exceedingly scarce in the chief staple places as Hamburg, New York, London, Paris, Havre and Bremen; offers from the produce countries can hardly be had and the world's stock is very reduced; it appears that these conditions will continue and that we shall see ere long record prices for the article.

There are sufficient reasons for the scarcity:

The Peruvian Balsam tree (Myroscylon Pereirae) grows in a small district only of San Salvador and stormy weather has caused heavy damage among them, an unreasonable cutting off of the bark for other purposes, has since some time greatly reduced the production, political troubles between Honduras and Nicaragua have prevented the gathering to its usual extent, the rainy season has set in lately, and we see no chance for a more liberal supply of the article, but rather expect the position to grow worse.

HE SCARED THE MOURNERS.

Wilmington, Del., June 23.—There was all kinds of excitement at a negro funeral near Denton, Md., to-day when Samuel Johnson, a negro ventriloquist, "threw" his voice into the grave as the coffin was being lowered and said, "Let me down easy."

The mourners and the pall bearers fled. Later the mystery was explained and Johnson was arrested.

Saving a Show Window is well worth knowing. When a plate glass window has had a stone thrown through it, even if the hole is a small one, the cracks in the glass will creep, until they have reached a considerable distance. To prevent this, as soon as the hole has been made, take a glasscutter or a diamond and scratch a circle around the hole on both sides of the glass; or if the cracks have already reached a considerable distance, using a radius greater than that from the center of the hole to the outer extremity of each crack, draw arcs a little beyond the extremities of each of the cracks on both sides of the glass. This will prevent the cracks from creeping.

Using Drugs in Milk.—State Dairy and Food Inspector Dunlap, of Columbus, assisted by Theodore D. Wetterstroem, chemist and druggist, of Cincinnati, has been waging a relentless and successful war against dairymen for selling impure milk in the state. A score or more of arrests have been made, and convictions have been secured in almost every case. Upon analysis by Assistant Wetterstroem the milk was found to contain formaldehyde and other poisons in such large quantities as to startle the investigators. A number of dairymen in Cincinnati fell before the onslaught. The investigations were not confined to this city or county alone but as far north as Greenfield, Eaton and Oxford, Ohio. The prosecutions are having a very noticeable effect on the quality of milk here.—M. B. Druggist.

A Troublesome Prescription.—Correspondent writes: "How would you compound the following:

Strychninae sulphatis..... gr. I.
Arsenii trioxidi..... gr. ⅓.
Strontii bromidi..... gr. II.
Extracti gentianae q. s. to make a mass.
Make capsules No. XXX.

I would like some advice in your next issue as to how it should best be compounded. I used very little extract of gentian and the moisture, of course, caused the strontium bromide to liquefy and I added enough powedered glycyrrhiza to make a workable mass too large to go into convenient capsules. I next mixed the mass and dried in on a water bath. I perhaps used too much heat, for the

mass was too hard and I used glycerin and water to soften it; it contained hard lumps which I could not get out without making the mass too sticky. I, however, after much difficulty succeeded in getting it into No. 2 capsules. But no degree of accuracy could be obtained in dividing because of its being full of hard lumps about the size of tapioca. I would like to know how best to proceed in making a mass for capsules where you have a large amount of salt like strontium bromide. Should the salt be exsiccated or was my method of procedure all right had I used the required amount of heat?"

The author of the prescription had probably never been called upon to make a pill mass.

In preparing the above we have an instance in which it is necessary for the druggist to use his judgment and his discretion.

In general a mass can be made of saline ingredients which will be sufficiently tenacious to be put into capsules by mixing the salt (not exsiccated), with about half its weight of powered licorice root, triturating the mixture to a fine powder and adding a small amount of resin cerate, as excipient. The above may be prepared, however, without the use of any excipient whatever by proceeding as follows:

Mix the strychnine and the arsenic thoroughly with half a drachm of powdered licorice root; add half a drachm of powdered extract of gentian; mix well and add the strontium bromide. Under trituration the moisture of the salt will form a mass which may be readily divided and filled into capsules. By this modification of the prescription the patient gets the tonic effect of the gentian, the druggist has little trouble and the physician will, in all probability, be entirely satisfied.

The New Japanese Pharmacopoeia became the legal authority on July 1, but so many changes had occurred in standards that importers were perplexed and confused. The condition reminds us of the one following the passage of the National Pure Food and Drugs Law in the United States, which caused importers in this country to consult the Pharmacopoeia to an extent beyond all previous records. We understand that the Japanese government will not be unreasonable in the early enforcement of the new Phar-

macopoeial requirements. It is interesting to note that the new revision of the new Japanese Pharmacopoeia will also be published in English and possibly in Latin or some European language.

The Colleges of Pharmacy are opening their sessions this month, and many young men and women will enter upon the work which is expected to prepare them for their life's calling. We desire to impress upon them the advisability of making the best posible use of their time. The seven or more months of study will soon be over and then it is too late to profit by opportunities which were neglected. Realize that the information gained will be of use to you during your entire life which is to follow.—M. B. Druggist.

THE NATURE OF ADRENALIN.

Adrenalin is among the substances considered by the Pharmazeutische Post (March 3, 1907) in its instructive review of the progress made in pharmacological science during the year 1906. The latest word on the question of the constitution of adrenalin comes from E. Friedmann, who gives as the formula $C_6H_3(OH)_2$:CHOH:CH_2NHCH_3. Concerning the source of adrenalin in the organism, Friedmann considers that certain albuminous bodies, such as oxyphenylserin or oxyphenylmethylserin, represent the mother substance. These substances on oxidation may become adrenalin acid, and further changes brought about by fermentation and resulting in the throwing off of carbonic acid give rise to the adrenalin. W. L. Halle considers tyrosin and phenlalanin the most important elements iu the formula of adrenalin from the fresh glands, and in a number of cases he was able to demonstrate an increase in the amount of adrenalin, while in others no such increase was found. Finally, mentions is made of the effect on the glycogen of injections of adrenalin. Z. Gatingruzewska has shown that if adrenalin is injected into the peritoneal cavity of guinea pigs in the proportion of 1 Mg. of adrenalin to 1 Kg. body weight, and the animal is killed 36 to 40 hours after the injection, there will be found a complete disappearance of the glycogen in liver and muscle. This is the most effective way of rendering an animal glycogen free.

THE DRUGGIST AND HIS PRINTER.

By H. T. Strong, New York.

In preparing copy bear in mind that the compositor will set matter as it is written. Matter should be written only on one side of the sheet, in paragraphs, or should be marked clearly where each paragraph is to begin.

Considerable expense in author's alterations will be saved, if clean typewritten copy is furnished, the cost of re-writing on typewriter being much less than the alterations mde in type by many authors.

Interlineations should be avoided as much as possible, but where they do occur, be particular to write them clearly and legibly, and to mark exactly where they are to be inserted. In attaching slips to copy never use pins, always use mucilage or paste.

Words or sentences to be emphasized should be underscored with one line, those to be set in small caps underscored with two lines, while those to be set in caps should have three lines under them and so marked in margin.

In sending copy to the printer have it arranged carefully and numbered consecutively, so there may be a definite understanding as to the order to be followed, and number of pages of copy sent.

Selecting Paper.

In selecting the paper, consideration should be given to the class of matter which is to be printed. If fine half-tone cuts are to be used in with the text, there is no choice except to use coated cut paper to obtain the finest results. If line cuts or half-tones with a large screen or mesh are to be used in with text, a fine super finished paper is desirable. If line cuts only are to appear, a machine wove, or antique book paper may be used, and where type matter only is to appear, more latitude may be given in selecting a coarser finish of book paper.

Laid paper is still used but many are giving preference to paper with an even antique wove finish, which will invariably give better results in printing than can be obtained by using a laid paper, it being almost impossible to obtain a uniform finish on both sides of the sheet, where the latter paper is used. To get the best results in printing, both in an even distribution of ink and an even im-

pression, particular attention should be given to obtaining a paper with a uniform finish on both sides of the sheet, as nearly as possible.

Printing Orders.

Orders for printing should always be in writing, and if any instructions are given and accepted by telephone, they should immediately be confirmed in writing. If is it not possible to send all of the data in the original order, the omitted portion should be sent in writing at the earliest possible moment.

Orders should be numbered and dated, and should specify the quantity wanted, give a description such as booklet, catalogue, letterhead, envelope or blank, etc., and in case of books or pamphlets, a title should be given to define the job, even though later it may be subject to change.

Time Allowances.

When your printer or binder makes a fair promise, as to time, don't crowd him to get it quicker; he may faithfully try to do so, but nine times out of ten he will fail, and while you may critize him and call him dishonest, don't forget that you are a party to the crime. Be reasonable and carefully calculate how much time such a job will require, and you will help him to give you good work, and will not displease or disappoint yourself.

When you get a promise on certain promises of your own, and then fail to keep them, don't expect him to make up for your lost time, or to sidetrack work of other customers to get yours out at the desired time. You wouldn't like to be sidetracked, neither does the other man. When you make unexpected changes, taking time not allowed for when the original promise was made, don't forget to allow the additional time required to make them.

Composition.

Too much care cannot be given to the preparation of manuscript before it is handed to the printer. A few extra hours spent on same, even a day or more, will frequently save many times the cost in author's alterations, which almost invariably occur through overhaste and lack of proper attention in preparing copy.

Order for Composition.

Always be particular to give full information in order here stated on all of the following details of composition:

Title.

Size of trimmed leaf.

Size of type page.

Size and style of type to use on text and how leaded.

Headlines to be set in caps, small caps or lower case, with or without rules.

(Regarding proofs, bear in mind that pulling them is an expense, and do not order more than are needed, but whatever are needed had better be ordered at once, to avoid the rehandling of matter, which will increase the expense still more.)

State number of sets of galley proofs wanted.

State number of sets of page proofs wanted.

Always be sure to answer queries (?) marked on proofs.

Always return copy and old proofs when returning revises.—From the Apothecary.

EVER TRIED THIS?

The younger man had been complaining that he could not get his wife to mend his clothes.

"I asked her to sew a button on this vest last night, and she hasn't touched it," he said.

At this the older man assumed the air of a patriarch.

"Never ask a woman to mend anything," he said. "You haven't been married very long, and I think I can give you some serviceable suggestions. When I want a shirt mended I take it to my wife, flourish it around a little, and say, 'Where's that rag-bag?'

"'What do you want with the rag-bag?' asks my wife. Her suspicions are roused at once.

"'I want to throw this shirt away; it's worn out,' I say with a few more flourishes.

"'Let me see that shirt,' my wife then says. 'Now, John, hand it to me at once.'

"Of course, I hand it over, and she examines it. 'Why, John Taylor!' she is sure to say, 'I never knew such extravagance! This is a perfectly good shirt. All it needs is——' And then she mends it."—Popular Magazine.

NEWER REMEDIES.

Abyssinin.

Abyssinin, as first prepared by L. Brieger and M. Krause from the Bayamoyo species of the Acokanthera, is a reddish brown fluid extract emitting a sweetish aromatic odor, yielding a copious lather, and acquiring a syrupy consistency after losing about 20 per cent. of water by drying in the exsiccator. It is present in the arrow-poisons of the aborigines of German East Africa, and, as far as our present knowledge of it goes, exercises an influence similar to that of the digitalis and strophanthus bodies. As far as I am aware, the preparation is not as yet obtainable commercially.

R. Freund, having made comparative experiments with abyssinin, digitalin and strophanthin on frogs and rabbits, has found that at first abyssinin is in its action comparable to digitalis in that it slows the pulse and slightly prolongs the systole, but there is no visible tonic action with respect to the heart. Moreover the systole very soon becomes shorter, whilst the diastole lengthens. Further doses have the effect of rendering the pulse irregular. During his experiments on rabbits Freund found that 6 injections of a solution of 0.025 :200 grm. (gr. 2-5 :oz. 6 2-3) were needed to produce a slight retardation of the action of the heart, but there was no increase of the blood-pressure.

Aluminii Acetas.

Aluminum acetate is supplied commercially under the name of "Lenicet", which is said to conform to the formula $Al_2 O_3 . C_2 H_4 O_2$ (?). According to Aufrecht's analysis it is, however, a basic aluminum acetate, containing 2 molecules of acetic acid per molecule of alumina and having the composition $Al_2 (O H)_2 (C_2 H_3 O_2)_4$. It is a white powder and sparingly soluble in water. Lengefeld recommends it for the treatment of hyperhidrosis, where it exercises a prompt desiccating and deodorising influence. It may be used by itself and also mixed with indifferent powders, such as talcum and starch, also with glycerin, vaseline, etc.

It is moreover said to be available for use in erythema, weeping affections or others attended with the formation of blisters, also in granulating wounds.—Merck's Annual Report, 1905.

THE ANECDOTE OF A DRUG CLERK'S TRAVELS.

A clear day, the parks just beginning to bud into their coat of green, a bustling noisy city smiled upon by a radiant sun of May. New York a world of worlds, with its tall buildings defying the heavens, lying opposite on the beautiful Hudson. A mother and son are walking briskly toward the ferry where the son is to catch a train on his way to see the mysteries of the great West.

"Mother, I don't believe I will be gone more than a year but perhaps it may be two years, but don't worry for I will try to walk in the right tracks where'er I may be."

"Harold, I will not fear, and perchance you get into any entanglements trust fully in the Great Creator and you may win any battle which comes before you."

"Well how do you do, Mr. Dobbins, I am right glad to see you." Mr. Dobbins, a traveling salesman whom he had known for years was waiting for a train. "Johnson, where are you bound for with a traveling grip?" "Buffalo for a start which as you know is the metropolis of western New York," he replied.

Mother, usually quite a talker, broke in, saying—"Yes, Mr. Dobbins, Harold wants to see the world." "Don't forget to see our factory should you stop at Detroit, old man," and wishing him God Speed, Dobbins started pell mell for his train. His time had also come, and bidding his mother an affectionate farewell, left the scenes of his childhood with a heavy but most expectant heart eager to know what lay before him. Arriving in Buffalo after an uneventful journey he made his way to the Hotel Broezel, stopping there a few days before seeking friends where he received a hearty welcome.

Two months elapsed during which time Johnson was employed by a Mr. Offenhorn, a rather corpulent personage whose hearty laughter could keep a growler's cup in smiles. At the end of the sojourn in Buffalo, was given a farewell social by a number of friends, starting for the Middle West a few days later. The first City in which he was upset was Chicago, a cauldron of humanity, smoke and dust. Everyone striving for the honest dollar, seemed happy and contented, so the looks of the City were but secondary.

Again another City loomed up in the din, Milwaukee, the home of the famous Bayerish Brew whose salubrious odor told you what a malted place it was. The foam of this product and avalanche of malt and hops left water in a silent grave. Truly a peaceful and quiet place it is. By a short trip he fell into Port Washington which made him think of the Atlantic Ocean with such a large name, but may we see what a large and busy center it is. After wading through mud and mire the main street was reached one mile from the station. A chair factory, tannery, and an iron foundry comprised the very extensive industries;—the best hotel, in which

beef-stew was served three times a day, a bakery, a few other rum dens, and the only drug store of "the City" of three thousand.

Mr. Boxer the proprietor of the drug store, a grand "old vet," (where Johnson found employment) introduced him to the ladies, a dozen or so worth mentioning in the town.

A dozen saloons greeted those who wanted to enjoy the evening, or otherwise the moon and stars were the attractions then in season. In choosing between lake, moon and stars, it was either fly or drown. When the noon-day whistle of the chair factory told the hour, one would think the world was at an end, for its shrillness rattled panes in all of the windows which were close by. I almost forgot "Mahoney" ye old "Apothecarie" by heaven, with ancient bottles and cans upon his shelves, in the center of the store a long table piled with patent medicines in dainty colored packages, papers and traps scattered in all corners made it look like a curiosity shop. Below him was Allcock who sold clocks, shoes and insurance always ready to greet you with—"What did you get this morning," referring to the hotel of the town. The bank was the civilized portion of the place, modern and well arranged, but busines seemed to be slack for the clerks were mostly rubbering at the winsome maids passing by on their way to the Post Office, a veritable bee-hive on the arrival of mails. On meeting Miss Allcock, the belle of the town Johnson's thoughts ran to the smooth but sometimes rough and stormy dream of life, how happy he could be if—Am so glad to see you Mr. Johnson, and such a smile with it that his heart leaped to his throat as a tiger on its prey. After again collecting himself a few courtesies were exchanged, Miss Allcock asked for the most popular book at that time which they had in the circulating library. Looking over the list a few times a disappointment followed, and he was of course obliged to reply "I'm sorry I cannot find it." Again a smile, a pleasant good morning Mr. Johnson I was so glad to meet you, and Miss Allcock left serene.

In vacant thought, with honest sweat upon his brow for it seemed as if he had done a hard day's work, he juggled nervously, walking up and down the shop with the words "Oh! Could it be," wondering how soon Miss Allcock would call again as the days dragged on, but of no avail, his fate was sailing on the lake so full of danger. (The wrecked hull of a ship sank at this place twenty years ago in which one hundred and twenty lives were lost and a rusted anchor is still resting on the shore.)

Having written to a firm in Montana and receiving telegram upon telegram that they would like to employ him, Johnson packed his traps and said farewell to the town of silent slumber, after a stop of three weeks.

The train speeding on through an abyss of inky darkness o'er the

plains of the Dakotas, and the moon looking upon the stillness shone but weird shadows on the scene, and Johnson still wondering where he would meet his fate.

He shivered with a chill to find himself at the brink of Devil's Lake, but it seemed to him that the devil lived in a warmer place than this. The vast plains of Montana loomed up on a bright September day with its Indian Reservations full of game, till Glascow was reached, a great comparison with its brother o'er the ocean. Desperate looking Indians, cow-boys and half breeds were hanging around the station, (which looked like a chicken coop) gazing as if they would devour train and contents. Many a train robbery had been committed not so far from this wild and brazen village on the plains, the robbers finding safe seclusion in the foot-hills in which some of the caves defied human daring. A year or so after the happening of this event a train robbery was perpetrated a short distance from Chinook, not far from Glascow.

At Havre known as the Junction, Johnson changes, bound for Great Falls, his destination; Kendall and James from Boston whom he had met on the train wishing him the best of luck. Leisurely walking over to the waiting train, and soon after being seated, he was attracted by a lady opposite nervously twitching around in her seat who finally broke his deep and thoughtful mood by addressing him, "Could you please tell me when this train is due in Butte?" "Couldn't exactly say," he replied, "for I am bound for Great Falls." "What a horrible country this is anyhow; I have been staying with my son in Chinook for the last few months, but now I am bound for my own dear State. While in the little Rockies a few days ago on a camping trip I became so lonesome that I at once made up my mind to get back to Colorado. You won't stay here very long for it will be monotonous to you." Very little encouragement did Johnson get from this motherly, but criticising lady. Every other word seemed to blast his brightest hopes and he meditated "Are you safe or unsafe to try your fortune in this wild but native land." At Fort Benton, there was no Fort in sight, nothing but a deep ravine holding the river bed of the Mighty Missouri. At last "Great Falls" where leaving the train he was wished much success by the lady who had talked every minute of the one hundred and twenty miles ride, and hoping to see him in her own state saying it so sweetly as if her place of residence was the state of Colorado. Trudging down the main street Johnson walked into the place where he was to be employed. Blake & Sons being the Pharmacists of the town, what high hopes he held of getting a lucrative position. "How do you do, Mr. Johnson, glad to see you. Just arrived from Wisconsin? Leave your grip and go and get some lunch." He then sought a restaurant down the street and looked at the bill-of-fare. Vegetables—

squash, sweet corn, potatoes; meat—beef-steak, stew and lamb chops. Eating what his stomach would allow him of this fare and paying for it in "bits," he made his return to receive instructions. "Back again, Mr. Johnson, well then let us begin," leading him to a back room with cobwebs over the door as portières, he supposed, with shoes, clothes and everything in disorder, and upon the bed two water spaniel dogs lying peacefully in slumber. No windows for light or ventilation, but a hole in a transom over the door leading to the side street which looked as if the former clerk had with hygienic thought smashed it with a broom. Mr. Johnson, this is your room, as we expect to have you tend to night calls, open at 7 A. M. and close at 11 P. M." "Do you expect me to sleep here?" he asked. (The picture shone upon him a place good enough for dogs is good enough for you.) "You don't expect the proprietor to sleep here do you, Mr. Johnson?" "I don't expect it, Mr. Blake, but a pen like this is just as comfortable for the proprietor as for the clerk." After many words between them and settling with him for telegrams interchanged, Johnson was so angered as to fly back home which was now so far away. Night came on when he retired at the "Hotel Grande," the best of this modern city of the plains, sleeping in a room of five occupants the best he could. The days wore on, and in a sort of trance wondered what would happen next. Gazing idly from the hotel lobby was often startled by a rumbling sound, a hey-ho, git up, and the old-fashioned mail coach with trunks and packs, cowboys and Indians passed by on its way to ranches and mining camps. Well, Johnson knew that he was now in the heart of the wild and wooly "West," as one day he visited the largest gambling den with another party where hundreds were drinking, singing, shouting, many in private booths playing faro, chips and spinning the roulette wheel, handfuls of gold and silver pieces changing hands every minute, a stage on which vaudeville performances were given as one of the attractions. In one corner a ticker telling the turn of the races from far and near. Here and there a cowboy sitting with legs perched upon a table, empty chairs around him, with a Colt lying by his side to which no one dared to approach or a brawl would ensue and the whole audience perhaps fall in tumult. The town built on the banks of the Missouri River, depended on a copper smelting and reducing works. Its streets lined with cotton-wood trees to beautify its appearance stood in defiance to the vast plains around. Johnson was much amused in attending the service of a church in which the congregation numbered a dozen or so.

(TO BE CONTINUED).

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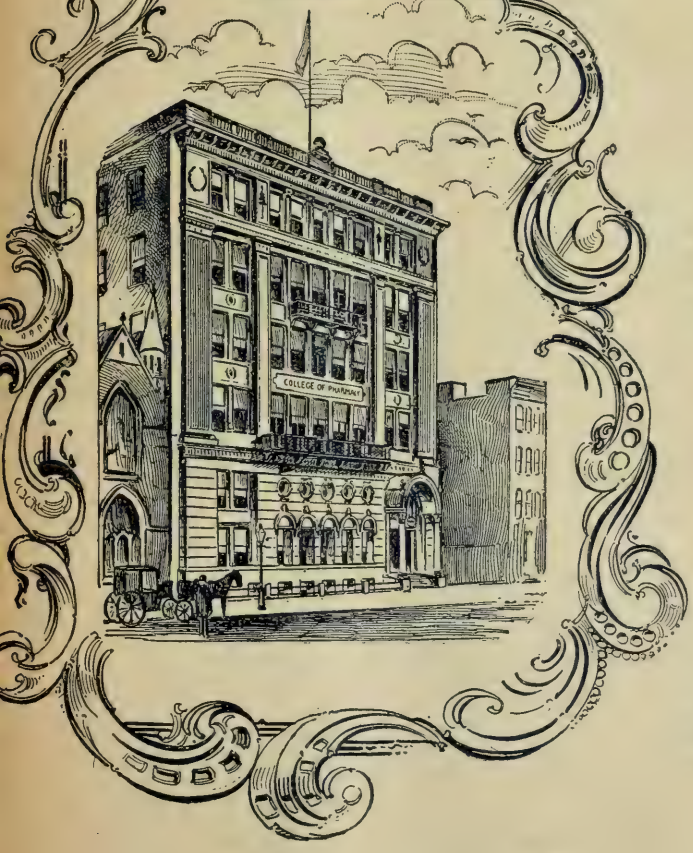
THE Alumni Journal



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Published Monthly by the Alumni Association of the College of Pharmacy of the City of New York—Pharmaceutical Department of Columbia University.

Columbia University

IN THE CITY OF NEW YORK

COLLEGE OF PHARMACY

The Seventy-eighth Annual Course of Instruction will begin on September 30th, 1907, under more favorable conditions than any which have existed in our previous history. The State law requiring one year of secondary school work before entrance to the pharmacy course has given us a superior class of students, capable of utilizing the higher grade of instruction offered by the Faculty.

The steady elevation of the educational standard that has been in progress in this College during recent years places us in a perfect position to meet the new demands for service under the recently enacted food and drug laws. Those demands are met by our graduate course of one year, leading to the degree of Doctor of Pharmacy, and by our Food and Drug Course also of one year, and open to graduates only. For those graduates who feel the need of a review before entering upon this work, we have this year inaugurated a summer preparatory course of twelve weeks.

Under the direction of a faculty consisting of four professors of Chemistry and one professor each in Pharmacy, Materia Medica, Pharmacognosy and Bacteriology, with well trained assistants, our Graduates in Pharmacy and Pharmaceutical Chemistry of our two-year course, are fully prepared to meet any board examinations, and those taking the advanced course are qualified to fill positions as analysts in chemical and microscopical work.

For information, address,

THOS. F. MAIN, Secretary,
115-119 West 68th St., New York, N. Y.

... The ...

Alumni Journal

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JOHN TORREY, M. D.

One of the ten busts of American Men of Science, now placed in the American Museum of Natural History Building, is that of John Torrey, M. D. Dr. Torrey was the first professor of physics and chemistry in the New York College of Pharmacy. He was one of the most distinguished men of science which this country has produced. His early years were spent in Boston, he studied botany under Amos Eaton and Dr. Hosack; medicine under Dr. Wright Post and at the New York College of Physicians and Surgeons, then in Barclay Street. He also studied chemistry at the latter institution, which is now the medical department of Columbia University.

Altho botany was always his favorite pursuit and that in which his great reputation became established, yet so general were his ability and attainments that he received in 1824, the appointment of professor of chemistry at the United States Military Academy at West Point, to the corresponding position at the New York College of Physicians and Surgeons in 1828, and, concurrently with the latter, in Princeton College and in our College of Pharmacy.

He became the first superintendent of the United States Assay Office in New York City, upon its establishment in 1854. This position he held up to the time of his death in 1873.

He was one of the founders of the New York Lyceum of Natural History.

In botany his principal achievements were the training of Prof. Asa Gray, Dr. George Thurber, and for a time Dr. Nathaniel L. Britton, formerly professor of botany at Columbia Univ. and now director of the New York Botanical Gardens.

He published *"A Flora of the Northern and Middle States,"* and subsequently an enlarged revision of the same, his *"Compendium,"* *"The Flora of New York,"* of which State he was the official botanist; and in connection with Dr. Gray, of *"The Flora of North America."* He also prepared thirteen important reports on government botanical expeditions and a large number of monographs and papers on special subjects.

While his early botanizing was done on Manhattan Island, most of it below Forty-second Street, and much of it below Canal Street, he lived to see those grounds entirely built over. Turning his atttention to new fields of work, his travels were extended on several occasions as far as the Pacific Ocean and Mexico.

The Torrey Botanical Club and the "Torreya," one of its official publications, were so named in his honor.

Prof. H. H. Rusby is and has for a number of years been the president of the Torrey Club—H. J. G.

"Its easy enough to be pleasant
When life flows along like a song;
But the man thats worth while, is one that can smile
When everything goes dead wrong."

JOE WELCH,
per Goeckel.

*History N. Y. C. P., College Library.

To Clean Engraved Copper.—Wash thoroughly with soap and water and dry thoroughly. Then rub the surface with a fresh lemon cut in half, rinse with tepid water, dry and polish with chamois leather. Powders and polishing pastes should never be used on worked copper, for the particles get lodged in the chasings and are very difficult to remove.—La Nature, J. Pharm. Chim., Suppl., 1906, 24, 35.

DISCOVERIES OF MANGANESE.

Many scattered deposits found in Myscore, India.

The discovery of new and large deposits of manganese in Mysore State, southern India, Counsel-General W. H. Michael, of Calcutta, reports, has aroused activity in prospecting and for concessions, concerning which he writes:

The Mysore gold-mining rules have been found inoperative respecting manganese, and it is proposed to formulate new rules. The Dewan is to hold a manganese mining conference to consider the area of mining grants, the royalties that should be levied, and all other matters that pertain to the new and growing industry. Representatives from manganese mining syndicates and companies will be invited to participate in the deliberations.

There seems abundance of manganese in Mysore, but it is found in scattered localities, thus making the transport of ore to the extracting mills expensive and difficult. In view of this the government desires to fix low royalties in order to encourage the industry and to make regulations fair to all. The Dewan is anxious to place the industry on a plane on which individuals and small concerns will be on an equal footing with large syndicates. In fact he seems determined to keep out monopolies. The opening of the manganese mines will be a source of large revenue to the Mysore State and of immense benefit to the laboring classes of that part of India. I understand that an American company has a scientific agent in the Mysore field for the purpose of reporting on the opportunities for investment. The mineral fields of India, I feel quite sure, offer splendid inducements for American knowledge, energy, and capital.—Consular Report.

Do plants actually think? A writer in the New York Weekly Times says: "The curious behavior of plants can scarcely be explained under any other supposition than their actions are due to some connection between sensation and consequent motion that seems to be closely related to the movements of animals. We touch the skin of a person and the person shrinks instantly; a similar touch causes a worm to shrink, and the same effect precisely happens when some plants are touched. The motion of a person is certainly the result of thought set in action by the sensation con-

veyed to the nervous center by the touch, and thus, thought must be the connecting link between the sensation and the motion. Then the question is presented to the inquiring mind, 'if this is so with a person, is it equally so with one of the lower animals, and, if so, are those plants that are endowed with the power of motion, as a result of sensation, capable of connecting the sensation of touch with their movements by the process of thought?'" Thought is "supposed to be an operation of the mind, and in no way related to matter."

HOME-MADE BUTTERMILK.

It is now within the power of every household to have an abundance of that refreshing and healthful summer (also winter) drink—buttermilk. To the present time no one knew of any source of buttermilk except from the butter-maker; but now-a-days the butter-maker does his work so well that the buttermilk is entirely deprived of the delicious little grains of fat which add so much to its food qualities as well as to taste. True buttermilk, made direct from fresh rich milk, within a few hours, of the finest flavor and taste, nutritious and more excellent than the article as originally known, can now be prepared in any kitchen. This is done by taking a quart of fresh, rich milk, adding a pinch of salt and about a half-pint of hot water to raise the temperature to body heat, and lastly adding a tablet which contains a pure culture of lactic acid bacteria. Place all in a pitcher, cover with a napkin, and let stand for twenty to twenty-four hours at the ordinary temperature, and there is your perfect buttermilk. The tablets are made by Parke, Davis & Co., the pharmaceutical and chemical manufacturers of Detroit, Michigan, and are called "Lactone" or buttermilk tablets.

On the farm, in the process of buttermaking the cream is allowed to sour spontaneously and is then churned. The souring is the lactic acid fermentation caused by lactic acid bacteria or ferments. The difference between the new and old process is one of method and not result. In the old, the lactic fermentation is waited for and expected to occur spontaneously, with disappointment sometimes. In the new, the ferment in pure culture is directly planted in the milk, and the desired fermentation is secured without fail. In Bible days, spontaneous fermentation of dough was depended upon to leaven or lighten bread, and failure frequently attended the process, the dough putre-

fying instead of fermenting, and was then lost. Finally, man learned to add yeast to the dough and not to depend upon spontaneous processes, with the result of always securing the right fermentation and making a better and more nutritious bread. This new buttermilk process is a like improvement.—*Monthly Bulletin Indiana State Board of Health,* June, 1907.

EXCHANGES.

We are in receipt of copy of Deutsche Americaner Apotheker Zeitung. This is an excellent monthly for our German druggists. It contains instructive and news items; $1 per year. Office, 104 John Street, New York City.

Oscar Matthiessen, 1900—Ph. G., is now manager of Boyd's Board Walk Pharmacy at Arverne, L. I., where he is enjoying the summer breezes, coincident with the rush of work.

Meyer Bros., Druggist, a monthly periodical from St. Louis. We have reproduced some of their items in this issue. For terms, etc., address Meyer Bros., Druggists, St. Louis.

PRESCRIPTION DIFFICULTIES.

Read at the Last Meeting of the American Ph. A. by Gustav Wolf, Phar. D., New York.

The following prescriptions are submitted for criticism and comment. They are taken from the files of various pharmacies and I am indebted to the courtesy of friends for many of them:

1.—Capsicum, Powdered..... 6 ounces
Camphor, Powdered..... 6 ounces
Mix and make twelve horse balls.

Use ether triturate the camphor to a fine powder. Let the ether evaporate, and add the capsicum. Mix, and add sufficient powdered tragacanth and mucilage of acacia to mass.

2.—Tinct. Cinchon. Comp..... 3 ounces
Tinct. Digitalis..... 1 dram
Tinct. Nucis Vomicae..... 2 drams
Cactina-Pellets ..... C.
Tinct. Cardamomi Comp..... 1-2 ounce
Water .....to make 4 drams

S.: Teaspoonful three times daily before meals. Shake. Dissolve the powdered pellets in the liquid.

3.—Zinc Oxide..... 80 grains
Powdered Opium..... 40 grains
Mix and make forty pills.
S.: One before meals.

I used as excipient:
Tragacanth, Powdered..... 10 grains
Glycerin ..... sufficient

I used a large quantity of glycerin, as the mass hardens rapidly. Glucose would have made a better excipient.

4.—Lead Acetate, Crystals..... 12 grains
Alum Crude, Powdered..... 8 grains
Water .....to make Cc. 400
Sig: Dilute with four parts of water. Externally. Poison. Shake.

Dissolve each of the salts in half the water, filter each solution separately, then mix. A finely divided precipitate is thus obtained.

5.—Sodium Chloride..... 18 grains
Carbolic Acid..... 8 minims
Camphor ..... 8 grains
Eucalyptol (Sanders)..... 13 minims
Water ..... 2 pints
Mix and filter.

Dissolve the camphor and the eucalyptol in half an ounce of alcohol.

6.—Sodium Salicylate..... 2 drams
Sodium Sulphate..... 12 drams
Sodium Phosphate..... 10 drams
M. S.: Teaspoonful in a glass of water every morning.

Use the exsiccated sulphate and phosphate of sodium.

7.—Codeine ..... 15 grains
Terpin Hydrate ..... 80 grains
Syrup Hydriodic Acid..... 4 ounces
M. S.: Teaspoonful every two hours. Shake.

The terpin hydrate ought to be dissolved in alcohol, and some glycerin added. An alcohole solution of codeine, 1 to 5, was used.

8.—Suppositories of Silver Nitrate, each... 1½ grains
Make twenty-four such. Wrap in tin foil.
Sig. As directed.

They ought to be first wrapped in waxed paper, as the direct contact of the silver nitrate and the lead in the so-called tin foil should be avoided.

9.—Strychnine Sulphate ..... 1½ grains
Spirit Nitroglycerin..... 1 minim
Mix and divide in sixty small pills.
Sig.: One pill after breakfast and supper.

A trituration of strychnine sulphate was used. Powdered tablet triturates of nitroglycerin and sugar of milk and glucose enough for each pill to weigh 1½ grain. Talcum was used as a dusting powder.

10.—Tincture Nux Vomica..... 1 dram
Tannin ..... 2 drams
Peptenzyme ..... 4 drams
Bismuth Subnitrate..... 6 drams
Precipit. Chalk, Powdered..... 12 drams
Mucilage Acacia..... 3 drams
Cinnamon Water.....to make 3 ounces
S.: Shake. Teaspoonful with meals until relief.. A nearly solid mass results.

11.—Strontium Bromide..... 1 dram
Fluid Extract Belladonna..... 12 minims
Bismuth Subcarbonate..... 2 drams
Mixt. Rhubarb and Soda, to make 4 ounces
S.: Two teaspoonfuls between meals in water.

A solution of strontium bromide was used. A marked effervescence was caused by the reaction between the strontium and the bismuth, carbon dioxide being given off.

12.—Menthol ..... 1 grain
Resorcinol ..... 1 grain
Spirit Nitrous Ether..... 25 Cc.
Alcohol ..... 50 Cc.
Peppermint Water ..... 50 Cc.
M. Sig.: For mopping the skin, externally.

A copious, brownish-red precipitate formed, which, when applied to the skin, left a green stain. A nitroso derivative of resorcinol, an aniline dye, was formed. The physician being communicated with,

permitted the omission of the spirit of niter. This ingredient, being subjected to tests, was found to contain some free nitrous acid.

13.—Expressed Oil Almond..... 4 ounces
White Wax .....320 grains
Spermaceti .....320 grains
Powdered Benzoin ..... 10 grains
Tincture Ambergris ..... 50 minims
Powdered Rice Starch.....320 grains
Powdered Carmine ..... 15 grains

M. S.: Make-up cream.

I used peach-kernel oil instead of the true oil of almond; and 50 min. tincture of benzoin instead of the powder. The use of a little ammonia water to darken the carmine spoils its nice red color and turns it a dirty blue. As the rice starch is first mixed with the carmine before adding the melted fats, the color seems to be so light that one will feel tempted to improve it by using ammonia. But on adding the melted fats to the light-red powder, the color darkens perceptibly.

14.—Goulard's Extract ..... 2 ounces
Glycerin,
Carbolic Acid ..... 2 drams
Olive Oil ..... 9 ounces

M. S.: Externally. Poison. Shake.

The lead acetate in the Goulard's extract and the olive oil seem to form a soap similar to that formed by linseed oil and lime water in carron oil.

15.—Strychnine Sulphate ..... 2 grains
Ferric Phosphate .....120 grains
Quinine Bisulphate ..... 24 grains
Phosphoric Acid, Diluted..... 1 ounce
Syrup Ginger ..... 6 ounces

Sig.: One teaspoonful in water three times a day after meals.

A solution of strychnine was used. The soluble phosphate of iron was dissolved in hot water, and the quinine in the acid. Each solution was mixed with half of the syrup, and then poured together.

As practically everybody expects Horlick's when they ask for malted milk it is a bad idea to try to substitute a less expensive brand. Good, common-sense advice.—[EDITOR.]

ALUMNI COLLEGE AND CLASS NOTES.—1893 CLASS.

It has been some time since anything appeared under this head in the Journal, but in the future we will endeavor to occasionally bring some news of the members of old '93. A few items which have been gathered recently, follow.

"Bert" Schreiner is making money and getting fat in Plainfield, New Jersey, where he has had a prosperous business now for several years past. He is the same old happy "Bert" as of College days.

J. P. Colonel is now with Schaaf Bros. in the Bronx, at 3411 Third Avenue, doing the "stunts" usually required of a "knight of the mortar and pestle," in due and ancient form.

P. J. Schaaf, one of the above-mentioned brothers, has been in business some years, with his two brothers, who at one time had three or four stores in Manhattan, and still have two, one in the Bronx and one in Manhattan.

"Jake" Stage is now J. Samuel Stage, M. D., and has been a practising physician in Newark, New Jersey, for some time. He has been a very successful "saw bones" and is also a happy husband and father.

Floyd Mortimer Stage is doing a high class business at his store on upper Broadway, Manhattan, where he has been since the firm of Smith & Stage dissolved partnership.

Eugene Webb, the valedictorian of our class, is again in business for himself, having bought the store of E. P. Ferguson & Co., at 2413 Seventh Avenue, Manhattan.

Francis E. Crispin, our "gold medal" man, is now collecting "gold coin" from a prosperous drug store at Greene and Nostrand Avenue, Brooklyn. He is just as quiet and reserved as of old.

"Charlie" Cubit has turned out one of the most successful of our class, doing a very large and prosperous business at 140 Nassau St., Manhattan, under the firm name of Reid, Yeomans & Cubit.

Walter Huber has become a Jerseyite; he is in business in Jersey City at 290 Central Ave., and while attending to the wants of his customers, is still perfecting his knowledge of things chemical and pharmaceutical.

The Annual Dinner is scheduled for December 4th. If you don't attend you will miss a good time. The dinner last year was very successful and served as a reunion of many of the classes. I would urge upon all the members of '93 to make a special effort to be present at the Alumni Dinner.

President Wm. A. Hoburg, who has been for quite some time with the Maltine Co., has resigned that position and has again entered the retail field; he desires to inform his friends and colleagues that if they fail to see him as frequently in the future as they have in the past, the above will explain. He is with Russell H. Marsh, Flatbush, Brooklyn. He says that retail hours are long, and if he gets over to the Alumni meetings that will be about all the luxury he can afford.

ALUMNI SOCIAL.

The Entertainment Committee announce that on Nov. 20, '07, at 8 P. M., they will give "a social evening" at the College. A lecture by the Dean entitled "An Afternoon on a Venzuelan Bayou," will be the main feature, following which will be the usual monthly dance. It is earnestly hoped that the members will do all in their power to help the Committee make this a grand success. Please do not forget that the ladies are always welcome.

WM. H. WARD,
Chairman Entertainment Committee.

ALUMNI PINS.

The registrar calls our attention to the Alumni Pins (improved) with a patent fastening clasp—unless you lose this clasp you cannot lose your pin. Those who have not an Alumni Pin and are members of the Alumni Association would do well to address the registrar for information regarding these Alumni Pins. Said information though is not really necessary. Just send $6 for one, or 20 cents extra for patent safety clasp, and 15 cents for registered postage to our registrar, Prof. Geo. C. Diekman, 115 West 68th Street, New York.

THE ALTERNATIVE.

The literary woman said one night to her husband:

"When I get to heaven I'm going to ask Shakespeare whether or not he wrote those plays."

The husband chuckled.

"Maybe he won't be there," he said.

"Then you ask him," said the lady.

THE ANECDOTE OF A DRUG CLERK'S TRAVELS

(Continued from last issue).

The discord in the singing would have made a coronet wail with pain. He thought he was singing to the walls when a lady tapped him on the shoulder and whispered, "would you kindly lead the singing?" Perhaps he was stunned, but managed to reply, "I beg to be excused." Back of the organ a dozen vacant chairs, waiting for the missing choir. Weary of the place he bought his ticket for Seattle after seeing several places in this vast unbroken plain. This time over another road, the tracks of which laid to conform with the plains, with no grade, made it seem like riding in a donkey cart, and on reaching Shelby Junction, a distance of a hundred miles, felt as sore as if he had lumbago or sciatica. Was he going to live or perish, no position, and his search for a companion still in vain?

Still through more of the most romantic scenery one could picture, the Blackfoot Indian country with its rich hunting grounds, over mountains with snow-covered peaks surrounding, past winding rivers, towering pines and cedars until Seattle was reached. Baggage please for Lorimer House, and before he could realize where he stood, was hustled off to said hotel. In the lobby were surly loungers, stretched out with their Klondyke boots, one fellow with a filthy pipe expectorating it seemed everywhere, and sputtering blasphemy as hard and loud as a ton of coal down a chute. Another with a grizzly beard like the quills of a porcupine and eyes which were burning from liquor. In another corner two thumping a table at a game of poker and almost tearing each other to pieces, canvas bags lying in all directions told him that this was headquarters for stranded miners from the north country or those returned with fortunes' happy turn. Fear did not overcome him for he knew what a rough country he had to contend with. The streets were black with idle men tramping up and down the filthy streets, in the business section mostly paved with planks. The cross streets leading to residential parts were abnormally steep to make those who walked them stoop-shouldered. Cable cars running over these streets seemed like the Coney Island Chute the Chutes. The United States Assay office standing on one of the hill streets was an interesting feature of the town. Here the gold from the "Klondyke" was weighed, assayed and formed into bricks. The shining barrels of two rifles could be seen inside the office grating, for such precautions were certainly necessary, as the country swarmed with desperate men who had been stranded here after failing in their purpose up at the Klondyke, some of them bad men from the West. Washington Street was known as the deadline, for below it toward the saw-mills and shops it was unsafe to

travel even in broad daylight. Here men were quite often beaten or killed, and even in broad daylight in the heart of the business section stores were robbed, and holdups perpetrated in the streets.

Strolling one day along First Avenue, who should Johnson meet but Kendall and James. "Hello, old boy, see you got here at last," said Kendall. "Isn't this a tough town, though?" "You bet it is," Johnson replied, "and I always keep my hands in my pockets, for the other day a fellow brushed up to me and while I was looking, tried to slip his hand into my pocket. I yelled hey-there, and tried to hold him for the police, but he slipped away and politely said, excuse me, brother, I came too close to you that time; hope I have better luck next trip. Kendall swore that he would not stay another week as he saw so chance in the lumber business. A few days after the meeting, Kendall, thoroughly disgusted, for he said everything was overdone, bought his ticket through to Boston anxious to return to his wife. James, Cowan and Johnson, seeing him off at the Canadian Pacific Railroad, they strolled back to the business section where it seemed every second store was a restaurant, quick lunch or chop house. Certainly the needs of one's appetite were in bountiful supply, although two to one were idle on the streets. The hills were prettily wooded with pine trees, and while the roses were in bloom in mid-September, the Olympic Chain of mountains seen from the hills were covered with snow. To the east could be seen Mount Rainier, one hundred miles away, on which a snow storm often in progress could be seen from Seattle like a misty haze hanging over its summit. They made their way to Lake Washington, a beautiful sheet with crystal-like waters densely wooded with pine and fir, and far off the snow-covered mountain peaks.

Johnson, what's the word if we all start for 'Frisco and try our luck? I believe that would be a good scheme James, for I have certainly been up against a hard turn, tramping until my feet were sore and every man simply smiled on an honest fellow's tale of woe.

Cowan said, no one here gives a continental for strangers, but the cold shoulder is shown everywhere. We have all been up against this overboomed town, but, of course, James and I could manage for a while, being mechanics and belonging to unions could get a job through our cards, but you, Johnson, no doubt competent in your profession, it's pretty tough that you can't get some kind of a job. Not long after this talk Johnson started on a voyage to 'Frisco, James and Cowan, both in good positions, wishing him success in his new sphere of adventure.

Let us hear how she goes, Johnson, and if Spreckels' new electric plant is nearly completed let us know and perhaps we will slide down that way. If there is any show, I will write you the particulars. Off he made for the wharf where the "Walla Walla," an old

hulk was docked, which was sunk off the coast of California about a year after the happening of this event with a loss of two hundred lives.

"Farewell, boys," said he, and walking briskly up the gang-plank, boarded ship, deeply thinking where will it end. The deck was crowded with weather-beaten miners returning to their homes from the north country, and, as he was told, some with snug sums of gold with them. The vessel sailed smoothly through the beautiful harbor of Puget Sound, docking at Port Townsend for an hour, after which the ship headed for the British port, Victoria, B. C., where she again docked for four hours. Feeling tired and hungry, for he knew not what the fare on board ship would be like, Johnson steered for a restaurant and partook of food. He noticed the waiters gazing at him with smiles, and embarrassed to find the cause of this attention to be, that he had seasoned his victuals with powdered sugar instead of salt. "Darn the British, anyhow," thought he, for they seem to have everything alike and no wonder I made such a mess. Taking in the sights which were few, as it was a small town, Johnson trudged back to the ship in the black of night.

Again they were off, the ship turning leeward, sailed around Cape Flattery, encountering high seas, rocked and tossed like a toy, timbers creaking as if they would break in two, and over all a stillness as of death, showed the danger before them. Being restless in his berth, for it was his first night aboard ship in twenty years, Johnson was wondering what his fortune would be in the land of the golden sun for which he was bound. The rising sun told of a beautiful September morning, and in calmness they were sailing along, the weather superb, the coast of Oregon looming up to the left, the Cascade mountains in the distance, the peace of the ship undisturbed, except for the exciting stories of miners told of Yukon Pass, the Chilkoot, or porpoise and whale cutting their way through the sea, the porpoise in a mad race with the ship. Walking over the deck Johnson came to a group of sailors of the United States Navy, one of which was barely restrained by his comrades from throwing one of the passengers overboard, who came aboard ship at Victoria, a British subject. "You are all tin soldiers and to—with the country and its native sons where you are going." Such an insult directed at our jack-tars made him sore also, but seeing that a drunkard uttered them, quiet soon reigned. Slowly nearing the coast of California on the third day under deep blue skies and dying sun, what a picture! As the sun shone a path of gold, radiating upon a mighty sea. At Point Reyes the arrival of ship was telegraphed to 'Frisco, and after passing Point Bonitas at the entrance of the rocky Golden Gate and opposite grim Fort Scott, guarding the secrets within, the Walla Walla was quarantined,

and after a few hours docked, to Johnson's great relief, and hurrying off in a cab made the "Hotel Grande" his headquarters for a few days. Again he went in search of a position, this time introducing himself to Mr. Fownes, in charge of the City Department of Gilpin, Strang & Co. Mr. Johnson, are you a native son? What do you mean, he asked, dumbfounded to have such an unknown question hurled at him. I mean whether or not you was born in this State. No, sir, he quickly answered, not knowing that to answer in the affirmative would have been to his advantage. Native sons are in great favor in the Golden State. What college are you a graduate from, Mr. Johnson? New York College of Pharmacy, one of the best in the country, sir. "Why do you think it better than any other, because you graduated from it?" He made no answer, as he was not in a mood for argument. Looking over his list he gave him the names of some parties who wanted clerks in the slums of the city. Johnson did not take the trouble to hunt them up, but, on looking further, met Mr. John Gates, of Freeman & Sons. Looking at his memorandum he at once named Dixon where a vacancy was to be had with Dr. Simon Ambrose and particulars were to be had from the son over at Oakland. "Mr. Johnson, I think this will suit you, and a very fine man to work for. Go over and see Geo. Ambrose about it. Ferryboat leaves foot Market Street at 10:30 A. M., and when you get there take a narrow gauge railway train for 'Golden Gate,' and he will give you full particulars."

Following instructions, he made haste to see Geo. Ambrose. A half hour's sail brought him to Oakland pier, and, catching the train, he meditated what his luck would be. Many times was he meditating on this trip of sole venture.

(Continued)

In the case of digitalis, strophanthus, and squill we have recently referred to the great necessity for the adoption of a physiological standard, such as that obtained by determining the lethal dose for a frog of a given weight, under constant conditions. In the administration of thyroid extract, or of ergot, if the desired effect be not produced, it would be of special value to be certain that the preparation used was not at fault. Although we must recognize that the drugs under discussion cannot be so exactly measured as pure substances, yet we have a right to expect that such accuracy at the present state of chemical and pharmacological science can afford should be at the disposal of every practitioner of the healing art.—The British Medical Journal.

PERFUMES FOR THE HOLIDAY TRADE.

While druggists cannot do very well without an assorted stock of perfumery of all sorts, domestic and foreign, for which a demand has been created with the public, the fact remains that the profit derived from their sale is not at all satisfactory to most dealers. This class of goods is expensive; a good deal of money is invested in the stock which does not turn often during the year, and in order to make the perfumery department profitable it is necessary to put up and display a certain amount of one's own preparations on which the profit is satisfactory.

Druggists as a rule do not possess the experience necessary to produce perfumes, handkerchief extracts, toilet waters, face creams, applications for the hair, etc., of the quality fragrange and lasting quality demanded by the public, and if they did, they could not begin to make these goods profitably if they were compelled to start with first principles, pomade washes, essential oils, synthetic perfumes, etc., a variety of which is required and a quantity which must necessarily be bought of each to obtain supplies at proper figures.

Lehn & Fink have had on the market for a number of years a line of concentrated perfumes which only require dilution with cologne spirits and in the case of toilet waters, with cologne spirits and water, to produce excellent products of great beauty and lasting power. These products, Absolute Essences and Floral Essences, are not an experiment, but have been in successful use for a number of years by many druggists who by their use have been able to make their own perfumeries and to build up their perfumery department to a very profitable branch of their business.

Handkerchief perfumes of one's own make can be put up in square cut glass bottles and when tied over with beaulruche skin or split skin, nicely finished with ribbon, make a very creditable appearance alongside of the French goods and can be sold in such bottles and even of larger size at the same price but at a much better profit than foreign goods.

Lehn & Fink are ready to mail their "Absolute Essences booklet" to druggists on request.

PURE ETHER FOR ANAESTHESIA AT LOWER PRICES.

Government regulations now permit the manufacture of Ether from Alcohol on which no internal tax is levied. The Mallinckrodt Chemical works announce that they are offering their pure Ether for Anaesthesia, as well as other Ether preparations, at much lower prices than heretofore prevailed. The Ether sold by the M. C. W. for surgical inhalation is marketed under the caption "Ether for Anaesthesia." This Ether they manufacture from the purest grain Alcohol, under the supervision of skilled and experienced chemists and it is especially tested and selected to meet the requirements of surgeons for an Ether of the highest attainable purity and uniformity. It contains even a greater percentage of pure ether (Ethyl Oxide) than the Pharmacopoeia requires and is a superior article in every particular. It is advisable for pharmacists and physicians when ordering Ether to specify "M. C. W." Ether for Anaesthesia, in order to prevent any confusion with the other grades they supply. The Mallinckrodt Ether for Anaesthesia is put up under a white label with the words "For Anaesthesia" printed in red, while all of their other grades are sold under a blue label.

Christmas Number

VOL. XIV DECEMBER, 1907 No. 12

The Alumni Journal

Published monthly by the Alumni Association of the College of Pharmacy of the City of New York—Pharmaceutical Department of COLUMBIA UNIVERSITY.

EDITED BY

CHAS. A. LOTZ, Ph. G. H. J. GOECKEL, Phar. D.

CONTENTS

Columbia University

IN THE CITY OF NEW YORK

COLLEGE OF PHARMACY

The Seventy-eighth Annual Course of Instruction began on September 30th, 1907, under more favorable conditions than any which have existed in our previous history. The State law requiring one year of secondary school work before entrance to the pharmacy course has given us a superior class of students, capable of utilizing the higher grade of instruction offered by the Faculty.

The steady elevation of the educational standard that has been in progress in this College during recent years places us in a perfect position to meet the new demands for service under the recently enacted food and drug laws. Those demands are met by our graduate course of one year, leading to the degree of Doctor of Pharmacy, and by our Food and Drug Course also of one year, and open to graduates only. For those graduates who feel the need of a review before entering upon this work, we have this year inaugurated a summer preparatory course of twelve weeks.

Under the direction of a faculty consisting of four professors of Chemistry and one professor each in Pharmacy, Materia Medica, Pharmacognosy and Bacteriology, with well trained assistants, our Graduates in Pharmacy and Pharmaceutical Chemistry of our two-year course, are fully prepared to meet any board examinations, and those taking the advanced course are qualified to fill positions as analysts in chemical and microscopical work.

For information, address,

THOS. F. MAIN, Secretary,
115-119 West 68th St., New York, N. Y.

... The ...

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A JOURNAL OF PHARMACEUTICAL PROGRESS.

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Pharmaceutical Department of Columbia University.

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CHRISTMAS AND NEW YEAR'S GREETING.

On behalf of the Alumni Association we wish you all a very pleasant Christmas and a very prosperous New Year. May hard times pass away as quickly as they came, and never come back again.—EDITOR.

EDITORIAL.

The subject of this editorial should be an unnecessary one, that of stirring up those indigent members who are forgetting their Alma-Mater, and their dues are in arrears, in some cases several years. This is a painful subject to talk about, but it must be brought to the attention of those who deserve it. If you are in arrears over one year and want to know how much you owe, or if you know it, send your remittance as soon as possible to the treasurer of the Alumni Association, Mr. Chas. S. Erb, 108 Amsterdam Avenue, New York, N. Y.

As usual the annual dinner was a splendid affair, it being a reunion of the different classes. More details next issue.

ALUMNI COLLEGE AND CLASS NOTES.

ALUMNI BALL.

The thirteenth annual ball will be held on January 29, 1908, at Madison Square Concert Hall. Music will be furnished by Crowley's Eighth Regiment Band. The committee—C. S. Erb, G. C. Diekman, M. D.; H. A. Herold, Dr. C. P. Wimmer, A. Henning, E. F. Lohr, N. S. Kirk, F. N. Pond, F. M. Davis, W. H. Ebbitts, Dr. F. A. Leslie, Dr. A. Vorisek, W. A. Hoburg, Jr., Dr. H. B. Ferguson. Wm. H. Ward, chairman.

SENIOR CLASS NOTES (1908).

At a class meeting held on November 6, 1907, the following officers were elected: Edward O. Dalton, president; Karl H. Driggs, vice-president; Edwin M. Davis, secretary and treasurer; William McK. Smith, historian; Edwin M. Davis, valedictorian; George Hohmann, reporter. Dr. Leslie acted as temporary chairman, in which he appointed Edwin M. Davis as chairman. Everything went off smoothly, and everybody who attended seemed well satisfied with the officers who were elected. The meeting was over at 6:15 P. M.

1909 NOTES.

At a meeting of the class of 1909 of the New York College of Pharmacy, held on November 16, 1907, an election of class officers took place when the following men were elected: President, W. Dice; vice-president, J. Carson; secretary, C. Brett; treasurer, E. Oats; Alumni reporter, L. Di Nolfo; spectator reporter, Miss Westmeyer. When the election was over it was moved, seconded and carried that the meeting be recessed.

LEONARD DI NOLFO, A. R.

ABOUT THE SENIORS.

We notice that Brooks (the only bleached blond in the class) is not going to the Colonial as much as he used to. Guess he is saving up for his graduation fee.

Feuhreisen, the "noted singer and song writer," is trying to organize

a glee club among his fellow students, which will be of benefit to all who can sing. Apply to him personally to have your voices tested He is something on Caruso's order, and sings with the same "feeling." I am sure you will all enjoy a good time.

Ever seen Heine with that German trunk of his in which he brings his books to college? It is big enough to hold the clothes of all the members of a traveling theatrical company.

Breachey, one of last year's junior men, is now with American Pencil Company as salesman. He manages to get around to college on senior days and supply the boys with pencils. He has a dandy job, I guess, but he misses one thing, however, and that is the girl behind the soda fountain. Ask him why?

Pullen would be a good man to join the "Glee Club." He has a sweet, low voice, and loves to sing the following songs: "Why Was I Ever Born Lazy," "Please Go 'Way and Let Me Sleep," "Asleep in the Deep," "Dreaming." Five dollars reward will be paid to anybody who finds him awake one-half hour after the quiz starts.

They say the "Class '08" is full of pimples, but I think if they look around they will find one black head.

It might be of interest to the class of '08 to know that Mr. McCann is contemplating the sacred steps of "matrimony." We have not as yet had permission to mention the other unfortunate's name, but hope to do so in a later issue.

Mr. Kaufman, if you notice, is acting as Catalytic agent, and the reaction taking place is rather slow. He invites his classmates to partake of a farewell dinner, consisting of an elaborate spread, which will be served by the well-known caterer, "Louis Haimes."

SENIOR STUDENTS!

Those Senoirs who subscribed to this Journal a year ago will find it to their interest to renew their subscription now. Send fifty cents to Alumni Journal, 43 Fulton Street, New York.

P-W-R PURE ETHER FOR ANÆSTHESIA AT REDUCED PRICE.

The Government permission to employ, since September 1, denatured alcohol in the manufacture of Ether has materially lowered the cost of this important article.

The Powers-Weightman-Rosengarten Company offer in their current list, at much reduced price, their well-known Ether-U. S. P., especially prepared for Anaesthesia and selected to meet the exacting requirements of surgical operations.

Its potency and uniformity are properties satisfactory alike to the patient and practitioner, and the increased demand for this brand for both private and hospital practice is evidence of its purity and excellence.

"THE COLLEGE MUSEUM."

The following bodies to be viewed are all men famous in the "College history."

Here lies the body of Fred S. Brooks,
One of the famous C. P. crooks.
Here lies the body of hot air Straehler,
Who made his escape by smothering a jailer.
Here lies the body of dear old Bendt,
Who took a drink and away he went.
Here lies the body of the famous Dr. Bahr,
The boy who could spring the villains, ha, ha.
Here lies the body of that noble McCann,
Who vowed he would marry when he became a man.
He never married.
Here lies the body of married Brownell,
It's a question whether he went to heaven or h—l.
Here lies the body of Henry Stiller,
Known to the boys as the lady killer.
Here lies the body of the fighter Bongartz,
Who carries his dead away in push-carts.
Here lies the body of Driggs you all know,
Who was nicknamed Cupid, for he couldn't grow.
So this is the end of the famous bunch
That patronize the corner where they serve free lunch.

P. S.—Any further class notes send at once to your class reporter.

Yours truly,

GEORGE HOHMANN.

BENEFITS OF A PLANT EPIDEMIC.

In a recent address on the diseases of plants, A. F. Woods, of the United States Bureau of Plant Industry, calls attention to the fact that we may often secure after an epidemic immense varieties of plants by collecting those that have survived. He says, as quoted in Science (New York, October 28):

"Our ideal, of course, is to cultivate plants that can, in the largest measure consistent with other requirements, fight their own battles. Observation and experience have given us a large amount of information on adaptability to conditions and resistance to disease, which remains to be classified and digested in order to be made generally available. We often neglect to reap the benefits of a destructive drought, a cold wave, an epidemic of disease, or the failure of a crop, *by neglecting to study and save what is left.* The few straggling plants left do not appeal to the average man. He plows them up or turns in the hogs. But the man familiar with nature's methods sees in these survivors resistant strains and saves the few straggling plants for seeds, with the hope that the few survivors may have some peculiarity transmittable to progeny, making them resistant to the factor that caused the general destruction of the crop. In this way originated the wilt-resistant cotton, wilt-resistant cowpeas and flax, and cowpeas and tobacco resistant to nematode or root-knot. Strains of red clover resistant to awthracnose (a disease which, in many sections of the South, makes it impossible to grow ordinary non-resistant clover), were also originated in this way. * * * In some of the older and more thickly populated parts of the world, necessity has forced the saving of the last straw. This is why we find the drought-resistant durum wheats in the dry regions of Russia and Asia and around the Mediterranean, the alkali and drought-resistant alfalfas and other forage crops in the same regions, a cold-resistant alfalfa in Siberia and Northern Manchuria, the cold-resistant winter wheats of Russia, and other crops too numerous to mention. Hundreds of years of culture and selection, forced by poverty and necessity under forbidding conditions of cold and drought and disease, have made those sections veritable storehouses of good things, but what nature and necessity have not produced for us we can in large measure do for ourselves. We can combine the cold-resisting quality of the trifoliate inedible orange with the fruit qualities of the tender sweet orange; the disease-resistant quality of the citron with the fruit quality of the edible melons; the

rust-resistant quality of the durum wheat with the berry of the blue stem; the cold-resistant quality of the wild crab with the fruit of our finer apples. The possibilities of such composite breeding have scarcely been touched or appreciated.—(*Abstract from Literary Digest.*)

A DIFFICULT PRESCRIPTION.

Editor Alumni Journal:

Dear Sir—Herewith I present you a very interesting prescription which was handed to us for compounding some time ago; you would oblige me very much and also the pharmaceutical profession if you would criticise it in one of the next editions, also give some means of overcoming the difficulties if there are any.

℞—Morphine sulfate gr. 1-20
Potass. cyanide gr. 1-16
Serpinhydrate gr. iiss (gr. 2½)
Tinctura belladonnæ m.V (m.V.)
Oleum eucalypti m.V (m.V.)

M. f. capsulæ d. t. dos. No. XX D. S. One every 2 hours.

The prescription is, as I suppose, intended for affections of the bronchial tubes. The doses are correct and the only difficulty I encountered was the preparation of a proper mass. As the solid substances of the prescription are insoluble in the mixture of oil and tincture, and the presence of potassium cyanide, especially endangering the filling of the mixture in a semi-liquid form into capsules, some means of forming a mass had to be employed. I therefore employed some calciner magnesia to absorb the liquid, in which I succeeded after using a very large quantity; however, I found it impossible to roll the mass out, as the oil was squeezed out again.

The addition of powdered acacia or extract of licorice did not help very much, as the oil of eucalyptus and tincture were in excess. All that was left for me to do was to weigh the quantity for each capsule separately and to fill them in. (Caps. NoO.)

Yours respectfully, "A Senior."

Answer.—This is an incompatibility as far as massing is concerned. The only way it can be put up in capsule form is to fill it in soft capsules. First, thoroughly mix the solid substances and divide same into 20 equal parts, put one part in each capsule, then mix your liquids, and likewise put 1-20 of your total quantity in each capsule. Then seal your capsules and let them stand for a few hours. Below you will find a reproduction of an article which appeared in the Journal of April, 1903.

"FILLING AND SEALING SOFT CAPSULES."

Very few druggists attempt to fill soft capsules, because it involves tedious labor, but occasionally it becomes necessary when liquids are prescribed in capsule form to resort to this method of dispensing. The physician naturally wishes to give his medicine in as convenient and palatable a form as possible, hence soft capsules are very often specified.

Every drug store should have a set of this simple outfit, which consists of strips of wood with openings just the size of the capsule and into which the capsule is placed.

Select perfect capsules and cut off the top close to the end, leaving a neck of about one-sixteenth of an inch for the seal. Reserve the portion clipped off to again close the capsule. Place each capsule in the opening of the sticks furnished and force them in tightly with a match stick. It is always a good plan to prepare a few extra ones as it often happens that some are spoiled in the process. Now fill in by means of a very fine dropper, one that can be placed directly into the capsule, so as to avoid getting any of the material on the outside.

Powders are often ordered in soft capsules and for that purpose I employ a paper or tin cone or funnel. In the case of powders more patience is required, especially if the powder be light, the same adhering to the sides of the funnel. Powders and liquids are often prescribed together in soft capsules, as, for instance, salol with an oil. In this case, to make a nice appearing product, gently heat the two on a water bath until the salol is dissolved. The powder would eventually dissolve, but the patient would think it peculiar if he at first saw a solid mass which later became liquid.

The finishing or sealing of the capsule is easy and pleasant; the tips, which have been cut off in the beginning, are melted together with a few hard gelatine capsules and a small quantity of water until the mixture has a mucilaginous consistence. The capsule may now be tipped by taking a thin stirring rod, dipping the end into the gelatine while hot, and gently rubbing it over the orifice. Be sure that the capsule is perfectly dry by previously going over it with blotting paper to absorb any liquid that may have got on the outside. A little practice will enable the operator to become quite proficient.

Another method is to employ a camel's hair brush, smoothing the top of the capsule as in the case of the glass rod. A very rapid way is to employ a wire loop with an opening about a quarter of an inch in diameter. By dipping this loop in the prepared gelatine and placing the

bubble which forms, over the opening in the capsule, a very nice seal is obtained.

It is generally necessary to go over the seals once or twice to make sure they are sufficiently thick as not to burst or break, which will not happen if the top of the capsule is dry and the prepared gelatine of the proper consistency. After cooling the seals, wash the capsules in alcohol or ether, the latter being the best. The seal may be dipped in a little lycopodium to prevent sticking to the other capsules, but this will not be necessary if they are properly dried.

DAN'S EXPERIENCE.

Daniel Dawson of our town,
Bought his wife a gingham gown,
Told her of his new alliance,
With the cult called "christian science."
And to honor the event,
Money saved for drugs he spent.

Rose his wife, made this reply,
As she laid the gingham by,
"Don't you know that you are ill
With a cough that's sure to kill?
Christian science well may do
For the strong, but not for you."

Used to praise, but not to blame,
Daniel felt it was a shame
To be thus misunderstood
By his helpmeet, kind and good,
Who preferred the good old way
To a fad of yesterday.

Genial husband that he was
Daniel thought he had good cause
To reprove his loving wife,
Though as dear to him as life.
For opposing him in this
Scientific path to bliss.

Gloomily he left the house,
Quietly as a timid mouse—
Thought to wear his sickness out—
He knew what he was about.
And although he weaker grew
Not another person knew.

In three days he came again,
And his wife soon made it plain
That he was deep in the fault
And in quick style called a halt,
For their baby had a chill
And had grown quite weak and ill.

Science was forgotten quite,
And it was a precious sight
To behold our Daniel run
For some drugs to save his son,
And to hear him meekly say,
"Science now can go its way."

Thus it was with townsman Dan,
Thus with every other man
Who denies the doctor's skill
When he or his beloved are ill;
But, if one prefers to die,
Sicence is the thing to try.

ANECDOTES OF A DRUG CLERK'S TRAVELS.

(Continued from last issue.)

Leaving train at Golden Gate station, he found his man who was postmaster of the village. Ahem, Mr. Johnson, am glad to see you, anything I could do for you? "I came to see you about the position at your father's place up at Dixon," he replied. "He was looking for a clerk a week ago, Mr. Johnson, so we will telephone and find out." He was such a winsome chap, a real tickler of humor, and he could roll out the most illustrated tales. Finding that his father still wanted a clerk Johnson was directed to take the 4 P. M. train from 'Frisco. Be assured you will be treated "O. K." You know, Mr. Johnson, wages are low in San Francisco, where no more is paid than you will receive with my father, and it has such pretty residences and wealthy farmers mostly reside there, and also noted for its pretty girls, I am sure you will like it, and after coating him well with a whitewash brush Johnson left again doubtful of the future. Catching the appointed train, he soon was speeding as before, to an unknown berg not even on some maps; not knowing but what the same fate as in Montana awaited him. At Port Costa a beet factory was located, where beets are refined into sugar. Next "Boneta," then Suisun (see-you-soon). He really felt contented, for this meant that he was not far from Dixon. "Elmira next," which sounded like old "New York" State, but a dream it was; as only a dozen houses were to be seen, with no life but a hideous stillness gave proof that this was a dead one.

Then the mysterious Dixon where Johnson was soon to live life over once more. With a deep-drawn sigh he alighted, to first behold the depot a neat little structure, a few hanging around curious as country folks usually are, the express cart drawn close to the baggage car and packages being hurled out upon it, all this excitement for a beginner. A short block to walk when he stood upon the main street, to the left a whole row of dilapidated one-story stores, deserted, showed what prosperity held sway. Passing three saloons, he finally stopped short at a sign marked Dr. Simon Ambrose, drugs, paints, books, stationery and newspapers. Nerving up he made a dive for the store, to be scrutinized from head to foot, the doctor looking over his spectacles at him as if he was some new ornament in this town of the plains. Dr. Ambrose of clumsy stature, flattened nose and foxy look, then addressed him. Let me get a look at you, Mr. Johnson, and with that he took him by the arm and carefully looked him over to see that he was not old and worn, as a horse dealer would a horse. "Guess you will do all right, what say you, Phillip?" Phillip rather reluctantly replied between his teeth hu, and smiled. He kept a curiosity shop on one side of the store, while the doctor ran the other side. The

fixtures had wires strung along the shelves so that the bottles would not fall from the shock of earthquakes, which gave the impression that they were put there so that they couldn't walk away. The dust on the bottles was so heavy that a sovel would have been in place to remove it, and as Johnson's stomach quailed on looking at them, he one day decided to clean them, which required much water, and four days of hard work. "I suppose, Mr. Johnson, you have received full particulars from my son at Oakland, wages will be $40 a month, and I trust that we get along very well." Now let us stroll around to the hotel, so grabbing his grip, he led him to a two-story frame building with the name "Grande" over the door. Every place he stopped at seemed to be the "Grande."

Leading Johnson to the dining-room he was introduced to "Sarah," the waitress and general maid. Serve Mr. Johnson with supper, Sarah, for he must be hungry. A dozen diners were distributed among twenty tables, showing the prosperous boom of the town again. Beefsteak, lamb chops, and beef spanish, yelled out the maid, sweetly gazing at Mr. Johnson. He heard this song so often after that, it rang as music in his ears. Everything tasted so peculiar, with grease enough to run a candle factory. He asked Sarah if the cook put opium into his cooking, when she replied that he was a first-class Chinese cook. You must get used to his cooking, it's the climate, my boy, the climate.

Next day Dr. Ambrose who handled paints, oils, toys, books, stationery, drugs, and we dare not forget newspapers, showed Johnson around the store. Looking at his watch he said, Mr. Johnson, it is now 9:30 A. M., and soon the train will be due with the papers from San Francisco. Charlie over at the hotel will show you how to get them. We have our customers, and the papers must be delivered mornings and evenings. He did not demur for he had taken the bitter apple, but wished to be back in Jersey, for to change from a pharmacist to newsboy was to him a new deal. Getting the papers which were almost hurled at him, Charlie showed him around the route with the Call, Chronicle, Enquirer and several others. One fellow came up and asks are you the new clerk, and minor insults had to be passed by, and Johnson enjoy the circus. One customer, a little Jew, amused him very much when he would leave his paper. "You shure you hef mine Chroonickle? I vant kine odder." It was such a pleasure to deliver papers on Sunday, Johnson, modest and shy, diving in and out the saloon doors as the church goers were going by. Saloons in the West are wide open on Sundays. One fellow shouts, "Hey, there," young fellow, paper please." "Take the one you want, sir," and now the dream of this beautiful town was realized. "Well, did you make out, Mr. Johnson, said the doctor, when he returned," I guess so, he mumbled. In walked a big bluff farmer. "Mr. Johnson, this is

Sam Seiler, one of our citizens" (he looked it). "Glad to see you, Johnson, where you from? I been here this thirty year, come from Missouri in '70, full moon, damp fog hanging over yonder hill when I settled.

Johnson replied by saying that his home was in New Jersey. I reckon I know where dat is for I hear enough of those Jersey skeeters of, botherashum that fly with the new mown hay, back dar.

"My new clerk is a dandy, Sam, he is full of energy, a graduate of pharmacy and a few States." Some days later the following article appeared in the Dixon Herald, the only paper of the village:

"Mr. Harold Johnson, of Jersey City, New Jersey, has entered the employ of Dr. S. Ambrose; Mr. Johnson, a practical pharmacist and prescription clerk, is a graduate of the New York College of Pharmacy. He is registered in five States and comes to Dixon with eight years' experience and carries credentials which speak highly of his qualifications and the excellence of his character." Such daring flattery in the face of all the confusion of high-class duties to perform, including window washing, general scrub and cleaning up in the shop and breaking up fire wood, would make a camel's hair bristle hard and stiff. One day Sam Seiler was praising California, that they had no snow and no cyclones and glad he didn't have to live in the East. We had been having a heavy fog for a month, and the weather pretty sultry with not a drop of rain, the humidity almost unbearable, with not a glimpse of the sun; suddenly a breeze started up, dark clouds began to appear, dust raised in clouds, inky darkness, and with a hum of gale started up, soon developing into a hurricane, the wind blowing eighty to one hundred miles an hour, after which the rain fell in torrents. Johnson smiled and quietly watched the storm, and Sam Seiler, who looked out anxiously and much disturbed, for Johnson well knew that a cyclone of genuine eastern kind had struck in the near vicinity. A few hours later Seiler all excitement, came telling us that two barns on one of his ranches had been laid flat to the ground, and that Martin, Peters, and several others suffered also. "Do you have cyclones in California, Seiler, he asked, closing one eye"? He never answered, but was more conservative in the future.

Johnson had conceit enough to feel that he was the admiration of the town for the next three months. Attended every social and reception held in the town, and took a leading part in all of them. On a bright moonlight night in November, 1900, nearing Thanksgiving, he made his entrance into society of Dixon at a public social given by young people. Miss Effie Cross approached him with a hearty good-evening as he entered "Vendome Hall." "Now, I do hope, Mr. Johnson, you don't object, but we would like you to act as head-waiter, superintending the rest." This was the first

honor bestowed upon him. Miss Cross, a mischievous young lady of eighteen summers, inclined to be pleasantly sarcastic, just to see the effects on her victims, led Johnson to where the coffee was being brewed. Miss Hattie Seiler, a corpulent Miss, always with smiles as wide as a frying pan and a rotunda as spacious as a State capitol, nudged up to him, squat down next to him, spread out a pretty white apron and squeaks, "I brought the best one for you, Mr. Johnson." Jessie Fream, Rob Cahill and Jack Colburn, with Johnson, made their way to the main hall where scores were actively engaged in different games. In a certain game Johnson was named the pride of Dixon. Soon after this reception Dr. Holmes received a letter from May Stone, the belle of the town, wanting to know who the young man was who held such popularity. She was a tall, graceful blonde, with soft blue eyes, and not long afterwards he met her at a reception of a local lodge. Now, Miss Cross, "you can't play any pranks on me, an easterner, so don't make up any schemes said Johnson; as some young ladies were grouped together planning to make a laughing stock out of him, but never succeeded. Jess, let's take him snipe hunting. Good for you, Effie, you make arrangements and hire a rig for Thanksgiving, the 29th, and we will give Mr. Johnson a bully time. Johnson promised to go, but ne'er to be fooled by Californians, a thorough investigation revealed what snipe hunting was, and Jay Thompson and the victim to be, laid plans to go, and when the opportunity presented itself to turn the tables on these mischievous females. In the meantime they found out that the snipe hunting game had been disclosed, and Johnson the wiser for it, as Thanksgiving came along, and through the long dreary hours of the day with not a soul on the street, he mused over the steed which was to take him to the hunting grounds but never made its appearance. The game was to take a foreigner to a field five or ten miles from town in the dark, let him hold open a bag to let the snipe fly in while the rest of the party walked over the field with lanterns to arouse them. After being interested in holding the bag (perhaps an hour) the rest of the party would drive off leaving the bag holder to his fate, and when he finally found that he was duped, would have to walk or get back to town as best he knew. Some weeks later Johnson accompanied Miss May Davis, a charming blonde, who was on a visit from Santa Rosa to a lecture held at Vendome Hall. After the lecture they walked down the road about half a mile from the town, to where Miss Davis was staying, and such a beautiful night, with the moon hanging low o'er the foothills, it truly tasted of romance, and a charming maid with rosy hue to her cheeks, the gift of this glorious clime beside him, why shouldn't his heart leap in inspiring tones.

(Concluded in next issue.)

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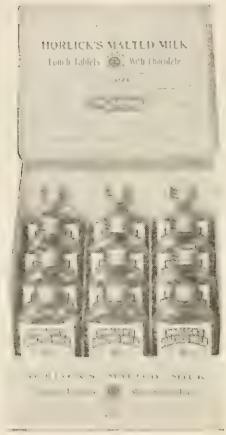

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