

THE MASK

OF KAPPA PSI
PHARMACEUTICAL
FRATERNITY



A PHARMACY CORPS FOR THE U.S.A.

A. PH. A. NUMBER

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Kappa Psi Pharmaceutical Fraternity

Issued under the direction and by the authority of

THE GRAND COUNCIL

THE MASK

(EXOTERIC)

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(ESOTERIC)

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THE MASK

of Kappa Psi Pharmaceutical Fraternity

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of the U. S. of America

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Kappa Psi Pharmaceutical Fraternity Directory

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THE MASK

of the Kappa Psi Pharmaceutical Fraternity

VOL. XXVI, No 4

NOVEMBER, 1929

WHOLE NUMBER 108

KAPPA PSIS ACTIVE AT THE A. PH. A. MEETINGS AT RAPID CITY, SOUTH DAKOTA, AUGUST 19-31, 1929

Kappa Psis who are American Pharmaceutical Association national officers include: President D. F. Jones, Second Vice-President W. H. Zeigler, Secretary E. F. Kelly, Editor of the *Yearbook* A. G. Dumez, Editor of the *Journal* E. G. Eberle.

Officers-elect include President H. A. B. Dunning, and Council members J. H. Beal, C. E. Caspari, C. H. LaWall, and W. Bruce Philip.

Secretary E. F. Kelly presented the report of the secretary, President D. F. Jones presented his address as president, and an address entitled, "At the Bottom of the Well," was delivered by Dr. James H. Beal. The report of the House of Delegates was presented by Ambroze Hunsberger, chairman.

The Council of the A.Ph.A. includes the following members of Kappa Psi: Vice-Chairman Charles L. LaWall, Secretary E. F. Kelly, and H. C. Christensen, H. A. B. Dunning, J. A. Koch, J. H. Beal, H. V. Army, W. B. Day, and T. J. Bradley. Ex-officio members of the Council include President D. F. Jones, First Vice-President Ambroze Hunsberger, Secretary E. F. Kelly, Editor of the *Journal* E. G. Eberle, and Editor of the *Yearbook* A. G. Dumez.

The officers of the House of Delegates of the A.Ph.A. include the following Kappa Psis: Chairman Ambroze Hunsberger and Secretary E. F. Kelly. The opening address in the House of Delegates was delivered by Chairman Hunsberger.

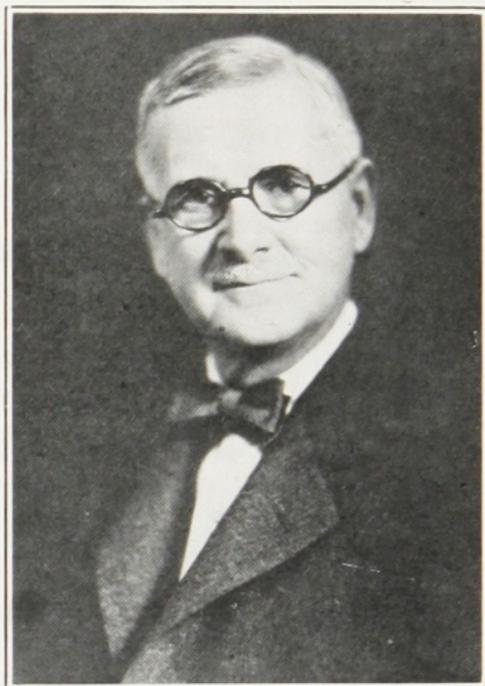
Among the officers of the sections of the A.Ph.A. and among those who presented papers, were the following members of Kappa Psi:



H. A. B. DUNNING, Alpha
New President, A.Ph.A.

F. D. JONES, Alpha
Retiring President, A.Ph.A.

Scientific Section—Chairman James C. Munch, First Vice-Chairman H. A. Langehan, Second Vice-Chairman W. G. Crockett, Delegate to the House of Delegates Paul S. Pittinger; "Food as a Preventive Medicine" by E. A. Ruddiman; "Aluminum as a Substitute for Zinc in the U. S. P. Test for Arsenic" by E. A. Southworth, E. O. Prether, Jr., and W. F. Ambroz; "Methoxyl Content as a Criterion of the Composition of Creosote" by R. P.



D. F. JONES, Alpha
Retiring President, A.Ph.A.

Fischelis; "Amino Alcohols: 4. Reactions with Alkaloidal Reagents" by J. C. Munch; "Reaction between Formaldehyde and Hydrogen Peroxide and a Quantitative Method Based Thereon" by Arno Viehoever; "The Bioassay of Capsicum and Chillies," "Further Studies of the Cat-Eye Method for the Bioassay of Mydriatics and Miotics," "Red Squill Powders as Specific Raticides," "The Delicacy of Chemical and Physiological Tests for Strychnine," "Bioassay of Aconite and Its Preparations," "The Pressor Assay of Epinephrine-Novocaine Mixtures," all by J. C. Munch and associates; "Effect of Digitonin" (2 papers), "Histology and Microchemistry of Digitalis Seed," and "Pharmacognosy of Psyllium Seed" by Arno Viehoever and associates; "An Air Interrupter for Artificial Respiration" by A. R. Bliss, Jr.; "Botanical, Pharmacological and Chemical Study of the Root and Stem Bark of *Viburnum Rufidulum*" by H. W. Youngken, J. C. Munch, and F. J. Amrhein; "Umbellularia Californica, Nutt" by H. M. Burlage and associate; "Polypodium Occidentale (Licorice Fern)" by F. J. Goodrich; "Evaluation of Pharmaceutical Glassware" by J. C. Munch; Report on *National Formulary* by W. L. Scoville.

Section on Education and Legislation—Secretary Glenn L. Jenkins, Secretary's report by G. L. Jenkins; "The Parker Bill" by E. F. Kelly; "Educating the Public on the Profession of Pharmacy" by D. B. R. Johnson; "The Proposed Transfer of Prohibition Enforcement to the Department of Justice" by J. H. Beal; "Bromatotherapy and the Drug Store" by L. F. Kebler; "The Neighborhood Store" by W. F. Rudd;

"Many Candidates Fail State Board Examinations in District 3. Why?" by R. H. Raabe; "Comments on the Revocation of Permits Issued under the National Prohibition Act" by W. B. Philip.

Section on Practical Pharmacy and Dispensing—Chairman P. H. Dirstine; Delegate to the House of Delegates H. A. Langenhan. Chairman's address by P. H. Dirstine. "A Survey of the Prescription Business in the City of Buffalo" by Leon Monell; and "The Manufacture and Dispensing of U. S. P. Digitalis Preparations" by R. P. Fishelis.

Section on Commercial Interests—Secretary J. G. Noh; Delegate to the House of Delegates C. L. O'Connell. Report of the secretary by J. G. Noh; "Dividing Your Inventory to Find Your Proper Rate of Turnover" by W. B. Philip.

Section on Historical Pharmacy—Chairman L. F. Kebler; Secretary G. D. Beal; Historian E. G.

Eberle. "The First Professor of Chemistry and Pharmacy in the South Dakota State College" by L. F. Kebler; Secretary's report by G. D. Beal; Report of the historian by E. G. Eberle; "History of the Illinois Pharmaceutical Association" by W. B. Day; "Reciprocity in Pharmaceutical Licensure" by H. C. Christensen; "Drug Legislation" by L. F. Kebler; "George Thorndike Angell, the Fearless Pioneer for Pure Food and Drugs" by L. F. Kebler.

Plant Science Seminar—Chairman C. E. F. Mollett; Entertainment committee, E. N. Gathercoal, E. B. Fischer; "Opening Address" by C. E. F. Mollett; Report of the committee of the National Research Council on Pharmaceutical Botany and Pharmacognosy by Chairman H. W. Youngken; "Color Nomenclature of the U.S.P. and N.F." by E. N. Gathercoal, discussion opened by Fischer, L. K. Darbaker, Viehoever, A. John Schwarz and Bacon; "Field and Collecting Trip Leader" Rang; Youngken and Mollett opened the discussion of "Ecology and Pharmacognosy"; "A Glossary of Historical Terms" by H. W. Youngken, dis-



Left to Right: D. F. Jones, Alpha, president A.Ph.A.; Pilot, Ed Hefley; Denny Brann, Alpha, President, N.A.R.D.



DR. A. G. DUMEZ, Sigma
Retiring President of American Association
of College of Pharmacy

Memorial to Dean Calder (Beta Epsilon by T. J. Bradley; report of committee on investigation of Pharmacy Schools by Carnegie Foundation by W. F. Rudd; "To Cooperate in the Revision of the Syllabus" by C. W. Johnson; report on the Pharmaceutical Corps in the U. S. Army by A. Richard Bliss, Jr.; report on the Fairchild scholarship by E. G. Eberle; "A Four-Year Curriculum" by G. C. Schicks; "Drug Trade Bureau on Information" by W. F. Rudd; "Biological Abstracts" by H. W. Youngken; "National Conference on Pharmaceutical Research" by E. V. Lynn; "National Drug Trade Conference" by W. F. Rudd.

Chemistry Conference—Chairman Glenn L. Jenkins.

Materia Medica Conference—Chairman L. K. Darbaker; Secretary A. Richard Bliss, Jr. Discussions lead by Plitt, Zeigler, Gathercoal, Bliss, Youngken, and Darbaker.

National Association of Boards of Pharmacy—Secretary H. C. Christensen. Report of the secretary by H. C.

cussion opened by Plitt, Gathercoal, and Mollett; "Medicinal Plants of Northern Ohio" by F. J. Bacon; "Mints in the Vicinity of Baltimore" by C. C. Plitt.

Conference of Pharmaceutical Association Secretaries—Address of the president by John Culley; report of the secretary-treasurer by J. G. Noh; "Commercial Clinics for State Associations" by J. G. Beard; "State Services for Members" by W. B. Philip; "Auxiliary Membership in State Associations" by W. E. Bingham; "Legislative Activity of State Associations" by R. P. Fischelis.

American Association of Colleges of Pharmacy—President's address by A. G. DuMez;



DR. JAMES H. BEAL, Chi
Member Council A.Ph.A.

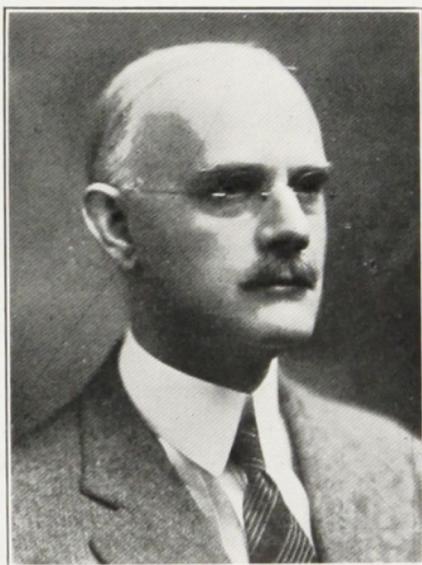
Christensen; "Suggestions Regarding Reciprocity" by R. P. Fischelis; report of Advisory Examination Committee by H. C. Christensen, chairman; report of the Syllabus Committee by George Judisch; report on District 7 by W. E. Bingham; report of the Fairchild Scholarship Committee by E. G. Eberle; report on the Advisory Publicity Committee by R. P. Fischelis; report of Committee on National Certificate by H. C. Christensen.

THE KAPPA PSI DINNER AT THE A. PH. A.

On Tuesday evening, August 27, the members of Kappa Psi attending the A. Ph. A. meetings at Rapid City, South Dakota, held the annual A. Ph. A. Kappa Psi dinner in the ballroom of the Alex Johnson Hotel. It was a gala event and one of the outstanding functions of the meeting, for in celebrities and in numbers it rivalled practically every event on the long program with the exception of the A. Ph. A. dinner itself.

Ninety-eight sat down to the Kappa Psi dinner! When our good Brother Dr. H. C. Christensen, secretary of the National Association of Boards of Pharmacy and member of Alpha chapter, came to the ballroom door to present his dinner ticket, he stepped back and said, "This cannot be the Kappa Psi dinner—there are so many seated, it must be an Association dinner!" He learned immediately that he was in "the right pew."

Grand Regent W. Bruce Philip of Gamma, Beta-Gamma, and San Francisco graduate chapter, presided at the dinner. He introduced and formally admitted to full membership in our order: President D. F. Jones of the American Pharmaceutical Association, President Denny Brann of the National Association of Retail Druggists, and President-Elect H. A. B. Dunning of the American Pharmaceutical Association. Each of these three gentlemen briefly addressed the members. Dean and Mrs. E. R. Serles of the South Dakota State College, our guests of honor, were presented, and Dean Serles responded to the Grand Regent's words of welcome. Dean Serles was local chairman of the Rapid City meeting and Mrs. Serles was chairman of the ladies' (state) reception committee, and much of the credit for the



AMBROSE HUNSBERGER Eta
Chairman, House of Delegates, A.Ph.A.

wonderful success of the A.Ph.A., etc., meetings at Rapid City goes to them. The meetings were the largest attended meetings in the history of the A.Ph.A., and Rapid City takes the record attendance away from New York City which had held the record up to 1929. The members of the Kappa Psi Pharmaceutical Fraternity are grateful to Dean and Mrs. Serles for the many courtesies extended during the meetings.

* * * *

KAPPA PSIS AT THE A. PH. A. MEETING

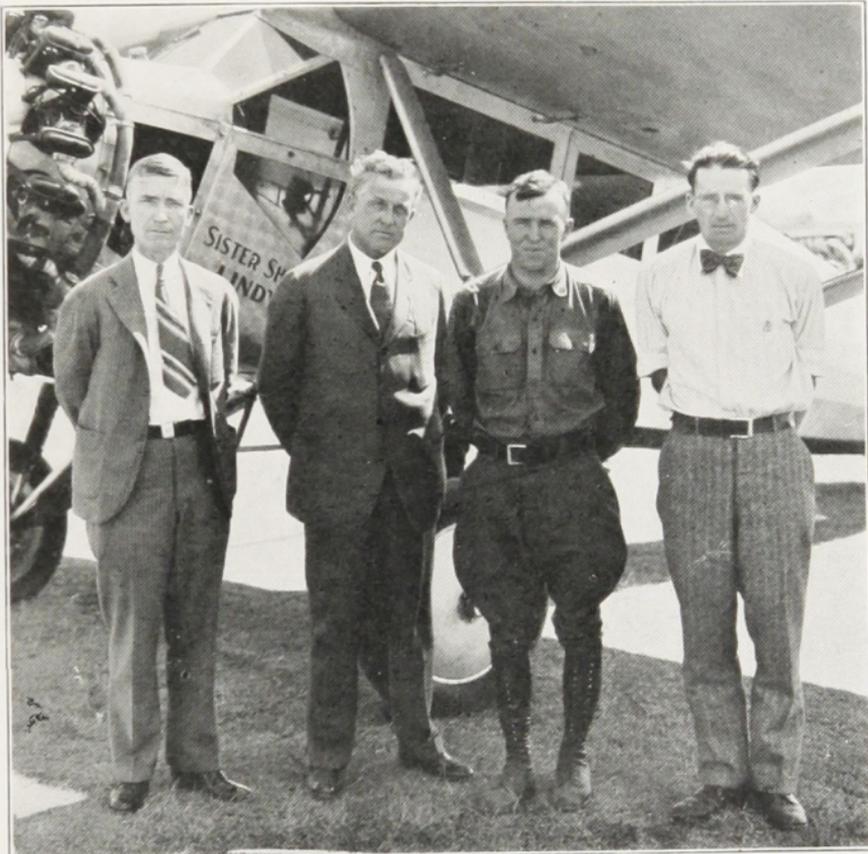
Walden F. Ambroz, Wagner, S.D.	C. W. Johnson, Seattle, Wash.
H. V. Army, Monclair, N.J.	D. F. Jones, Watertown, S.D.
F. J. Bacon, Cleveland, Ohio.	A. F. Judd, Pittsburgh, Pa.
W. Webser Barkley, University, Miss.	L. F. Kebler, Washington, D.C.
H. G. Beach, Montrose, S.D.	E. F. Kelly, Baltimore, Md.
George D. Beal, Pittsburgh, Pa.	C. J. Klemme, Lafayette, Ind.
James H. Beal, Camp Walon, Fla.	J. A. Koch, Pittsburgh, Pa.
John G. Beard, Chapel Hill, N.C.	H. A. Krumwiede, New Brunsw- wick, N.J.
William E. Bingham, Tuscaloosa, Ala.	H. A. Langenhan, Seattle, Wash.
A. Richard Bliss, Jr., Memphis, Tenn.	L. C. Lewis, Tuskege, Ala.
Theodore J. Bradley, Boston, Mass.	E. L. Maines, Cleveland, Ohio.
Denny Brann, Des Moines, Iowa.	L. E. Martin, Chicago, Ill.
Clarence M. Brown, Columbus, Ohio.	A. O. Michelsen, Portland, Ore.
Fred S. Bukey, Lincoln, Neb.	C. F. Mollett, Missoula, Mont.
Henry M. Burlage, Corvallis, Ore.	L. V. Moore, Bellevue, Pa.
Charles E. Caspari, Jr., S. Louis, Mo.	J. C. Munch, Baltimore, Md.
H. C. Christensen, Chicago, Ill.	J. G. Noh, Omaha, Neb.
A. Henry Clark, Chicago, Ill. <i>no</i>	C. L. O'Connell, Pittsburgh, Pa.
John Culley, Ogden, Utah.	K. Peper, Fargo, N.D.
Gordon L. Curry, Louisville, Ky.	W. B. Philip, San Francisco, Calif.
L. K. Darbaker, Pittsburgh, Pa.	C. C. Plitt, Baltimore, Md.
Wm. B. Day, Chicago, Ill.	W. P. Porterfield, Fargo, N.D.
P. H. Dirstine, Pullman, Wash.	R. H. Raabe, Ada, Ohio.
A. Groves DuMez, Baltimore, Md.	K. H. Rang, Brooklings, S.D.
M. S. Dunn, Philadelphia, Pa.	J. G. Rees, Woodlawn, Pa.
H. A. B. Dunning, Baltimore, Md.	E. C. Reif, Pittsburgh, Pa.
Eugene G. Eberle, Baltimore, Md.	W. F. Rudd, Richmond, Va.
Frank H. Eby, Philadelphia, Pa. <i>no</i>	E. A. Ruddiman, Detroit, Mich.
George W. Fiero, Buffalo, N.Y.	H. H. Rusby, Newark, N.J.
Edmund N. Gathercoal, Maywood, Ill.	L. Saalbach, Pittsburgh, Pa.
Cris Karl Glycart, Chicago, Ill. <i>no</i>	G. C. Schicks, Montclair, N.J.
Forest Jackson Goodrich, Seattle, Wash.	W. L. Scoville, Detroit, Mich.
Elmer L. Hammond, University, Miss.	C. M. Snow, Oak Park, Ill.
Emil R. Hirsch, Chicago, Ill.	E. P. Stout, Detroit, Mich.
Wm. John Husa, Gainesville, Fla.	F. P. Stroup, Philadelphia, Pa.
D. B. H. Johnson, Norman, Okla.	W. F. Sudro, Fargo, N.D.
G. L. Jenkins, Baltimore, Md.	R. W. Taylor, Greensburg, Pa.
Total	J. L. Voight, Appleton, Wis.
	G. L. Webster, Chicago, Ill.
	L. S. Whitmore, San Francisco, Calif.
	S. A. Williams, Troy, Ala.
	H. W. Youngken, Arlington, Mass.
	W. H. Zeigler, Charleston, S.C.
	80.

* * * *

MEETING OF THE EXECUTIVE COMMITTEE,
RAPID CITY, SOUTH DAKOTA,
AUGUST 31, 1929

The Grand Regent called the meeting of the national officers and the Executive Committee to order at 9:00 A.M. on the morning of Saturday, August 31, at the Alex Johnson Hotel, Rapid City, South Dakota.

The Grand Regent called for reports.



Left to Right: E. F. Kelly, Sigma; H. A. B. Dunning, Alpha; the Pilot; Publicity Director of A.Ph.A., G. A. Bender.

The Grand Regent's report has already appeared in part in various issues of THE MASK. His formal report will be published in a later issue.

The Grand Secretary and Treasurer's report showed that the majority of the chapters are paying their dues regularly and promptly. The following chapters are in arrears for national dues (per capita tax):

Gamma: February, March, April, May, 1929.

Eta: February, March, April, May, 1929.

* *Mu*: October, November, December, 1928; January, February, March, April, May, 1929.

* *Xi*: October, November, December, 1928; January, February, March, April, May, 1929.

Sigma: January, February, March, April, May, 1929.

* *Beta Beta*: October, November, December, 1928; January, February, March, April, May, 1929.

Beta Kappa: January, February, March, April, May, 1929.

* *Beta Nu*: October, November, December, 1928; January, February, March, April, May, 1929.

* *Beta Xi*: March, April, May, 1929.

* *Beta Psi*: October, November, December, 1928; January, February, March, April, May, 1929.

* *Beta Epsilon*: October, November, December, 1928; January, February, March, April, May, 1929.

* *Beta Omicron*: October, November, December, 1928; January, February, March, April, May, 1929.

All bills are paid in full, and there is a comfortable balance on hand due to the economic fashion in which the central office is conducted, and to the hearty co-operation of the chapters in good standing.

The Grand Historian's report showed that *Mu*, *Sigma*, *Beta Epsilon*, *Beta Theta*, *Gamma Epsilon*, *Beta Iota*, and *Beta Nu* had not responded to three requests sent out by that national officer for a report.

The Grand Regent called attention to the fact that the national officers and committeemen have been attending national conventions and committee meetings during the A. Ph. A. meetings without expense to the National Treasurer.

The propositions of eight manufacturing jewelers, together with samples, were given careful consideration. On motion by Dean Mickelsen, chairman of the Executive Committee, it was decided to award the contract to the L. G. Balfour Company at Attleboro, Massachusetts. The Central Office was instructed to send a letter of appreciation to all of the manufacturers who presented propositions and samples.

Under the discussion of new chapters several preliminary petitions were approved. Formal announcement will be made when the formal petitions are received and acted upon.

The Central Office reported that the material for the revision of *The Agora* was being compiled, and would appear first as a directory number of *THE MASK*. This plan, which will save a considerable amount, received the hearty approval of the national officers and the Executive Committee.

The Grand Regent was requested to continue sending regular communications from his office to the various chapters.

It was decided to purchase an embossed register book to be used at all future A. Ph. A. meetings.

* These chapters are in arrears for their full year and are liable to have their chapters revoked.

At future meetings, it was decided that a letter be sent to each member of Kappa Psi present announcing the time and place of the Kappa Psi dinner.

There being no further business, the meeting on motion adjourned.

The following table presents a summary of the reports.

	Initiates	No. at Opening of School	Unaffiliated	Transferred	Expelled	Total Active	No. in first year	No. in second year	No. in third year	No. in fourth year	Letters to MASK	Files of Graduates
Gamma.....	9	8	1	1	0	17	4	5	8	0	4	+
Epsilon.....	19	13	5	0	1	30	0	8	11	8	3	+
Eta.....	21	31	3	0	0	54	17	15	22	0	2	+
Theta.....												
Iota.....	6	7	1	0	0	12	3	4	5	0	1	+
Mu.....												
Mu Omicron Pi...	14	11	3	0	0	68	22	28	18	0	4	+
Nu.....	25	5	0	0	0	12	0	9	0	0	3	+
Xi.....	11	15	3	0	2	21	0	2	11	8	3	+
Pi.....	0	0	1	0	0	18	8	10	0	0	1	+
Sigma.....												
Tau.....	14	23	0	0	0	31	6	15	9	1	2	+
Upsilon.....	12	17	0	1	0	23	4	7	12	—	3	+
Chi.....	23	31	31	0	0	40	0	12	23	5	2	+
Psi.....	8	18	0	1	0	26	3	17	6	0	1	+
Omega.....	17	18	0	1	0	24	5	7	12		2	+
Beta Beta.....	12	15	0	0	0	21	7	9	3	2	4	+
Beta Gamma.....	19	26	3	0	4	38	12	17	9	2	3	+
Beta Delta.....	12	12	0	0	0	24	4	20	0	0	4	+
Beta Epsilon.....												
Beta Zeta.....	5	16	0	3	0	16	0	6	4	6	3	+
Beta Eta.....	6	8	3	1	1	13	0	0	7	6	1	+
Beta Theta.....												
Beta Iota.....												
Beta Kappa.....	24	37	0	0	0	61	9	21	27	0	3	19
Beta Lambda.....	6	11	0	0	0	14	2	12	0	0	2	+
Beta Mu.....	13	17	0	0	0	21	0	10	11	0	2	+
Beta Nu.....												
Beta Xi.....	8	9	1	1	0	15	3	7	5	0	1	+
Beta Omicron.....	6	12	0	0	0	18	0	6	9	3	4	+
Beta Pi.....	8	12	24	0	0	20	0	20	0	0	1	+
Beta Rho.....	7	5	0	0	0	11	6	0	5	0	3	+
Beta Sigma.....	14	13	0	0	0	20	0	12	6	2	7	+
Beta Phi.....	8	12	24	0	0	20	0	20	0	—	1	+
Beta Psi.....	0	5	0	0	0	5	0	1	1	3	0	+
Gamma Delta.....	8	24	4	0	1	20	0	9	11	0	3	+
Gamma Epsilon.....												
Gamma Eta.....	8	13	2	0	0	14	0	4	5	4	3	+
Gamma Omicron...	10	7	5	0	0	17	0	7	6	4	1	+

THE PROFESSIONAL SIDE OF PHARMACY

Does Pharmacy Pay?

HENRY J. GOECKEL, *Gamma*, Cranford, New Jersey

Two pharmacy periodicals have published articles which should be read and pondered over, especially by the younger generation of pharmacists. One of these articles appeared in the house journal of one of the larger pharmaceutical manufacturers¹. The other one was presented at the 1928 meeting of the American Pharmaceutical Association.² Both of these papers show that a pharmacist must be decidedly "more than a merchant" if he would achieve a lasting success.

"Prescription business!" a druggist exclaimed as we stood talking in the midst of his stock of alarm clocks, dolls, electric fans, toys, reading matter, and sporting goods. "There isn't any prescription business in this town. We don't get half a dozen prescriptions a day and we keep a fully equipped department in order to handle that picayune business."

The writer of the first article¹ goes on to state that he does not know what is the matter with the drug stores in that town. He does know that when sickness visited his family, the prescriptions and other sick room needs were supplied by a prescription pharmacy which he calls the "So and So Laboratories, the only sanitary prescription laboratories in this part of the state devoted exclusively to prescription compounding."

While the first pharmacist with fourteen years of both German and American training in professional pharmacy complains of a lack of prescription patronage, an aggressive young pharmacist on a laboratory basis secures sufficient professional work to make this business pay. There is more to pharmacy than just to mechanically fill prescriptions. Many articles which have been presented in *THE MASK* in the past were selected to show this.

Farrington also writes of another small town druggist who is holding the professional patronage and who is featuring laboratory work by careful application of aggressive promotion efforts to the professional side of his business. He stresses his professional qualifications, the care given to prescriptions and the adequacy of his prescription department. He has developed an analytical service and has secured from the civil authorities the work of making the official liquor analysis, charging \$5.00 for an analysis and \$10 if he must testify. Of particular note is the fact that this druggist is likewise a successful merchant. He has

¹Farrington, Frank, "Featuring the Professional Side of Pharmacy," in *Tile and Till* of Eli Lilly and Company, June, 1929, page 91. a very successful soda fountain trade and is a record small town dealer

in Kodaks. He evidently knows how to be more than a merchant without ceasing to be a good merchant.

The comments on three pharmacists cited in Wulling's paper² are worth noting. The first of the pharmacists has stated his case in words which cannot very well be improved on, so we will let him state his own case.

"Fifteen years ago my almost exclusively pharmaceutical store was located in a residence district. Thirty to thirty-five prescriptions a day was an average and sales amounted to about \$60 a day. Gradually the business section extended past my store and five years ago five additional stores including three chain stores surrounded me. Mine has been largely a family business and now practically all families had moved away. For that reason and because of the cutting and merchandising of my competitors my business ran down to where I was losing out fast. I owned the three story building which was located on a corner and contained my drug store and the adjoining small grocery store and the apartments above. Nothing seemed left for me to do except to do some merchandising myself, so I enlarged my floor space by adding the store next door, the owner of which had been driven out of business by chain groceries. Renovation and modern fixtures and a stock of merchandising similar to that of my invaders cost me \$25,000. In three years I was nearly on the rocks and realized that I was not as good a business man as I was a pharmacist. Acting upon my expensively learned lesson, I remodeled my building, converting the upper apartments into offices and the street floor into three stores, the inside one of which I fitted out and stocked modestly as a professional pharmacy. Of the offices I rented two to physicians and one to a dentist. Then I went after pharmaceutical business. I advertised my self in quarter columns in three of the leading papers as an exclusively prescription pharmacist rendering exclusively professional pharmaceutical service. I got six of the former doctor friends to send their patients for their medicines to me; I supplied a nearby private hospital with the medicines and solutions needed; created a business in medical supplies for dentists, selling now to them among other things about fifty gallons of antiseptic solution monthly. I sent personal letters to as many of my former family customers as I could locate with the results that some of them came to me clear across the city, etc. I used what little business ability I had in me to build up a pharmaceutical practice and succeeded with only a fraction of the effort I put so disastrously into merchandising. My new venture I started on January 2, 1927. In December I added twenty feet to the rear of my store which the adjoining men's furnishing store let me have and there I manufactured every preparation that can be made in a small laboratory. Prescriptions and customers come to me from all parts of the city and I do not depend upon

² Wulling, Frederick J., "Epiphytic not Parasitic," *Jr. A. Ph. A.*, June, 1929, page 594.

my immediate locality for business. By July, 1927, I was doing about twenty prescriptions a day and \$30 sales. Now, May, 1928, prescriptions average sixty and sales over \$100. Not only am I having a good practice; I feel like a professional man and have more self respect; am happy and contented which I certainly was not while merchandising. My practice is growing and it has a momentum, but of one thing I am sure; I will not let it expand beyond where I can give it my personal service and attention for on these my reputation and success as a pharmacist now depend."

Another pharmacist who lost his professional practice through commercial expansion regained it by eliminating his merchandise and putting his full energy in gaining the co-operation from physicians, furnishing an orphanage and a private hospital in his neighborhood with their supplies, and establishing a clinical laboratory service; keeping a good supply of biologicals and making practically all the galenicals needed in his practice. He has built up a good business and has more leisure than he ever had without neglecting his practice.

Another interesting case is cited where a recent graduate inherited an establishment which had become so commercialised that it was no longer a drug store. This young pharmacist sold the commercial part or "trade emporium," established the drug and prescription part in a side street location and in three years he dispenses around one hundred prescriptions a day. He makes a full line of household remedies and toilet preparations.

To these examples the present writer can add others of interest. For thirty or more years two establishments in a large eastern city were located within a block of each other. Their opportunities were about equal except that the first one of them at the beginning had much the better status as a pharmacy. Through the years both took advantage of their merchandising, fountain, and luncheonette opportunities. Both were very successful. However the first one neglected to aggressively push the professional side of the business, being content to develop a fountain-luncheonette service which required twenty-one persons to run. The drug and prescription opportunities were probably too picayune and unprofitable and bothersome compared to such quick turnover and rush of business. The other establishment never neglected to push the professional side of the business. Those in charge of this department were thoroughly qualified and capable matured pharmacists. Every large merchandising advertisement gave liberal space right under the name informing the public that the establishment "put up prescriptions." This was so played up that it finally became a byword in a community of over a million people. Both of these establishments had to move from their established locations. They again selected parallel locations. Both naturally suffered a loss in transient patronage. However the one which for years built up the business around the prescription and pharmaceu-

tical service has retrieved these losses. The other establishment has gone out of business. Does pharmacy pay?

Another pharmacist in a large eastern city is learning a bitter lesson. He forsook building up his prescription and pharmaceutical patronage for the siren of merchandising, extensive side lines, quick turnover, big volume sales, etc. He is now wedged in by three other variety so-called drug stores similar to his establishment. There is the usual battle of price cutting and undercutting with his competitors having the best of the advantages. He will probably not be able to retrieve as did the pharmacists of Dean Wulling's acquaintance. The writer personally knows another pharmacist in a city of about 15,000 population in the East who up to fourteen years ago centered his energies in building up a so-called merchandising business. He had no direct drug store competition at that time.

He succeeded in building up such a busy establishment that he had seven persons employed at his fountain. He also sold all kinds of musical supplies. In his own words his pharmaceutical business was such that he would have starved to death if he had depended upon it. In 1915 he made what many would consider a very foolish move. He had the opportunity to change his location to the middle of the block at about half his previous rental on a long term lease. He did away with all fountain service and ceased to be a music store. He has two competitors within a half block on either side of him. Every customer coming to him must pass a drug store with soda fountains and all other trimmings of a so-called modern drug store. Since establishing at the present location he has also discontinued the sale of all tobacco products.

While running his successful merchandising drug store he managed to do from six to eight prescriptions on a busy day. He now has from three to four registered men and two to three assistants to cover sales and pharmaceutical work. The sales in drugs, sick room supplies, and toilet goods have attained a volume which would satisfy many a large chain store. His prescription patronage varies from sixty to seventy a day in the slow season to a hundred and fifty a day during the busy season. This without a fountain or tobacco department and with a competitor on both sides of him. And he has by no means taken advantage of all the opportunities which could be developed along true pharmacy lines.

Some conclusions justified from the forgoing illustrations are:

1. A soda fountain and luncheonette business is not a necessity and likewise not necessarily a detriment to building up a true pharmacy patronage.
2. It is however absolutely necessary at all times to stress the pharmacy service and to be a capable pharmacist.
3. A professional standard must be adhered to.

4. Business ability and professional pharmaceutical ability are two distinct and necessary qualifications.

5. It is time to cease harping on what is the matter with pharmacy and consider for a while what is the matter with the pharmacists.

WATER AND ITS RELATION TO HEALTH

A. O. MICKELSEN, Ph. C, M.S., *Beta Iota*, Dean,

Professor of Pharmacy, Physiological Chemistry and Bacteriology

Water was long considered one of the four fundamental elements—air, fire, water and earth; but during the eighteenth century water was definitely determined to be composed of two gases, hydrogen and oxygen, and that these elements combine in the proportion of two volumes of hydrogen to one of oxygen to form water. While modern science is familiar with the chemical and physical properties of water, there is still a great deal to learn in regards to the relation of water to health. The world could get on seemingly well without gold, and very possibly several elements might be spared, but without water all life would be a dead cinder beyond the possibility of revival.



A. O. MICKELSEN, *Beta Iota*

Water is a powerful solvent, that is to say, it dissolves many substances. Water in the form of rain catches and dissolves dust particles. Bacteria that may be present in the air are brought to earth by the rain and thus the air is

purified by water, and the water becoming contaminated with animal matter and germs, render it unsafe for human consumption for a time.

Water combines chemically with a large number of substances. It is a constituent of nearly all minerals, even to the hardest stone, and of all vegetable and animal tissue. Water containing over eight grains of mineral matter to the gallon is called hard water. From an industrial point of view, hard water is a disadvantage since it forms deposits of mineral matter on the steam boilers, but for drinking water and human consumption pure water containing a small quantity of minerals is ideal from the standpoint of health. Pure water with reference to animal and vegetable matter would make the water unsafe for human consumption. Water for domestic use must be free from objectionable color, taste, odor, animal matter and germ contamination. The minerals contained in water are usually calcium (lime)

magnesium, sodium, potassium, and iron. The reason for the desirability of such water for human consumption, these very minerals are required by the body for normal health and will be discussed separately in a later paragraph.

While the mineral content of water is important to the water supply of a community, the presence of animal and vegetable matter in the water supply is perhaps of greater concern due to immediate results from such contaminated water. Typhoid fever offers the most striking examples of disease spread by contaminated water. The typhoid germ is by preference a parasite and rarely found outside the human body, or traced to an origin in the discharges of a typhoid patient or convalescent. With our modern means of transportation, and the desire of business people to seek the mountain streams for a little recreation, an additional problem arises to the cities drawing water from those streams for its water supply. Many epidemics of infectious diseases have sprung from germs left by travelers, and most of the great plagues and pestilences of history have followed the routes of pilgrims, caravans, crusaders, conquerors, traders or travelers. "Walking cases" of typhoid fever, diphtheria, etc., are perhaps most dangerous to the public health, and roving characters do much to spread disease. Persons coming down with an infectious disease, such as typhoid fever, are very apt to leave off work and "go a-fishing," sometimes upon or along the shores of public water supply, which they may unwittingly contaminate. Whenever infected material finds its way into the drinking water of a community, ideal conditions naturally exist for the development of epidemics, the extent of which will be proportionate to the number of people using the water. While the typhoid bacillus can survive only for approximately three weeks in water, the germ may be carried for considerable distance by water currents in this period of time. At one time typhoid fever was one of the most widespread and important of all bacterial diseases. Statistics show that in the United States in the census year 1900, there were reported 35,379 deaths from this disease, and this number was probably considerably below the true figures. The number of deaths reported indicates that there were at that period at least 350,000 cases of typhoid fever in a single year. In 1925 there were only 8,287 deaths reported in the United States from typhoid fever. Since the disease is caused by taking into the mouth germs discharged by humans harboring the germ, this implies that a very advanced stage of civilization and sanitation has been reached. This improvement is largely due to public arterial water supplies, chlorination of public water supplies, and pasteurization of milk. While we are making rapid progress further precaution is necessary to decrease disease.

The value of inorganic substances (any substance such as minerals) in nutrition, which are present in the most desirable public water supply, may well be considered at this point. Modern biochemistry, with its

new delicate methods for quantitative analysis of mineral substances, makes it possible to estimate the importance of such substances in nutrition more accurately than was formerly possible. It has been demonstrated that inorganic substances play as important a part in the economy of the human being as do the organic. Mention is made separately of important mineral substances present in desirable arterial water supplies.

Sodium chloride (table salt); while salt is supplied in the food, mention is made of its importance since it is also found in water supplies. Salt-free diets cause death if carried beyond a certain limit; a pigeon dies within a fortnight while a dog may live nearly twice that long. This illustrates the importance of sodium chloride. On the average, ten to fifteen grams (approximately two teaspoonfuls), are excreted per day by normal adults. We would expect this to represent the required intake of salt, and should guard ingesting an excess of salt as well as taking the required amount.

Calcium (lime). Lime is the most important mineral constituent found in drinking water. The minimum daily requirement for human adults is one-half gram, for children one gram (one-fourth teaspoonful), of calcium every twenty-four hours is essential. Of this, about one-hundredth is retained to build the bones and teeth. Milk furnishes the largest supply of calcium in foods. Calcium is obtained from other sources such as a diet of legumes, as beans or peas; or lime water prescribed by the doctor. Where the public water supply deficient in calcium content, milk should be ingested at the same time, since a greater amount of calcium will be retained. This is undoubtedly due to vitamin D present in the milk. Calcium is not utilized unless vitamin D is present and the parathyroids are intact, or in the presence of either sunlight or ultraviolet light. Ultraviolet light (sunlight) has calcium depositing properties. That is, ultraviolet light makes the assimilation of calcium possible. (Assimilation meaning the transformation of the calcium into the bony tissue). The problem of calcium deficiency in the body has been given considerable study by the medical profession and is of vital importance to the growing child as well as the adult.

Effects of Calcium Deficiency. This may be demonstrated by placing two young white rats in separate cages and feeding both on adequate diets, but retaining calcium from one rat. Make frequent body weight determinations. The rat receiving the diet containing calcium will show a normal growth. The rat receiving the diet deficient in calcium will fail to show normal gains in weight, this is due to the deficiency in calcium. Similar effects under similar conditions would be true to children. Calcium plays a very important part in the cure of the condition known as rickets, together with a high phosphorous content maintained at the same time. Calcium is essential to the diet if teeth are to be free from decay, and the bone structure normal. In tuberculous patients, the tissues con-

tain less mineral salts and more is thrown off the body as waste matter. For this reason calcium in the water apparently has a desirable effect on the disease. London's seemingly low rate of tuberculosis, as compared with other large cities, is in a great measure accredited by tuberculosis specialists to be due to the presence of lime in considerable quantity in the city water. The presence of calcium in the blood must be maintained. If the food does not contain sufficient calcium, the body draws upon its own supply of calcium in the bones and teeth to maintain the required amount of calcium in the blood. The above discussion of the importance of calcium is very general and much more may be said, but this will give an idea of the necessity of ingesting an excessive amount of calcium.

The general source of calcium is milk, but unless the cow receives the proper diet the milk may be deficient in lime, and although calcium is more available in the form of milk, we must not overlook the value of calcium in the water supply, even though less readily utilized. It is advisable to overshoot the mark in administration of calcium in order to insure an adequate amount.

Only brief mention will be made of other minerals which may be found in the water supplies. Magnesium, potassium, phosphorus, iron, and copper. Magnesium is metabolized largely with calcium, in its retention and excretion. Magnesium occurs in the tissues, blood, and bones—the blood and muscle contain more magnesium than calcium. The body requires approximately one-half gram—about one-eighth teaspoonful every twenty-four hours.

Potassium plays an important rôle in the human body. In case of potassium deficiency the vagus nerve (the nerve which has an effect on the heart control) is incapable of exerting its regulatory effect upon the heart. The amount of potassium excreted daily by the adult is approximately two grams.

Phosphorus is an extremely important element in the economy of the body. It occurs in the nucleoprotid foods (portions of the nerve tissue) for maintenance in the adult about a gram of phosphorus should be ingested each day.

Iron. The primary use of iron in the body is in the composition of hemoglobin of the blood, the red blood cells. Iron in some cases causes improvement in certain anemias. A very small quantity of iron is required by the body, and usually a sufficient supply is obtained in the average diet. The necessity and administration of iron is more generally known than that of the other minerals.

Copper. Traces of copper are found in the human body, and very recent experiments with copper tend to show that copper is one of the more essential requirements of human nutrition. It is reported that copper has a curative effect on anemic rats. Copper could only be utilized in very small quantities, since it has a toxic effect on the proteins of the body.

Approximately 65 per cent of the entire human body consists of water, and there is not a single chemical reaction taking place in the body which does not involve water. From two to five quarts of water are eliminated from the body daily and the quantity eliminated should be ingested, either in combination with other foods or drinking water. The claim that drinking of water with meals is harmful because such a procedure causes a dilution of the gastric juice, has no basis in fact. The drinking of water with meals by normal individuals has been found to be accompanied by a more economical utilization of the ingested proteins, fats, and carbohydrates. Various other desirable, and no undesirable features, have been demonstrated as accompanying or following such a dietary procedure. A very healthful habit can be formed by drinking a glass of water about an hour before any food is ingested each morning. The importance of water in nutrition may be shown very satisfactory on guinea pigs. Give one guinea pig a good diet excepting water; and give the second guinea pig no food, but permit free access to water. The guinea pig receiving no water will quickly become abnormal, and it will be necessary to give it water to preserve its life. The second guinea pig, which has access to water but receives no food to eat, will live longer than the guinea pig receiving an abundance of dry food. This little experiment impresses the important fact that man can live longer without food than water.

There are two sources of public water supply. Surface water and ground water. Large cities and many small cities secure their supplies from lakes, ponds, rivers, and often from smaller streams, the water being stored in reservoirs. Supplies of this sort are called surface water supplies, and the water is naturally softer, that is, it contains less mineral matter. Surface water supplies are generally ample in quantity but more easily subject to pollution. For this reason they should not, as a rule, be drawn from thickly inhabited districts or from rivers, lakes, or smaller streams into which sewage or other polluting matters may find their way; and the water should never be drawn from such sources unless they have first been purified in some manner. "There is no river long enough to purify itself from any sewage introduced into it even at its source, and there are rivers more than two hundred miles long." It is true that sewage or other filth in streams often disappear, but such self purification is partial, incomplete, and untrustworthy. As a rule modern cities do not take a chance on surface water being free from pollution, and filtration or other artificial treatment is resorted to. Some of these municipal purification works are elaborate and costly.

The other source of water is that of ground water. This is undoubtedly the ideal source of water, and many cities obtain their water supply in this manner. This is also spoken of as arterial water. Wells are driven through the soil, sand, and rocks of the earth's crust until the underground water is reached; water thus obtained has been filtered

through the sand and rocks, through which it gradually seeps. The water in this slow process dissolves calcium and other minerals which makes the water ideal for human consumption. While the mineral content, obtained in this way by the underground water, is very important as ideal drinking water, this water is pure, cool, and sparkling. The quantity of sand and rock that was necessary for the water to go through before it reached the underground flow served the same purpose as a Berkefeld filter. This is a filter used in bacteriological laboratories for the purpose of filtering out bacteria. The filter is made from diatomaceous earth so fine that the bacteria do not pass through the Berkefeld filter. Water thus obtained, free from pollution; protected from the public contamination; containing mineral matter, is the ideal water for use from the standpoint of health. Safeguarding the outlet at the surface of the well is very important and this is readily accomplished by our modern use of steel and cement. Where it is available and possible arterial water offers the most desirable source of water for human consumption; containing the minerals discussed and free from pollution by organic or germ content.

THE GENTLE ART OF POISONING

WALTER J. MEEK, Ph.D.

(Continued from January issue.)

With the dawn of the Renaissance, poisoning became even more common and it was practiced by states as well as by individuals. During the fifteenth century no less than fourteen editions of Abano's famous *De Venenis* were published, the rarity of all of which speaks for their hard and continual use. No one believed in the natural death of princes, kings or cardinals. They were either poisoned or poniarded. A list of these murders sounds like an Almanac de Gotha. Everything was poisoned; food, wine, cups, tapers, clothing, even the lips of the king's mistress.

That political poisonings were considered quite legitimate is shown by the secret archives of the Venetian Council of Ten. The following are a few examples and after certain of them was placed the significant word *factum*.

May 24, 1419. The Council agrees to a proposition of Michaletus Mundacio to poison Sigismund, King of Hungary, for a specific reward, poison to be furnished for that purpose.

September 23, 1419. Archbishop of Trebizond offers to procure death of Marselius of Canova. Offer accepted and fifty ducats paid and a horse ordered.

December 2, 1450. Received a poison consisting of balls which when thrown into the fire, kill by their odor. Poisoning of Count Sforza considered. Poison to be tested on a criminal condemned to death.

January 14, 1478. Accepts offer of one, Lazarus, to poison wells from which Turkish Army takes its water.

May 12, 1568. Destruction of a wounded prisoner ordered by application of poison to his wounds.

December 16, 1755. The Council finds that the poisons are in great disorder and orders the inquisitors to put them in safe and serviceable condition.

Three recipes for poison preserved as *secreta secretissima* are found in the archives under dates of 1540-44. One of these shows that the chief substances used were corrosive sublimate, white arsenic, arsenic trisulfide and arsenic trichlorid.

Among the most notable and notorious of poisoners in Italy during the Middle Ages were the Borgias, Pope Alexander VI, and his son Cesare. They are said to have had a poison which would kill at any desired time, in a day or a year. A writer in describing them says:

Infamous poisons which render the wine better. You think yourself drunk and you are dead. Someone falls suddenly with languor, his skin wrinkles, his eyes become hollow, his teeth break like glass on bread, his cheeks pale, he walks no more, he drags himself, he does not breathe, he rales, he neither laughs nor sleeps. He shivers even in the sun. Though young, he has the air of an old man. He agonizes for a time. Finally he dies. He dies and then one remembers that a month, six months, or a year ago he had a glass of wine with a Borgia.

The "Gift of the Borgia" was a mixture of arsenic and ptomains called "cantarella" and it was believed to have been made as follows: A hog was killed with arsenic. Its abdomen was opened and sprinkled with more of the same drug. The animal was then allowed to putrefy. The liquor which trickled from the decaying carcass was collected and evaporated to a powder. It is needless to say it was extremely poisonous.

One of the best known poisonings carried out by Alexander VI was that of Zizin, son of Mahomet II. The Sultan paid the pope 300,000 ducats for the work of art. The Borgias specialized, however, on bishops and cardinals. The pope would appoint a cardinal and allow him to increase his wealth by perquisites from the church. Then he would be invited to a meal. He would soon die and his property reverted to the Holy See. Finally the game was played once too often. In 1503 on a certain occasion at which some cardinals were to receive the usual refreshment, the pope and Cesare returned home before the banquet and called for some wine. The servant gave them by mistake from the poisoned vessel. The pope died but his son escaped by means of a most remarkable antidote. Many old writings mention that if one can enter the body of an animal, he will escape the effects of poison. Remembering this, Cesare had a mule killed and having cleaned out the

abdomen he covered himself with the carcass. His recovery is ample proof of the efficacy of the method.

One of the most famous of all Italian poisons was the Aqua Tofana. A great mass of writing exists about this solution and its venders. The most bizarre stories regarding the origin of the Aqua were current. By many it was supposed to be the condensed sweat and foam from tortured men. A few drops would kill at a future appointed time. The victim would lie down, rosy and fresh in sleep and never awaken. With the exception that it would kill, all this was fable. The facts, as near as they can now be ascertained, were these.

In 1633 during the rule of Vice-King Ferdinand in Sicily, a woman Teofania was executed because she sold a death-giving water in Palermo and vicinity. In 1640 there appeared in Rome a Giulia Tofana who came from Palermo. Whether or not this woman was a daughter of the first is not clear, but she was at least her spiritual heir. She gathered about her a number of accomplices and appears to have escaped the gallows, dying a natural death in 1651. She is credited with over 600 successful poisonings. Her companion Guolema Spara and four other female helpers were hanged in 1659, and their accomplices whipped through the streets. The pope had the records of the case preserved in the Vatican to preserve secrecy. Spara disposed of her poison in small vials labeled "Manna of St. Nicholas of Bari." In 1730. there was a third Tofana in Naples but of her little is known.

The composition of the Aqua Tofana has aroused much speculation. Some thought it was cantharides and opium, but that is inconsistent with the statement that it was clear, limpid and tasteless. The best evidence is that it was a solution of arsenic trioxid. The legal papers of 1659 state that the poison was arsenic and it has been discovered that in 1633 immediately after the execution of the first Tofana, a law was promulgated at Palermo governing the sale of this drug.

Poisoning as an art and a profession came to France with Catherine de Medici, the Italian bride of Henry II. With her also came the dread Florentines, Rene Bianco and Cosme Ruggieri. Rene opened a perfumer's shop in the pont St. Michael. Ruggieri was an astrologer and became the oracle of the court. Both of them were adepts at preparing poisons. Catharine came from a court and family that had frequently used poison for political and private reasons. Cosmos I, patron of arts and letters as he was, had a chemical laboratory in his palace. The poisons there prepared he tested on animals and repeatedly used on people. Catharine is usually credited with having disposed of Jeanne d' Albret, Queen of Navarre, the Cardinal of Lorraine, Coffe, a marshal of France, and Duc d' Anjou. The court of France was the image of that of the Borgia, and death was the friend of the Queen.

The number of those devoting themselves to the black arts in France during the seventeenth centuries is almost unbelievable. In 1572 there

were 30,000 sorcerers in Paris, most of whom dealt quite openly in poisons, love philters and abortifacients. The works of Porta and Cardan popularized the knowledge of poisons, both mineral and vegetable. There were secrets for poisoning gloves and clothing. Books were soaked in deadly drugs and became fatal to the reader. Knives were so skilfully drugged that on cutting a peach one side only was poisoned, the other being eaten by the murderer to allay all suspicion. The vapors of candles brought speedy death. Cups were prepared which added poison to any liquid they might contain. Love philters and vials of death were in every vanity box. Pins were there, a scratch from which sent one into eternity. There were mirrors even which reflected death. Rings were made with secret receptacles, and one is preserved that on the palm side has attached a small syringe, by means of which a poison could be injected into food or drinks. Poisoning was the fashion. Thousands stood ready for a price to commit a quiet murder. Death stalked in a thousand unknown forms. Most of the methods mentioned existed only in people's imagination. Modern science, with its knowledge of toxalbumins and war gases might possibly be able to duplicate some of the fancies of the sixteenth and seventeenth centuries, but a majority of the stories can hardly be taken at face value. It must be remembered, however, that the people of that day were extremely superstitious, and the cases of undoubted poisoning were quite frequent enough to take away all sense of security. When Henry IV came into Paris from Navarre, he ate only eggs which he himself fried, and drank only water which he drew from the Seine with his own hands.

Many of the dietetic habits of the time were quite favorable to the poisoner. Bread was baked in round cakes which served as trenchers. On these were placed the meat and vegetables and the trenchers themselves were then eaten for dessert. There were many forms of wines and ales, but all were heavily spiced and turbid. The clear products of the present time were unknown. Service was in metal cups, glass being practically unknown. Rabelais speaks of seventy different recipes for soups, all charged with pimento or pepper. But a still greater safeguard for the poisoner was the absence of any qualitative or quantitative methods for the detection of poisons. Unless the murderer was seen to add something to the food, nothing could be proved. Every sudden death aroused suspicion. Science, or rather alchemy, from which chemical science sprung, had developed poisons but had learned to control none. So serious was the situation that men of affairs urged Ambrose Paré to devote his energies to searching for antidotes. He wrote a book on *Les Venins*, a chapter of which he devoted to counter poisons, but although he railed at physicians who bled the patients white, he had nothing better to offer than theriac in Malvoisii wine. It was at this time that the bezoars, those concretions from the alimentary canal

or herbivora were greatly in vogue. Paré demonstrated their uselessness in a tragic event not of his own planning. At Clermont, Charles IX received a bezoar solution from Spain, and was much impressed with the extravagant claims made by the bearer. Paré denied the efficacy of the solution vehemently. To settle the quarrel the King proposed that a criminal condemned to death be brought and given both poison and the antidote. The poor wretch was to be pardoned in case of his recovery. It was done as ordered, but a horrible scene resulted. The man rolled and writhed in agony for seven hours and then expired. The rest of the antidote was thrown in the fire.

By 1679 poisonings were so common in France that a special judicial commission the "Chambre Ardente" was appointed to take care of the cases. In the three years of its existence it investigated 442 cases of which the charge was sustained in 218. Gradually people began to look on poisoning even as one of the ordinary hazards of life. Losers in the game, provided they recovered, made no outcry. The proper thing was to be a good sport. It was comparable to dueling. When Madame de Dreux, who was in love with Richelieu tried to poison her husband and her lover's wife, the indiscretion was found to be "divinely diverting." The criminal was too pretty to be hung so she was let off by the judges with a friendly warning. Madame de Bouillon determined to poison her husband so that she might marry the Duke de Vendome. The whole court knew of the attempt, but nothing could persuade the husband to outrage the proprieties. On being called to court he took his wife's right hand, the Duke de Vendome took her left. Thus supported she faced her judges. When the president of the court asked her if she had seen the devil at the sorcerer's house she replied, "O, no, but I see him now. He is old, ugly, and disguised as a councilor of state." Paris went wild at the witty remarks.

One of the most famous cases of poisoning in the seventeenth century was that of the Marquise de Brinvilliers. The story is a sordid one and the nauseating details may be passed lightly. The Marquise was a girl beautiful of person but mentally most likely a high grade moron. She married a Gobelin, a son of the famous tapestry maker, but formed an attachment to a certain Captain Sainte-Croix. Her father being a gentleman of the old school and disapproving of loose morals had the lover put in the Bastille. Here Sainte-Croix is said to have learned the art of poisoning from the famous Exili. He had, too, in the past been a student of Glaser, a famous chemist, the discoverer of potassium sulphate, long called Glaser's salt. At any rate when Sainte-Croix was finally freed he had many recipes for poisoning at his disposal and these he transmitted to his mistress. She tested them in a manner at least unique. In the name of charity and religion, she secured access to the hospitals. It was finally noted that those she visited and gave sweet meats to, often grew worse and many died. It was not until

later, however, that her diabolical actions were understood. To gain possession of the family property, a necessity for the continuance of her dissolute life, she poisoned her father, two brothers and a sister. Sainte-Croix, her lover, perished in his laboratory from some poisonous fumes that penetrated his mask. On looking through his papers, evidence was found that proved the guilt of his mistress. She was arrested, convicted, and condemned to be beheaded, her body burned and the ashes thrown to the wind.

Among other well known cases of the time was that of La Voisin, an arch poisoner, abortionist, and sorceress. She ran a great establishment with an income of some hundred thousand francs a year. She confessed to having murdered some 2,500 infants, many of whom were sacrificed during various occult rites. She performed the "black mass" repeatedly. At last she was arrested and condemned. When in 1680 the investigation of her crimes began to involve the court, particularly the King's mistress, Madame Montespan, Louis XIV summarily abolished the *Chambre Ardente*. The horrible details, however, actually aroused public opinion and La Voisin was the last of the "poisoners for hire," at least the last who attained any eminence. This desirable result was also due in large part to the edict of 1682, which closely regulated the sale of poison and placed the ban on "poisoners, diviners, and others." The law was broad and vague enough that the underworld at last took fear and their nefarious business began to wane. With the eighteenth century poisoning became sporadic much as one finds it today.

Two other cases of the sixteenth and seventeenth centuries which have been discussed a great deal in history may be mentioned briefly, namely the deaths of Charles IX of France and the Duchess of Orleans, Henrietta of England. Charles was the third son of Henry II and Catharine de Medici. He died under suspicious circumstances after having reigned thirteen years during which he blackened his reputation forever by the massacre of St. Bartholomew. His illness was long. There was a great abdominal pain, much vomiting, and spitting of blood. Toward the end his body sweat blood and drops of it fell from his fingers. It is small wonder that such symptoms should provoke all kinds of surmises. Some believed he was being punished by God for the massacre. Others saw it as a case of slow poisoning and this idea grew so prevalent in the court that two of the King's gentlemen, Le Mole and Cocionas, were executed. This incident is made much of by Dumas in one of his novels. Fortunately an autopsy of the king was made, for the most part by Ambrose Paré. The protocol of this postmortem has been carefully studied in recent years. It seems clear that the king died of pulmonary tuberculosis. The cutaneous bleeding which so startled the courtiers was doubtless a complicating *purpura hemorrhagica* by no means unknown in such conditions.

Henrietta of England, sister of Charles I of England, and wife of the Duke of Orleans, is also popularly supposed to have been poisoned. She died suddenly after great gastric pain and vomiting of blood. The letters of Guy Patin, dean of the Medical Faculty of Paris, throw much light on this case. The Duchess had long been treated for stomach trouble. Littré has in recent years gone into the details carefully and has shown conclusively that "Madame" really died of a perforating gastric ulcer.

It is hard to tell the exact poison used in any given case during the sixteenth and seventeenth centuries. The symptoms were always confusing and with the absence of analytical methods, everything was in confusion. There could be no toxicology without chemistry, yet Zacchias, Cardon, Porta, Abano and Paré had treatises on poisons. Paré's views, which reflect the knowledge of the time, were somewhat as follows:

Poison is a substance which has power to combat and conquer the human body. Food connects itself into blood and nourishes the parts of the body; poison, on the contrary, adds itself to the excretions and so dissolves and consumes the whole body. Furthermore, it transmits the body and particularly the members that it touches into rank poisons.

Paré divided poison into two classes: 1. Those that operate by virtue of their elementary qualities. 2. Those that have specific, occult, qualities. These latter have their power from heaven, such as the torpedo first, which paralyzes the arms, the sea-hare that consumes the lungs, and cantharides which attack the liver.

The first class was divided into four sub-classes: 1. The hot, such as arsenic which provokes intestinal inflammation. 2. The cold, such as opium which brings on coma. 3. The dry, such as lead and antimony. These are almost all cold too. 4. The wet, such as snake venom, anthrax and plague.

Although, as has been said, the poison used in a given case was always doubtful during the Middle Ages, we do know the drugs in most general use. Arsenic was the king of poisons. Its use dates back to antiquity. Towards the end of the Renaissance it was well known and available to all classes of society. It was the base of nearly all the Italian concoctions. The common form was white arsenic As_2O_3 , commonly called sublimed arsenic. The sulphids, realgar and orpiment, were known as well, but their color and insolubility made them harder to disguise. Letharge, lead acetate, and lead carbonate were occasionally employed. Copper acetate has been reported occasionally. Among the vegetable poisons aconite seems to have been the most commonly used. Opium, Belladonna, mandrake, hyoscyamin, and hemlock were known and used at times. Among the animal poisons the only one of any importance

was cantharides. Most of the poisonings by this agent were accidental and occurred in its use as an aphrodisiac.

During the eighteenth century, poisoning lost most of its glamour and romance and became more and more recognized as cowardly murder. With the discovery of a chemical test for arsenic by Marsh in 1846, the old days of the art of poisoning were dead, never to be revived.

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—Beta Theta Pi Quarterly

PRESCRIPTIONS—THE BACKBONE OF THE DRUG STORE

BY HAL E. DUNCAN, *Kappa*

It has been truly said that the business, be it large or small, the profession, or any enterprise that does not keep abreast of the times and does not attempt to be modern in methods and does not attempt to see into the future is doomed to the junk pile.

The above rule possibly is more applicable to the drug business than any other.

Up and down the land we hear talk of new ideas, giant mergers, radical changes in the manner of conduct of the drug business. We hear a lot of talk about chain stores, department stores, this store, that store, etc. Where are we headed for and what will the next few years bring forth?

The truth of the whole thing is that for years we have been resting on our oars and just drifting while our real competitors (people outside the drug field) have gradually made inroads on us until at last we are beginning to see that vast changes are taking place and there is about to be an awakening.

We hear on every hand talk about chain drug stores and independent drug stores. Who are these two groups? Is it not a fact that chain drug stores are in a large measure owned by the public? Their stock is on the market and can be bought by any who will invest in it. But even if they are owned in a great measure by the people they are, as a rule, modernly, efficiently, and economically managed.

And is not the so-called independent druggist just one who is not a chain druggist? And what is he independent of? Would it not be better to class the unallied druggist as a "dependent one" because he is wholly dependent on his individual ability and judgment to operate his business and on his own group of confident friends and customers as an outlet for his services and merchandise?

Walk with me if you will into one hundred privately owned drug stores and let's see what we will see. In the first place seventy-five of them will have no attractive sales impelling displays either on counters or in show cases. The windows will be dressed with some merchandise



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ad put in in five minutes by someone who had no interest whatever in the store. The floor will not have been mopped more than once that day if at all. The mirrors and glasses in the store will show, too well, that flies have been on hand sometime that season.

We will then enter the sanctorum usually known as the prescription department, and because that is hidden from the eye of most customers it is just a dumping place for all the odds and ends that cannot be easily disposed of anywhere else. The pill tile is still smeared with the last ointment prescription and the whole counter is littered with bottles and packages with not a place to lay one egg. Blow the dust off a bottle of calomel tablets and pour some of them out to see that many have become dark from age and oxidation and are dangerous to dispense. And oh! That typical drug store sink and toilet. Such specimens can only be found in drug stores.

In a dark corner in the back end of the store we may find the owner poring over a set of books and he smiles as he greets you, never dreaming that he should have been at the front door to greet you and had a \$15 a week girl posting up the \$20 worth of charge sales for yesterday and which he won't collect for maybe a month or a year or never. Peep, if you will, down the aisle to the soda fountain and see the young man smoking a cigarette and having a hilarious time talking to several cute young things who are sipping an ice cream soda which cost twenty cents to build and on which only ten cents was collected.

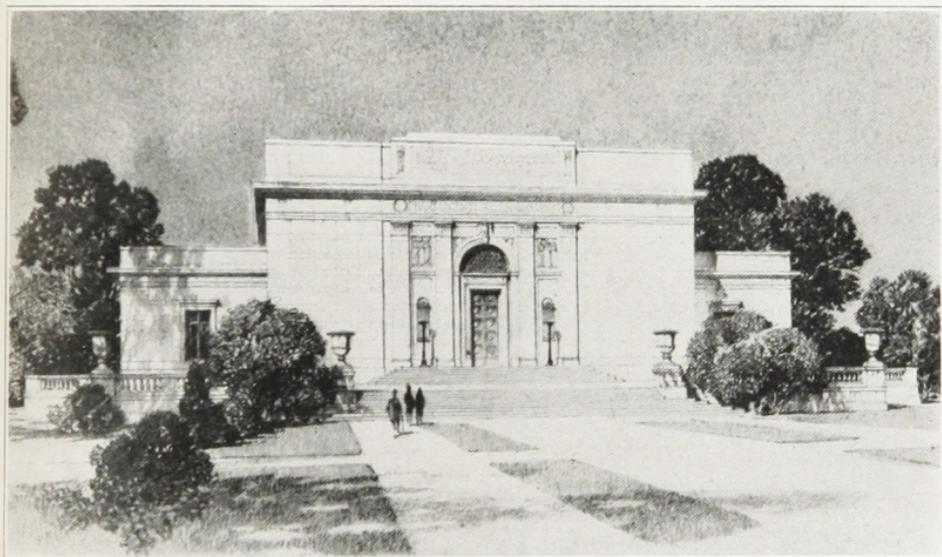
My friends, do not think I have become cynical and that I am exaggerating. I have made the very tour described above. I have had the privilege of intimate contact with drug stores. It is time to wake up. Better let the clerks run the store a few days while you get out and visit one hundred other men's drug stores and see for yourself.

The other day at a meeting of our store managers one of our officials addressed them. "Fellows we have some managers who do not stay at their stores enough and are always running to headquarters or the wholesale house or out when they should be in." The remark was made for the benefit of one man, and after the meeting he came up and said: "Some of these fellows must be staying off the job a lot." We druggists are too prone to think when we are criticised that the critic refers to the other fellow.

The fact that you are a pharmacist was the reason you went into the drug business. The fact that you are qualified to compound prescriptions and chemicals is the primary object for the display of your sign "John Doe—Drugs." Then why should not your prescription department be the backbone of your business, systematically and professionally conducted with fresh, potent drugs in stock carried in a spotless case where you are proud to call any doctor or customer to show how well you are enabled to serve the demands which might be made on the store?

But all of our customers are not sick all the time and our business cannot be operated on the work of our prescription cases with profit. We necessarily have to sell many items and lines in the front, and if the chain store plan makes money for the stockholders why should you not imitate their varieties and displays and plans? If a manufacturer or jobber allows you an extra discount on his goods to enable you to pay your clerks commissions on the sale of those goods, then don't keep that PM from the clerk, but stir his enthusiasm by passing it on and no doubt the clerk by that encouragement will develop into a real salesman which will mean more profits for the store.

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ARCHITECT'S SKETCH OF PHARMACY HEADQUARTERS BUILDING
The American Institute of Pharmacy



THE INVASION OF THE PROFESSIONAL FIELD BY LAY CORPORATIONS

Lest the pharmacists think that they alone are afflicted with the problem of having their sphere of activities invaded by unqualified individuals and by lay corporations whose primary aim is the financial exploitation of the public, we wish to call to their attention that such is not the case.

The American Dental Association and many of the state dental associations have for many years waged a fight against the unqualified practice of dentistry. These activities and experiences of the dental profession should be of considerable value to pharmacy and should aid in avoiding some costly mistakes.

That the medical profession is also confronted with this problem on an extensive scale is evident by the actions of the American Medical Association which has appointed a committee to investigate and study this problem and to report to the association at its 1930 meeting. The committee is also to make recommendations for the guidance of the medical profession in future dealing with this problem.

Pharmacists have been facing this problem for many years. The frenzied finance phase of the last few years is only an enlargement of the problem. The New York State pharmacists have succeeded in winning the classification with the other recognized professions. Pennsylvania tried to go beyond this and succeeded in getting a rather drastic legislative measure passed along this line. Through the aid of members of the legal profession this law was declared unconstitutional.

In the July, 1929, issue of *THE MASK* we published under the appropriate heading of "Medicine is not Merchandise" the statement of facts as presented by the New Jersey State Pharmaceutical Association. This should be carefully read by every pharmacist.

The activities of the associations of the boards of pharmacy and of pharmaceutical faculties and of the American Pharmaceutical Association in maintaining and in advancing pharmaceutical qualifications

should be well known to every one worthy of being classified as a pharmacist.

A few years ago quite a lot of noise emanated from the ranks of the American Bar Association over the invasion of the field of legal practice by lay corporations and by trust companies. This commercialization of the practice of law without shouldering the ethical responsibilities was deemed against the best public interest.

Many editors of publications in the fields of pharmacy, medicine and dentistry took quite a keen delight in noting the dilemma in which the American Bar Association found itself. The spaceous arguments used by some lawyers in aiding in the defeat of protective measures taken by these professions were quoted to mock the members of the Bar Association. These arguments did not sound so good when applied to the problems of the legal profession. It makes a difference whose ox is being gored.

It is very evident that medicine, dentistry, pharmacy, and the legal profession are all confronted with the same problem. Common sense and sound principles of policy would indicate that provisions should immediately be made for the legislative committees of the American Medical Association, the American Dental Association, the American Pharmaceutical Association and the American Bar Association to establish contact so as to bring about cooperated and if need be concerted action in dealing with this problem. All will profit by such action.

It is particularly fitting to bring this to the attention of the Kappa Psi men. Besides being pharmacists many of our men are now found in the fields of medicine, dentistry, and chemistry and a few are members of the legal profession. In union there is strength is an old saying. Likewise in this case what is an injury to one will prove an injury to all. Can and will these associations co-operate to maintain their status?—H. J. G.

* * * *

During the past years THE MASK published articles by members in which attention was called to advantages which will follow the proper development of hospital pharmacy service. One of these advantages is that pharmacy internships will be possible just as we now have medical internes. The advisability in some way certifying pharmacies in a manner similar to that in which the American Medical Association certifies hospitals for interne training has also been advocated. It is therefore interesting to note that at least one state association during the past summer went on record as advocating something of this sort.

The committee on pharmacy education and standards of the New Jersey State Pharmaceutical Association presented a report on the point conference of members of the faculty of the New Jersey college of

pharmacy, the board of pharmacy and the members of the committee on education. The association unanimously indorsed the recommendations that one year of "practical experience" in pharmaceutical work following graduation from a course in pharmacy of three or four years duration is far superior to the present-four year experience requirement which may include service under a registered pharmacist before or during a course at college, which would place the experience requirement on a par with the internship required of medical practitioners, and that the assistant pharmacist classification should be abolished provided of course that those that are rated as assistant pharmacists may continue to act in that capacity.

It was unanimously agreed that some kind of classification of drug stores based on the amount of pharmaceutical work carried on would be very desirable.

* * * *

A drug store trade paper reports that a certain firm contemplates the establishment of one hundred drugless drug stores in conjunction with their candy and soda fountain establishments. If the plans advocated by the New Jersey State Pharmaceutical Association materialize what will be the status of employees in such establishments? What is a drugless drug store anyway?

Drugless Drug Stores

* * * *

What constitutes professional pharmacy practice? Is it just the compounding of prescriptions and the making of pharmaceuticals? What should be an essential part of a professional pharmacy? The writer thinks many are making a mistake in not giving close study to furnishing essential sick room supplies as well as medicaments. This branch will however develop in a more satisfactory manner when we have properly organized hospital pharmacy. The nursing profession will then no doubt take us to task for the unsatisfactory state of such supply service in the average drug store. Can and should an analytical chemical commercial service be combined with a pharmacy service? Is it advisable to train pharmacists to furnish clinical laboratory service in conjunction with pharmacy? Let THE MASK have your opinion on these things.

Professional Pharmacy

* * * *

What is the future of pharmacy? Are we at the parting of the ways? Many things have occurred during the past few years which we would like to have our members express their opinions on in the pages of THE MASK. Our national professional association, the A.Ph.A. has progressed in a very pleasing manner during the past few years. The association put over the pharmacy headquarters building project beyond the fondest

Signs of the Times

hopes of those who started the idea. The association has awakened to the importance to pharmacy of the hospital service and has taken the necessary steps to develop this branch. The association and all others in the pharmacy field have finally determined to remove the blot of unqualified pharmacy service in our army. Our colleges are going on a four-year basis. Certified pharmacies and hospital internships are being advocated. THE MASK has presented papers by members showing what has been done to maintain a professional pharmacy standard with and without extensive merchandising activities. One recently published also showed the penalty of not stressing professional service as well as other branches of service. There is a determined movement to abolish the assistant pharmacist and druggist classes. Several states have already done away with these classifications. We have the drugless drug store and the patent medicine shop. We have also the straight professional prescription pharmacy. We have our pharmaceutical research conference. Many of our leading medical educators are reintroducing the proper teaching of therapeutics. The hobby of ultimate principles and drug nihilism have about run their course with the advance of experimental pharmacology. To mention all the advances made in educational and in board of pharmacy organization would take up much space. The live and ambitious pharmacist will find much to interest him and to hearten him in labors for pharmacy.

* * * *

The American Medical Association has undertaken a survey of the various factors entering into the cost of medical service to ascertain wherein the cost to the public can be reduced. With the advancement in educational standards and the improvements in the technic of diagnostic methods, of hospitalization, nursing and of pharmalcal service it is very evident that the cost of quality service is getting beyond the reach of more than half of the self respecting families of the U.S.A.

**Medical
Economics**

* * * *

The nursing profession is likewise giving attention to this problem, to find out wherein the nursing service can be improved to insure adequate income for the members of the nursing profession and at the same time to reduce the cost of such service to the average family. Elsewhere we give an abstract of an article by the national director of Public Health Nursing Service of the American National Red Cross Society. This gives and idea of the nursing service problems and also some suggested methods to aid in remedying the situation.

**Nursing
Economics**

* * * *

The writer has for the past years looked for evidence of interest in this subject on the part of the members of our various state and national pharmaceutical associations and in the so-called independent drug and pharmaceutical journals. He has looked in vain. We have had educational and state board of pharmacy matters well aired. There is no dirth of discussion on the narcotic and on the prohibition questions, and on the price cutting evils, on the chain stores and on the practice of pharmacy by unqualified persons.

**Pharmacial
Economics**

The American Pharmaceutical Association has during the past few years awakened to the deplorable state of pharmaceutical service in the hospital field and in the U. S. Army service.

But pharmacial economics as they affect the lay public seems to have been unthought of. Are we going to wait until outside interests show us our faults? Are we going to give others the opportunity to detract from their own faults and shortcomings by slinging verbal mud at the pharmaceutical profession? Perhaps pharmacists think that there is nothing along this line calling for consideration. In past issues of THE MASK we called attention to several things wherein pharmaceutical service can and must be improved if we would continue worthy of the public confidence. We also called attention to means employed by other professions to grapple with similar problems and suggested some methods to consider to cope with some of these problems in a constructive manner.

It was a very heartening experience to read the presidential address of David S. Jones at the last A.Ph.A. meeting. He brought some phases of this subject to the attention of pharmacy in the following manner.

Just as long as propaganda is disseminated from manufacturing institutions of any type whatever, that are not satisfied unless each successive year shows an increase in their sales volume, we cannot look forward to anything but a final overthrow of Pharmacy's superstructure, with perhaps damage to its very foundations. I make a plea to you to give the most careful study to this condition.

Parallel with this is the ever increasing influence of those who do not seem to have the business sense to realize that in this great country of ours we are smothered, sufficated, drowned under avalanches of goods and commodities that the industrial masses cannot purchase with their present income. The buying public is morgaging its future in buying on the deferred payment plan. I quote from a writer in a current magazine as follows:

"What is the purpose of industry? To supply human wants? To aid men in the struggle for life, liberty, and happiness? To relieve men from the fear of want? To feed, clothe and shelter their children? To give them time, leisure and peace to enjoy the only worthwhile things of life—serenity, love, beauty and freedom? Banish the thought! The purpose of industry is industry. It is to make money to buy machines, dig mines, erect new plants, so as to make more money to

buy, dig and erect until we dig a grave for ourselves in a bedlam of speed, noise, smoke and dust. Quoting G. Bernard Shaw: 'Science as we find it today, becomes a propaganda of quack cures, manufactured by companies in which the rich hold shares, for the diseases of the poor, who need only better food and sanitary houses, and of the rich, who need only useful occupation to keep them both in good health.'

May I set forth the danger existent in the marketing of the multitude of products of the research laboratories under copyright and trade-mark protection detailed to physicians by highly trained men as specific remedial agents, the nature of whose complex formula is presented perhaps by numerals or letters only and thus prescribed? No physician with the multitude of articles presented can in any manner develop a memory that will retain an intelligent understanding of all. Even if he is able to do this to some extent, he will sometimes diagnose the case of a person suffering from an ailment which would indicate say, the use of S.X.2493 and carelessly say to the patient, "Go to the drug store and get a package of S.X.2493." The patient steps into the store and remembering only part, says, I want something recommended by my physician that sounds like X93." The druggist produces the article. When again in need, the physician is overlooked and the patient goes direct to the drug store and makes his purchase. Then he tells his neighbors. Soon half of the community is calling for S.X.2493 for their real or imaginative ailments. Before long some of them have formed a habit—there are habit forming drugs coming out of these laboratories even though they are not classified as such—and before long will show no little damage is being done by the willful maladministration of a product that was first carelessly ordered for a specific and deserving condition. The producer has an increased demand; he is a clever advertiser, increasing further the call for his product and again we have an example of the research chemist and the manufacturing pharmaceutical house replacing today to a large extent the old patent medicine man with all his fakes and cure-alls. What a state of affairs!

The continuation of many of the evils of pharmaceutical service are due to an apathetic attitude on the part of pharmacists. Their correction are within the power of organized pharmacy. Pharmacists will be justly blamable if they do not take appropriate steps to improve the conditions. By so doing they will themselves cease to be dupes and a party to unfair and questionable exploitation of the public.

With chain stores forming only about 7 per cent of the retail pharmacies of the country and these being mostly situated in populous centers where the public has a certain latitude of choice—the exploitation of pharmacy by stock jobbing and by banking interests is not such a menacing matter.

Heretofore most of our successful manufacturing units have been owned as well as managed by people more or less conversant with medicine, pharmacy, or pharmaceutical chemistry. Many of them arose from the ranks and followed in the footsteps of their elders. Ofttimes they studied for their positions far beyond the ken of their elders.

With the super financing entering into the field of production it behooves pharmacists to strengthen their professional and business or-

ganizations. Glorified office boys parading as super-executives in an automotive industry or other commodity business is not such a serious matter. The results from forcing the technical staff to produce a shoddy product to enable the management to show a handsome dividend balance while unloading stock on the ignorant investor usually corrects itself without undue loss of life.

Such glorified office boy executive methods if practiced in the field of large scale pharmaceutical manufacturing is a more subtle and more dangerous form of exploitation. The invalidism, misery and death resulting from each practice is not so readily traceable to its source.

One of the problems calling for action is the high pressure selling methods of some domestic and many foreign interests in foisting products on the public at a cost out of all proportion to cost or actual use value. These products are played up to the physician with a lot of pseudo scientific bunk and claptrap. Most of the time he has no idea of the actual value or cost to the patient of his latest hobby. The avidity with which a large number of physicians fall for these things is certainly not a credit to their intelligence nor to their ability as therapeutists nor to their powers of clinical observation. Some of these high priced supposedly improved products are often inferior to standard products available. They are marketed solely as a business scheme to enhance cost and at times to market an inferior product in a manner to escape direct comparison with U.S.P. and N.F. standards by creating standards of their own which are presented to the thoughtless physician as actually superior to those of these two standards of the medical and pharmaceutical professions.—*H. J. G.*

* * * *

Courts have held that pharmacy shall be practiced only by those qualified for that responsibility and this applies to pharmacists in civilian life as well as in the divisions of government service.

—*Jour. A.Ph.A.*, September, 1929

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KAPPA PSI LEADERS

CHARLES EDWIN FRANCIS MOLLETT, *Gamma-Eta*

The chairman of the Plant Science Seminar (1929) is the dean of Montana State School of Pharmacy. This year he rounded out the first fifty years of an active life; the years of his youth were spent on a large Kansas farm in the Neosho River Valley in Kansas. C. E. F. Mollett, after receiving his earlier education in the schools of southeastern Kansas, attended several sessions at Kansas State Normal School and then entered the pharmacy department of the state university. He passed the examinations of the State Board and then engaged with W. D. Webb, pharmacist, of St. Joseph, Missouri, and later with C. D. Smith Drug Company. In 1907 he located in Montana and a year later was elected head of the department of pharmacy, located at Missoula since 1923.

The subject of this sketch became instructor in pharmacy in 1907; the following year he was advanced to assistant professor and to full professorship in 1910, and assumed the deanship in 1916. He has been a student of economic medicinal plants for many years and received the A.B. degree in botany from Montana university, his thesis being "Official Medicinal Plants of Montana." In 1926, on the completion of research studies of the botany, chemistry, and pharmacology of the *National Formulary*, he was awarded the master of pharmacy in science degree by the University of Kansas. At the recent meeting of the Plant Science Seminar he presented a paper on "The Medicinal Flora of Montana and Yellowstone Park."

Brother Mollett is also vice-president of the American Association of Colleges of Pharmacy, (1929).

The golden anniversary of his birth and the silver anniversary of his marriage are happy events, of the year 1929, in the life of this Montana pharmacist and botanist.

* * * *

SAM A. WILLIAMS, *Kappa*

The life of Sam A. Williams, is a story of a man who has given long hours, year after year, in the interest of his chosen profession of pharmacy. Both from the standpoint of his individual achievement and from his record as a hard worker for pharmacy in Alabama it is



DEAN CHARLES E. F. MOLLETT, Gamma-Eta
Vice-President of the American Association of Colleges of Pharmacy

quite evident that Mr. Williams' position of prominence in his profession is well deserved.

Born January 7, 1870, in the town of Brundidge, Alabama, Sam Williams early in life moved to Troy, Alabama, with his parents, and since that time has resided in that city. Until the age of thirteen he attended private schools and at that time was offered a position with Dr. A. St. C. Tennille, a pioneer in the drug business in that section of the state. He worked after school and on Saturdays. Soon after his work began his father's health failed and he began continuous work at a salary of ten dollars a month. He continued with Dr. Tennille for above five years with an increase in salary each year.

Out of this small salary he saved nearly enough money on which to go to school again. He attended the first high school ever established in Troy, notwithstanding the fact that he had been out of school for over four years. He entered classes with those who had been in school continuously and made the highest grade given in the school that year. He then again began work in the drug store and saved some money which, with the help of his father, gave

him to enter the Maryland College of Pharmacy in Baltimore, Maryland. His record in this college was good—for he ranked second on the honor roll for the junior year.

He returned to Troy and worked for one year for Dr. J. M. Collier and was able to save enough this year, together with some borrowed money, to go again to Baltimore, where he was graduated with second honors in the class of 1890. On his return to Troy he was put in charge of the business of Dr. J. M. Collier. In those days the drug store was open from five or six o'clock in the morning until ten o'clock at night. He remained with Dr. Collier for five years and during that time had only seven days' vacation.

In September, 1893, he began business in partnership with W. R. White under the firm name of White and Williams. A year later J. Weldon



S. A. WILLIAMS, Kappa
Member Alabama State Board of Pharmacy

Seals bought the interest of Judge White and the firm continued under the name of Williams, Seals, and Co. After a year his old friend Dr. Tennille bought the interest of J. W. Seals and the firm became Williams and Tennille. In the year 1899 Sam Williams bought the interest of Dr. Tennille and from that time up to the present the store has been doing business under the name of Sam A. Williams.

He has served the Alabama Pharmaceutical Association in various ways as vice-president and as president. He has been, at different times, a member and chairman of the legislative committee. In this capacity he has done his most valuable work for the association and for pharmacy in the state. He has been a member of the sub-committee which has been empowered to draw up a pharmacy law in keeping with the progress of the times and he has also been of aid in keeping down adverse legislation in the state. He has always had the loyal co-operation of the druggists of Alabama in promoting or in opposing legislation of vital interest to pharmacists, and, as he says, "without this help my effort would have been of no avail."



GAMMA

William Coghlan has moved from 2404 Baker Avenue to 2034 Baker Avenue, Utica, New York.

A. Richard Bliss, Jr., has been reappointed chairman of the "Committee on the Establishment of a Pharmacy Corps in the U. S. Army" of the American Association of Colleges of Pharmacy.

MU

John E. Donahue is located at 40 Quimby Street, Haverville, Massachusetts. Mr. Donahue moved from 18 Main Street.

XI

Paul E. Beck has moved from 1053 Oak Street to 933 East Whittar Street, Columbus, Ohio.

TAU

F. W. Koester is located at 5116 Almadin Street in Los Angeles. Mr. Koester recently moved from 304 Nineteenth Street, Hermosa Beach, California.

UPSILON

Ferdinand D. Stoll and Miss Clara F. Parker announced their marriage on Saturday, September 21, in Louisville, Kentucky. They will be at home at 2321 Glenmary Avenue, Louisville.

William H. Card has moved from Bardstown Road, Louisville, Kentucky to 1819 Deer Park Avenue.

CHI

J. F. Seward, who was formally situated on 1641 Grace Street, Chicago, has moved to 3637 N. Hermitage, Northcenter Station, Chicago.

MU OMICRON PI

Kenneth Owens, recently of 126 Pine Street, River Rouge, Detroit, Michigan, has moved to 85 Maple Street.

William Bertram is now located at 2029 Woodward Avenue, Detroit, Michigan. Mr. Bertram moved from 315 Farnsworth Avenue.

BETA GAMMA

Roy R. Barthold has moved from 377 Carbett Street to 59 Sixth Avenue, San Francisco, California.

Jack P. West, Jr., who was formally situated in Sacramento, California has recently moved to Westwood, California.

BETA ZETA

Russel Long, formally of Salem, Oregon is now located on 660 Madison Street, Corvallis, Oregon.

BETA KAPPA

Joseph Christain Heckman is now located at 4046 Mintwood Street, Pittsburgh, Pennsylvania. Mr. Heckman moved from 263 Fish Avenue, Arsenal Station, Pittsburgh.

Ira C. Miller has moved from Pittsburgh, Pennsylvania and is now situated at 523 Horner Street, Johnstown, Pennsylvania.

BETA NU

Ludwig Benz, Ph.G., B.Sc. (also Gamma-Epsilon) who was practicing at the Washington Park Community Hospital, Sixtieth Street and Vernon Avenue, Chicago, was drowned while on his vacation in Wisconsin on August 3. He was buried at Council Bluffs on August 7. THE MASK extends heartfelt sympathy to his bereaved family.

BETA XI

Aubrey Gallop is located at 505 North Road Street, Elizabeth City, North Carolina.

J. G. Beard is the new President of the American Association of Colleges of Pharmacy.

BETA OMICRON

Harry M. Burlage has offices at 110 Pharmacy Building in Corvallis, Oregon.

BETA SIGMA

Lester H. Oliver is located at 4624 Stevens Avenue, Minneapolis, Minnesota.

BETA PHI

James C. Stewart has moved from Carthage, Ohio, to Lockland, Ohio.

George R. Lewing is located at 9 West Street, Cincinnati, Ohio.

J. L. Wade recently moved from Lockland, Ohio, to 3812 Carlton Avenue, Cincinnati, Ohio.

GAMMA DELTA

Walter Beil, of Youngstown, Ohio, has moved from 418 Fifth Avenue to 29 Williamson Avenue.

Charles F. Thomas is now located at 2270 Lawrence Avenue, Toledo, Ohio.

C. C. Dutt is situated at 481 Morningview Avenue, Akron, Ohio. Mr. Dutt formerly located on 1665 Battery B.

W. F. Ryan of 1422 Bennett Street has moved to 44 Van Vorst Street, Utica, New York.

GAMMA ETA

J. P. O'Connor's new address is Box 303, Missoula, Montana.

GAMMA IOTA

Victor Wojciehowhi is now located at 310 Waldren Street, Buffalo, New York.

George A. Klier is located at the George A. Klier Pharmacy, 261 Ames Street, Rochester, New York.



NU

Connecticut College of Pharmacy

A. F. HOLCOMBE, *Historian*

After a wonderful summer's rest from studies, we are all back again to make this year the most successful one yet. It sure seemed good to come through the door of our college again this fall and be greeted by our brothers with a warm Kappa Psi handshake. By the greetings some of us got from our brothers, you would think we had not met each other for ten years. Boy! It seemed great!

This being the senior year for some of us, means that we must fill our curriculum so full of fraternity activities that we will never forget our last year in college.

We now have seventeen active members, so there is no reason on earth, why we can't make annals in Kappa Psi history. We hope that before long we will see our way clear to establish a permanent fraternity headquarters. It seems that if we had such a place, much interest could be stimulated in our graduate members and we could have a regular reunion about every week.

Our faculty has been strengthened greatly this year by the addition of Brother Maier as professor of pharmacy.

We are glad to welcome Brother Maier and only hope he will join us at every meeting of our chapter.

We have just heard from Brother Theodore Thorsberg, formerly professor of pharmacy here, but now connected with the Don Chemical Company of Midland, Michigan. He states that he will soon be transferred to the sales department of that company and hopes to drop down to New Haven during his travels. We hope he will be transferred soon, so that he may keep his promise. Let us hear from you more often, Brother Thorsberg.

At class elections held recently, Kappa Psi again holds first place in the election of Francis Collevecchio as president of the Senior class. He is also regent of our chapter. Frank is going to have a pretty busy year we think, but without a doubt a fellow like he is, can put across

any job successfully, no matter how big it is. More power to you, brother, we say!

Brother Milardo, once again carries away the honors by being a second time, elected treasurer of the Senior class. John has also picked a beautiful job for himself this year in that capacity, because, I imagine collections this year, will be many as well as adequate ones. We would advise that John strap a couple of horse pistols to his sides this year in case of inevitable reluctance. It might act as a good coaxer. Well anyway, John, best of luck to you.

Before I closed this letter, I couldn't help saying a few words about Brother Lofquist, instructor in chemistry. He has just announced his engagement, so it is only fitting that we extend congratulations to him through THE MASK. (We think a Kappa Psi wedding would be perfect!) Well anyway, Elmer is sure a prince of a fellow, in and out of school, always willing to help anybody who just can't seem to get the hang of things. I'm sure we can all recall, at some time or another, where he has proven himself to be the prince of good fellows that he is and always will be.

Well, lets get off to a flying start this year and show some real Kappa Psi spirit and we won't regret it.

BETA BETA

Western Reserve University

RUSSELL B. McARTOR, *Historian*

It has been the policy of Beta Beta to use great care in choosing new pledges. This year we tried to be very careful in selecting men that we think will live up to the standards of Kappa Psi. Early Monday morning (registration day) we set out with this idea in mind and it was not long until we had some new faces appearing at the house. We were much disappointed this year at the small enrollment in the Freshman class, but in spite of this we did fairly well. This year's number is less than last, but at that we have pledged ten new men. Besides these we have five pledges returning who were unable to receive the initiation last year, but who expect to enter our order this year.

On Monday evening (registration day) we held our annual get-together smoker at the house. This served well the purpose of bringing the fellows together again and to inspire co-operation for the ensuing year. We also made it our purpose to see that the pledges became acquainted with the alumni and faculty members.

On October 4, we held a house party in honor of the new pledges. The house was delightfully decorated in scarlet and grey, making a pleasing setting. We were glad to entertain as our guests, Dean Spease and our faculty members as well as a number of the alumni. The eve-

ning was devoted to dancing and cards after which refreshments were served.

Beta Beta has made a unanimous decision to enter the intramural sports at the university this year. We have already plenty of volunteers for indoor baseball, and we are looking forward to winning the interfraternity basketball championship this year. We were barely nosed out last season, but we are starting with all the more determination this season.

Beta Beta has a bright outlook for the coming year and we hope our fellow chapters all have a bright future.

We have always tried to keep tab on our alumni and keep them well informed of our procedures. Here are a few notes of interest:

Brothers Porter and Aldrich have stepped into the realms of matrimony. We wish them our best wishes for the future with hearty congratulations.

Brother O. T. Carner has recently accepted a position as purchasing agent for the university. He was formerly employed as assistant pharmacist at Lakeside Hospital.

Brother Porter has accepted the position as assistant pharmacist at Lakeside.

Brother Aldrich is working at the Marshall Drug Company store at Euclid and East One Hundred-Fifth Street.

Brother Blakeway is now employed at Spear's pharmacy on St. Clair. He intends taking the New York state board examination and entering a store in that state.

BETA LAMBDA

University of City of Toledo

CHESTER KALISKE, *Historian*

Thirty couples attended Beta Lambda's annual formal dinner dance given at the Toledo Yacht Club on the evening of April 26. Through Chairman Brother Willeman's efforts the affair was a great success.

After dinner responses were given by Brothers Overmier, King, Dr. Bowman, and Professor Reed.

From the dining hall we then marched to the ballroom which was beautifully decorated with scarlet and gray streamers and K Ψ cutouts. Music by Arid Schumaker's melody men was very good. Dancing was until 1 o'clock.

Beta Lambda held its annual May beach party at Lakeside, Michigan. Although the water was a bit chilly three members braved the waters for a ten minute ducking. Refreshments were served by Pledge Frank Bond.

Kappa Psi has another record. Of the nine men passing the recent June state board from Toledo, six were Kappa Psi men. Brothers Emerson, Gelow, Smith, Roberson, Seigle, and Creery passing.

XI

Ohio State University

H. E. SWAN, *Historian*

Another scholastic year is under way and we hope to make it a successful one.

We are pleased to be able to accommodate Brothers Cook and Barnes of Gamma Delta who are now working in the city.

We also wish to announce the pledging of William Macabee, Robert Bigler and William Osburn.

Xi chapter claims to have the best tenor in Ohio, in the person of John Tipton. He rendered a selection at a meeting of the social committee several weeks ago and received a tremendous applause.

A banquet was held at the Neil House, October 16, 1929, in honor of Dean Clair A. Dye of the Ohio State University College of Pharmacy in celebration of National Pharmacy week and the new Pharmacy Building now under construction here. F. O. Taylor of Detroit, Michigan, was the speaker of the evening.

We regret the loss of Carl Byers, a former pledge, who has been transferred to Otterbien.

Brother Norman went to California early this fall; he expected to be back in time for the winter quarter.

Brother Justice is an assistant instructor in the College of Pharmacy this year.

The active chapter is planning on the return of a large number of the alumni for the homecoming game with Illinois and the dance afterwards, we sincerely hope they all can be here.

As for last year's alumni R. W. Stine and D. W. Shoupp are with the Day Drug Company in Akron. P. M. Stark is working in Stonebaker's Pharmacy, 2156 Noble Road, Cleveland, Ohio. J. M. Russell is in Chillicothe, Ohio, A. C. Smith is at Purdue University and L. F. Jones is teaching at the Indianapolis College of Pharmacy.

OMEGA

Rutgers University College of Pharmacy

W. KENNETH O'BRIEN, *Historian*

Here we are back again and with the colors of Rutgers and the Kappa Psi still flying on high. The new Officers have assumed office and

intend to make this a record breaking year. We had our first regular meeting Friday, October 19, 1929. It was well attended.

It seems from the turnout that we had, of the graduate members, that they intend to stay in the undergraduate chapter and not go into the graduate chapter. This is what we need in order to make this a banner year.

Professor Cox, who by the way, is always present at our meetings and had considerable to do with the initiating of the present officers, spoke about the necessity of organization and co-operation of the chapter.

Brother Toms spoke to us regarding our duty to Kappa Psi and the manner in which we should undertake our responsibilities. Brother Boyle, Brother Jaques, and Brother Mitterman expressed their sentiments for the chapter and wished it a prosperous year.

Brother Jaques has secured a position with Merck and Company. We know that Brother Jaques will succeed and we wish him lots of luck.

We were fortunate in having as instructors Brother Toms in quantitative analysis and Brother Hayden and Doyle in pharmacy.

Refreshments were served after the meeting was over.

During the summer vacation the graduate members of Kappa Psi held a reunion at the home of Brother Pernot in Patterson, New Jersey.

Plans were made for a theater party and dance to be held sometime late in November. The Kappa Psi members of the class of '29 were present which included Brothers Toms, Pernot, Monday, Jaques, Holmes, Hayden, Doyle, Mitterman Lockwood and Hiler. All the fellows were glad to get together again as they hadn't met since graduation.

Brother Pernot spared no trouble to make the get-together a huge success. He composed a Kappa Psi song which is sung to the tune of the Rutgers College song. Also for each member present he wrote a rhyme which commemorated some event which happened during his stay at college.

Music was furnished by New York's best orchestra via the radio. The dinner was a special spaghetti dinner cooked by a chef who was imported for the occasion and was certainly a treat.

After a long discussion on our coming party, they called it a day and said good-by to Patterson, hoping to be back there again in the future.

Wishing success to all the other chapters we'll see them in THE MASK.

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dozen lots from:

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INFORMATION FOR CHAPTER OFFICERS

1. *Badges, Pledge Buttons, and Recognition Buttons* can be purchased only through the CENTRAL OFFICE of K Ψ, Crosstown Sta., P. O. Box 3308, Memphis, Tenn.

Other jewelry and novelties can be purchased from the sole, official jeweler, L. G. Balfour Co., Attleboro, Mass., direct, if a duplicate of the order is sent the Central Office. All designs, etc., are copyrighted, and hence may not be used without official license from the Grand Council.

2. *Plaques*, bearing either the *Coat-of-Arms* or the *Insignia* in bronze, can be purchased ONLY from the sole, official jeweler, L. G. Balfour Co., Attleboro, Mass. The designs are copyrighted.

3. *Stationery, Dance Orders, Menu Cards, etc.*, can be purchased ONLY from the sole, official stationer, L. G. Balfour Co., Attleboro, Mass. Designs of badges, coat-of-arms, insignia, etc., are all copyrighted.

4. *Flags, Pennants, Banners, Pillow Covers, Skull Caps, Arm Bands, etc.*, can be purchased ONLY from the sole, official manufacturer, The Eagle Regalia Co., 298 Broadway, New York, N.Y.

5. *Constitutions & By-laws, Rituals, Membership Record Cards, Separate Leaf Forms for Secy. & Treas. Books, Transfer Cards, and Pledge Cards* can be secured only from the Central Office.

6. *Membership Certificates* are issued only by the Central Office through Chapter Secretaries to members in good standing with both Chapter and Grand Council at the time of graduation.

7. *The Per Capita Tax or Grand Council Dues*, consisting of 50c per month, for the months of Oct., Nov., Dec., Jan., Feb., Mar., April and May (eight months) of each session, per active member, must be paid to the Central Office, using the regular per capita forms provided by that Grand Officer.

8. *The Agora Assessment* of \$4.00 per year for each Collegiate Chapter must also be paid to the Central Office. Space for this is provided on the per capita forms. It must be paid by Feb. 1.

9. *The Grand Council Membership Fee* of \$2.00 for each and every initiate must be paid to the Central Office, immediately following initiation. Space for this fee is provided on the per capita forms.

10. *Life Subscriptions* to THE KAPPA PSI MASK must be paid to the Central Office by ALL members. See the Constitution for details.

11. *Membership Record Cards* (two for each initiate) must be filled out at the time of initiation, and one sent to the Central Office and the other kept in the chapter file.

12. *Annual Officers' Report Forms*, due in February of each session, may be obtained from the Central Office.

13. *Chapter Letters* must be sent the Central Office by chapter historians by the dates requested. Chapters unrepresented by letter are liable to a fine of \$10.00.

14. THE KAPPA PSI MASK is mailed chapters in bulk, c/o the Historian who is responsible for the delivery to active members. Requisition for the number required must be made to the Central Office at least three weeks before date of issue (Jan., April, July, and Nov.). The summer issue is mailed to individual members IF a summer mailing list is furnished by the chapter; otherwise no copies are mailed.

15. *Coat-of-arms or Insignia inserts for college annuals* are furnished by the official publishers—Geo. Banta Pub. Co., Menasha, Wis.

16. *Hat Bands*.—Order from Wick Narrow Fabric Co., 931 Market St., Philadelphia, Pa.

NO PERSON IS A MEMBER OF KAPPA PSI UNLESS HIS GRAND COUNCIL MEMBERSHIP FEE, HIS PER CAPITA TAX (to date), AND HIS LIFE SUBSCRIPTION TO THE KAPPA PSI MASK (or installments to date) ARE PAID, AND A MEMBERSHIP RECORD CARD HAS BEEN FILED WITH THE CENTRAL OFFICE. THERE ARE NO EXCEPTIONS.

If an officer finds his duties interfere with his college work he should ask his chapter to give him an assistant who, besides helping him, will be trained to succeed him.

Kappa Psi Paraphernalia

When Ordering
mention Item No.

OFFICERS' SASHES: Set of twelve, all of adopted regulation patterns, and edged with silk braid, with correct emblem embroidered in golden-yellow silk on each, as follows:

- 1 One, only, scarlet sash of fine satin, golden-yellow braid, emblem "A."
 2 Eleven—grey sashes of flannel, scarlet braid, emblems, one each as follows: Greek letter Omega, Palm 99, Short Greek Sword, Shield and Wreath, Crossed Long Greek Swords, Crossed Short Spears, Crossed Pens, Crossed Keys, Mask, Eye, Greek letters "Kappa Psi."

3 Sashes, any of above—each \$3.30, per set of 12.....\$35.75
 5 **MEMBERS' COLLARS:** (Optional). Lined and interlined, cadet-gray flannel, scarlet silk braid on both edges, no emblems. Each \$2.25. Per dozen, \$22.25.

MEMBERS ROBES: (Optional).

Loose fitting, plain draped gowns with hood and cotton cord; waist girde all of solid black with double facing bands of scarlet sateen down front, each decorated with a scroll design worked in narrow silk braid (soutache) of gray on the scarlet facing.

- 10 Cambric, trimmed with sateen, any quantity, each.....\$5.90
 11 Cotton cashmere with sateen, any quantity, each..... 6.60
 Or same as above with the gray soutache scroll design omitted.
 14 Cambric, trimmed with scarlet sateen, any quantity, each.....\$4.85
 15 Cotton Cashmere, with scarlet sateen, any quantity, each.....\$5.65
 18 **TRIANGLE** (one required), wooden, painted alternating colors, scarlet and gray, each.....\$1.40
SPEARS: (two required). Each with seasoned shaft.

	Each	Pair
27 Gilt bronzed wooden point and ball.....	\$1.10	\$2.20
28 Polished brass point and ball.....	1.15	2.30
29 Nickel plated metal point and ball.....	1.30	2.60
30 Nickel plated metal point and ball.....	1.45	2.90

GRECIAN SHORT SWORD: (one required).

- 31 Leather scabbard, Grecian hilt, steel blade, brass mounted handle and trimming—with stud for belt throg, each.....\$5.80
BELT, FOR SWORD: (one required)

- 33 Shoulder sling style—heavy webbing, leather throg.....\$1.30
 34 Shoulder sling style—all leather, leather throg..... 2.00
 35 Waist belt style—heavy leather 1¾ inch wide, plain metal plate, leather throg (advise color black, brown, red)..... 2.95

BALLOT BOX: (one required). Exclusive of ballots (See next item).

- 37 Full secret swan neck pattern, walnut.....\$7.50
 38 Full Secret, hinged lid pattern, quartered oak..... 3.50
 39 Semi-secret, oak..... 1.50

BALLOTS: 50 assorted black and white.

- 41 China, glazed, per set of 50..... .25
 42 Rubber-noiseless—black cubes, white balls, per set of 50..... .75
GAVELS: (four required).

	Each	Per set of four
45 Oak.....	\$.40	\$1.60
46 Walnut.....	1.00	4.00
47 Rosewood.....	1.50	6.00

HOODWINK: (one required). Each equipped with strap to adjust size, and spring attachment to effect quick removal or replacement.

- 50 Leather, velvet lined, metal eye caps are permanent, each.....\$1.88
 51 Similar to 75799 but metal eye lids can be turned open, permitting clear vision without removing hoodwink, each.....\$2.16
 52 Special pattern—permits clear view, or shows through red lens, or shuts out light completely.....\$2.50

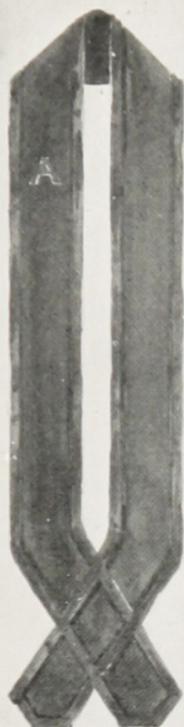
CHAPTER SEAL—Heavy lever stand.

- 55 Circular die, 1¾ inch diameter, plain lettering, no emblem or Greek characters.....\$5.25
 56 Circular die, 2 inch diameter, plain lettering, no emblem or Greek characters.....35.25

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