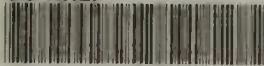
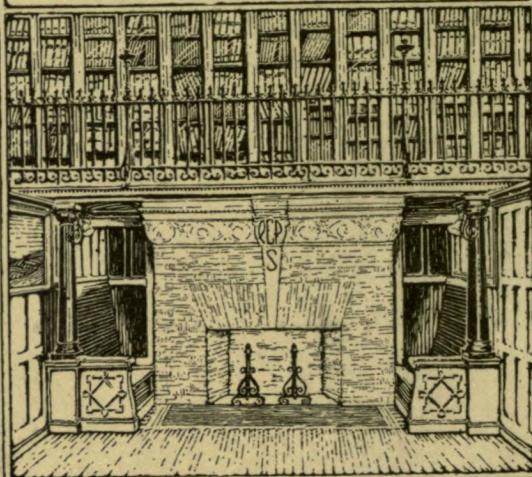


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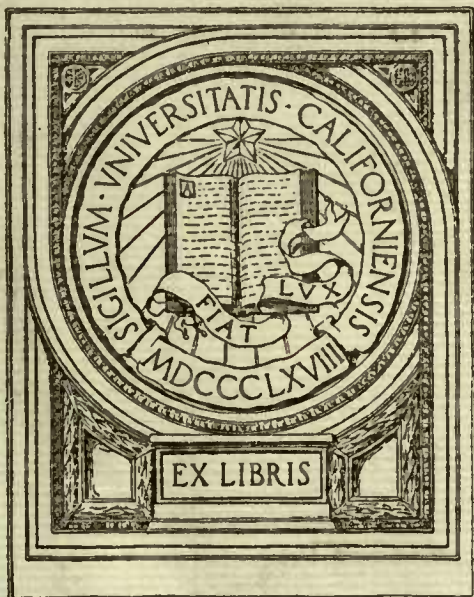
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THE FIRST CENTURY  
OF THE  
PHILADELPHIA COLLEGE OF PHARMACY

1821—1921



PUBLISHED BY THE  
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## PREFACE

The history of the Philadelphia College of Pharmacy—the first College of Pharmacy in the New World—covers practically the history of American Pharmacy. Instituted in 1821 and incorporated in 1822, the College has exerted a potent influence in developing pharmaceutical education, improving the conditions of pharmaceutical practice, and rendering, through its thousands of graduates, a nationwide service for the relief of human suffering and the conservation of public health.

It is therefore fitting that, upon the centenary of the founding of this college, its history be reviewed and its principles and traditions perpetuated.

Briefly, this volume considers :

Philadelphia and pharmacy as of one hundred years ago.

The founding of the institution, largely by members of the Society of Friends “with their homely virtues of modesty, thrift and wisdom, and love of peace and simple honor,” its modest beginnings, and the primitive condition of the pharmacy of the time and its gross abuses.

The pioneer work of Wood and Bache for scientific pharmacy.

The development of higher ethical standards and the birth of the U. S. Pharmacopœia and the American Pharmaceutical Association.

The removal from the old buildings on Zane Street to North Tenth Street and the erection of new buildings.

The amazing progress of the past half century or more, with its wonderful development in pharmaceutical education, legislation and practice, together with an account of the origin and work of the Alumni Association, and the merging of the Department of Pharmacy and Chemistry of the Medico-Chirurgical College in 1916, followed by a review of the events of Centennial Year, and these, by biographical data of compelling interest to the graduates of the institution.

The story is one that will bring a thrill of pride, not only to every alumnus of the Philadelphia College of Pharmacy, but to everyone who is interested in American Pharmacy, and it should serve as an inspiration to hold aloft the torch of scientific pharmacy handed down to us by our forbears and to do all within our power to justify their faith in us.

The history of yesterday foreshadows the experience of today and tomorrow. The old is ever suggestive of the new and the new of the old, or as Chaucer wrote in his “Assembly of Fowles,” over five hundred years ago :

“For out of the old fieldes, as men saithe,  
Cometh all this new corne fro yere to yere;  
And out of old bookes, in good faith,  
Cometh all this new science that men lere.”

The Committee on Historical Volume desires to express its appreciation of the services which have been rendered by Dr. Ellis Paxson Oberholtzer in the collection of historical data generally; it wishes to express, also, its appreciation of the co-operation given by Mrs. R. J. Tullar in the collection of biographical data.

The illustrations of this volume have been made, in some cases, from old paintings and faded photographs, also old prints in magazines and newspapers, and, therefore, are not as uniform and clear as might be desired.

Philadelphia, October, 1922.

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# THE FIRST CENTURY OF THE PHILADELPHIA COLLEGE OF PHARMACY

## CHAPTER I

### PHILADELPHIA AND PHARMACY IN 1821

One hundred years have passed since the druggists and apothecaries of Philadelphia met and organized the first college of pharmacy on the American Continent.

Philadelphia, founded by that far sighted Quaker, William Penn, on the western bank of the Delaware River, had been the leader in so much that was associated with American history and science, that its pioneer service in separating pharmacy from medicine and dignifying it with professional standing, was but a natural development.

Stimulated by the philosophical and scientific leadership of Benjamin Franklin and the group of young men who gathered about him, Philadelphia had become the pioneer of the Colonies in many educational, industrial and humanitarian movements. A vigorous protest against slavery, the reprinting of the Bible and of the works of Shakespeare, the starting of an American newspaper and of a magazine, the establishing of a drug mill, a paper mill, a botanical garden\* and an astronomical observatory, were the direct outcome of the cultural influences of early Philadelphia. Here was the first American hospital, the first college of medicine and the first law school of the New World, and here assembled the Continental Congress which wrote and adopted that immortal state paper—the Declaration of Independence of the American Colonies, which resulted in the birth of the American nation.

It was in this creative and inspirational atmosphere that the Philadelphia College of Pharmacy was founded.

### Philadelphia in 1821

Philadelphia in 1821 was the principal city of the United States and the largest. In it much of the business of the Federal government continued to be transacted, in spite of the removal of the capitol to the District of Columbia. Many of the foreign ministers and consuls resided here instead of at Washington. Here was the Mint in which our money was coined. Here was the National Bank, the second great financial institution to be chartered by Congress for regulating the fiduciary relations of the country, housed in a fine granite building on Chestnut Street between Fourth and Fifth Streets (now the U. S. Custom House), under the presi-

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\* The old homestead of John and Mary Bartram on the west side of the Schuylkill, between 54 and 56 Streets, now a public park, is America's first botanical garden. Bartram's father was a Quaker, loved and admired by his acquaintances. Following a fancy to have none but his hands erect a home in his old age, he built, of stone and timber, the house that now stands in the park and engraved upon the front the lines:

"To God alone: the mighty Lord:  
The Holy One by me adored."

JOHN BARTRAM, 1770.

dency of Nicholas Biddle. With a famous bar, famous physicians and surgeons, famous publishing houses, a prosperous trade on the river with Europe, the West Indies and all the rest of the world, which brought every kind of merchandise to her wharves and established fortunes for many of her citizens, Philadelphia had come to be regarded as the most distinguished of American communities.

Philadelphia had a population of 137,000; New York of 123,000; Baltimore of 62,000; Boston, 43,000; and New Orleans, the most important town in the South, some 40,000 inhabitants.

The West, which was reached only by the aid of the great canvas covered wagons which toiled up the steeps of the Alleghenies and down the slopes of those mountains to the shores of streams which poured their waters into the Mississippi, was a wilderness whose future the most prophetic could not yet foretell. Barges laden with goods passed down the Ohio in the spring freshets, the boatmen returning on ships by way of Philadelphia and Baltimore. Sailing packets, and now for a few years the new steamboats, still only experiments, threaded their way among the snags and rapids to the Gulf of Mexico. Pittsburgh, at the head of the Ohio River, the seat of some iron industries, was the home of only 7,000 people; Cincinnati, 10,000; St. Louis, like New Orleans, flavored with the civilization of France, from which it had so recently been acquired by purchase, was the quiet abiding place of 4,500 people. Buffalo was a mere village on the verge of western settlement with a population of 2,000; while Chicago, later destined to boom its way to wealth and importance with such irresistible power, consisted of but a few cabins clustered around Fort Dearborn.

Not a railroad had yet been seen better than the one Thomas Leiper had built in the large yard of the Bull's Head Tavern on North Second Street, which fact soon led him to construct tracks leading from some quarries which he owned on Crum Creek in Delaware County.\* Over this tramway crude cars filled with stone were drawn by horses three-fourths of a mile to a landing on Ridley Creek. It was not until the summer of 1832 that brightly painted cars, built after the pattern of the English mail coach, were pulled by horses from a station at Ninth and Green Streets through the green fields lying north of the city as far as Germantown.

At the same time, in the summer of 1832, tracks were being put down from the Belmont plateau on the west side of the Schuylkill to the town of Columbia on the Susquehanna, the beginning of a railroad into the West, and the nucleus of that great transportation system which we know now as the Pennsylvania Railroad. It was finished as far as Paoli in 1832 and a spur was run into West Chester. But it was 1834 before the rails reached their destination and were ready for use from tidewater to the Susquehanna.

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\* In the *Union* of May 25, 1822, "Innovator" stated that "it is a matter of surprise that there has never yet been a railroad built in this country, when roads on this construction have so long been used in England, where their utility is acknowledged. True, they have never yet been used for the purpose of traveling, but, in my opinion, they might be, and steam coaches might run on them, which would be as great an addition to the comfort and speed of passengers on land as the steamboats are on the water. I have often read of them, but never saw one in operation, and was, therefore, gratified by the view of the one in miniature now at Springer's Garden in Camden, and I think any of your readers would also be satisfied with their excursion, as a pleasant sail brings them to the place."



When the druggists and apothecaries of Philadelphia were formulating their plans for the establishment of their College, even the canals were not available for ferryboat or passenger traffic. For a long time plans had been on foot for digging a way for boats between the Delaware and Chesapeake to take care of the Southern trade, and for a canal along the Schuylkill which might reach into the north and west. But upon the excavations, little progress had been made until after the War of 1812, when men of means came to the support of the undertakings. It was 1825 before boats which had traversed the whole length of the Schuylkill Canal reached Fairmount, and 1827 before the connecting Union Canal by way of Reading to Middletown on the Susquehanna was open for navigation. A half dozen years more passed before the Juniata was canaled and by a portage in the mountains passengers and freights could be conveyed to Pittsburgh and to ports on the Ohio and the Mississippi. The Chesapeake and Delaware Canal, across the little State of Delaware, to facilitate communication with Baltimore and the South, and the Lehigh Canal, running from Mauch Chunk down to Easton, were not opened until 1829. The all-water route to New York, with the assistance of the Delaware and Raritan canal from Bordentown to New Brunswick, was not available for use until 1834.

In 1821 the only method of reaching the West was by stage coach out the Lancaster Pike. It was a trip of from five to seven days to Pittsburgh over indescribably bad roads, and it cost each passenger about twenty dollars. Emigrants were packed into the Conestoga wagons—"the East Indiamen of the road"—making the journey in twenty days, and paid the wagoners five dollars a live hundred weight, the same rate as for their goods. Market (then High) Street and the side streets around the taverns, where the teamsters stopped, were at times choked with the lumbering vehicles which had brought Western produce into the city and would carry back clothing, hardware, salt, iron, paint and other articles necessary to the people settled on the frontier. Winter and summer, great long limbed horses, wearing bells, used in the mountains to signal their approach to teamsters coming in an opposite direction on some narrow road, stood in all weather tied to the wheels of their wagons, eating their oats and corn from the feeding troughs, which, like the tar boxes and the water pails, were slung under each vehicle.

The Lancaster Pike of that day revealed a long procession of these cumbersome carriers of freight. The stage coach dodged in and out among them. Drove of live stock on their way to the market raised clouds of dust. All came to rest at the inns set at the road side—the driver of cattle, the wagoners, and the stage coach driver and his passengers. There were sixty-one stage and wagon taverns on the pike between Philadelphia and Lancaster. Here meals were hastily eaten, thirst was quenched and horses were refreshed and changed. "The present generation," says a writer whose memory covered this period, "cannot realize the commotion that was caused by the arrival and departure of half a dozen stages of rival lines with horns blowing, streamers flying and horses on the full run." Sometimes as many as thirty coaches, each drawn by four horses, though six were used in the mountains, stopped at one of these taverns in a single day. The Conestoga wagons were drawn oftentimes by as many as eight animals.

Going North and South travelers were aided by the rivers. Packets borne by the wind and the tide, and later steamboats, carried passengers down the Delaware

to New Castle. Here they boarded a stage coach to be taken over the peninsula to Frenchtown on the Elk River, a distance of sixteen miles, where another packet or steamboat was found by which they could proceed on Chesapeake Bay to Baltimore.

The trip to New York, when it was not made throughout by coach, involved a packet trip up the river to Bordentown, and a coach ride to New Brunswick on the Raritan, or Elizabethtown Point or South Amboy. Packets were found at these places to bear the traveler by water on to New York. For as little as three dollars one could pass from city to city. In 1825, when fast steamboats were in use, the trip to New York could be made between sunrise and sunset. A passenger would be awakened at his inn at a very early hour—in winter time before it was yet light—in order to make the boat. As he reached lower Chestnut Street he would meet men, women and children, carts, coaches and barrows passing in columns to the Delaware River where the bells were clanging, the steam pipes hissing, the wood fires under the boilers sending up a fountain of sparks. Porters were noisily engaged in transferring freight and baggage from wharf to deck. The crowd was augmented by many who came to bid their friends farewell as they started on their fateful journeys. Candy men, fruiterers and news agents passed through the throng, and a harper or Scotch piper played his instrument on the boats. Out on the river the passengers were called to breakfast.

All this was better than a trip at night. There were berths for but a few. Others must sit up or lie upon the floor. The gassy stoves in cold weather, the thumping of the billets of wood on their way to the boiler fires, the bawling of the firemen and pilots, the ceaseless movement of the paddle wheels, with the crying of infants and the moaning of the sick, made sleep out of the question except to the hardiest.

A dozen, sometimes twenty, coaches were assembled at the end of the river trip. They proceeded overland in a procession to meet the boat which was to be boarded for the next "water stage."

The canals up the Schuylkill and Lehigh Rivers were necessary to bring the new "stone coal" to Philadelphia, and in 1821 only a little time had elapsed since a method for burning it had been discovered by accident. According to Hazard's Register only 365 tons of anthracite coal were received in Philadelphia in 1820, though five years later the total was increased to 33,000. Houses, public buildings and factories were being fitted gradually with stoves and furnaces adapted to its use, and the sooty sweeps who, time out of mind, had trooped through the city, offering to clean chimneys, gradually disappeared.

Lighting was by candles and animal oils. The streets were illuminated only by a few lamp posts surmounted by frames which Franklin had devised. With lanterns in hand, a few night watchmen patrolled the town, calling out their "Twelve o'clock and all's well," "Three o'clock and bright starlight," for the information of those who might be lying awake on their feathers in four post beds. It was William Lehman, one of the founders of the Philadelphia College of Pharmacy, who led the way in City Councils for the introduction of illuminating gas as a lighting agent. In Peale's Museum in the State House in 1816 were seen "lamps burning without wick or oil," rightly regarded as great curiosities. Gas lights were in-



stalled in the Chestnut Street Theater. The new Masonic Hall in 1820 was equipped with a small gas making plant, but some years were to pass before private residences should give up the tallow dip and the whale oil lamp in favor of the new illuminant.\*

A public water supply had been achieved by the city in 1802 through Benjamin H. Latrobe, the English architect, who identified his name so honorably with several buildings in the city as well as with the capitol at Washington. He built pumping engines on the Schuylkill River at Chestnut Street. The water was forced through a brick tunnel to Center Square at High and Broad Streets (where City Hall now stands), and another engine raised it to a large reservoir; from this receptacle it was distributed through hollowed sap pine logs sunk in all the principal streets, to hydrants for the use of the householders. This service sufficed for a while, but in 1815 it was abandoned in favor of pumping works at Fairmount which raised the water into a large basin on Morris's Hill, now the site of the Art Museum being erected at the western end of the Parkway. When the plans for the Schuylkill Canal were advanced and the Fairmount Dam was built, water wheels were installed and a system of pumping developed which still has a place in the boyhood memories of many a Philadelphian. Crowds assembled at the spot to see the great wheels revolve in the power house.

It was in the very year of the institution of the College that the dam was closed and the water wheels were put in place. Still it was only an occasional house that had water in it, except as it could be carried in pails and crocks from the hydrants outside the door. But there were some public baths at the rivers to which the people might repair in summer. Best of all, the new water works provided the means of flushing the gutters, streets and markets for keeping the city more free of disease, which had so constantly recurred during the summer months for several years, and it afforded some degree of protection from fire. Many of the inhabitants of the city were members of volunteer fire companies, who would rush out of their doors and windows upon hearing the cry of fire. Sometimes it was a false alarm started by young rowdies for the purpose of disturbing quiet and orderly citizens and of instituting free-for-all fights.

The city lay between the Delaware and Center Square at Broad and High Streets. There were houses only at irregular intervals on High Street west of Broad Street. The city's southern boundary was Cedar or South Street, its northern boundary Vine Street. The old lines:

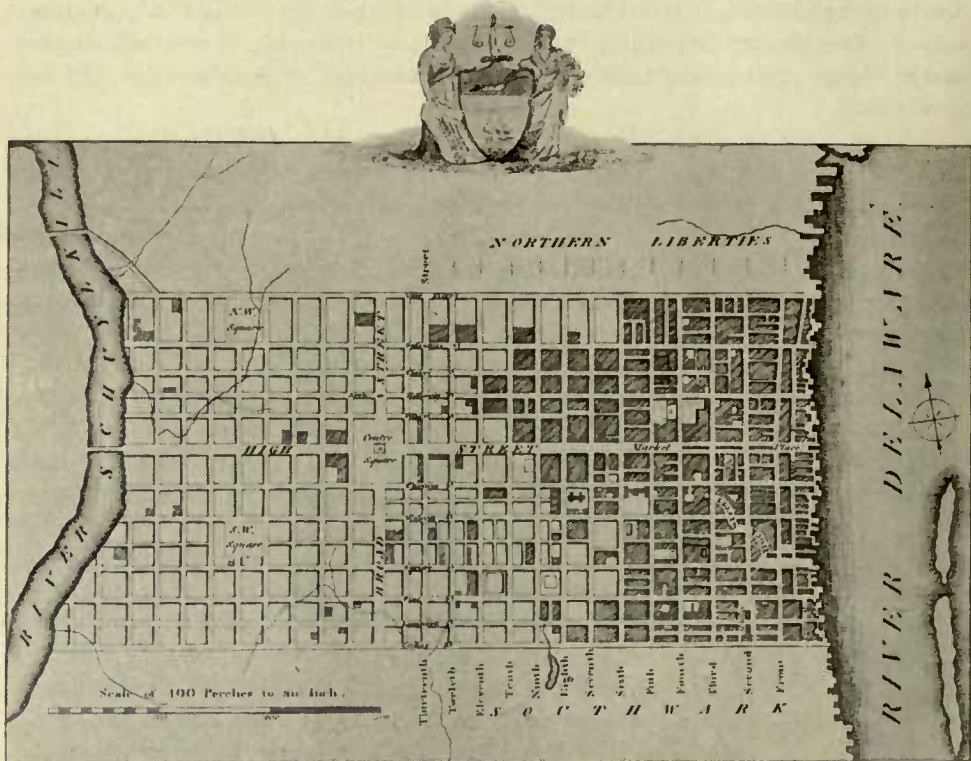
"Chestnut, Walnut, Spruce and Pine,  
Market, Arch, Race and Vine,"

were an expression of its physical scope, no less than of the arrangement of its thoroughfares. To the south of the city, though indistinguishable from it, was Southwark, which had its separate government; to the north of Vine Street was Northern Liberties, with its own political jurisdiction.

Of pavements there were not many. Such as were laid down were of round cobble stones, water-washed rubble, obtained from the bed of the Delaware near

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\* It is of interest to note that in November, 1837, the records of the College show that \$100 was appropriated for introducing gas into the Zane Street Building of the College.



MAP OF THE CITY OF PHILADELPHIA

Trenton. Vine Street was built upon and paved out as far as Ninth Street; Race, which at first had been Sassafras, to Broad Street; Arch, which had been Mulberry, the home of many well-to-do Quaker families, to Twelfth Street; Market to Schuylkill Sixth Street, now Seventeenth Street (streets west of Broad Street were at that time numbered east from the Schuylkill); Chestnut was paved to Sixteenth Street and built up nearly as far as Twelfth Street; Walnut was paved to Twelfth Street; Spruce to Broad Street; Pine and South Streets to Ninth Street. The intersecting streets, running north and south, were similarly set with round stones according as the improvements by abutting lot owners seemed to warrant it. One street paralleled another, north and south and east and west. Its very regular appearance was Philadelphia's characteristic as well as defect.

"Street answers street, each alley has a brother,  
And half the city just reflects the other."

The four squares which Penn had set aside when he laid out his "greene country town" for the inalienable use of the commonalty were located at points equally distant from the Center Square. But so much open ground was found in all directions that the deed of gift met with little public appreciation. As yet they were just the Northeast, Northwest, Southeast and Southwest Squares, potters' field or dumping grounds for town offal, overgrown with grass and weeds. Again it was William Lehman in Common Council in 1816 who proposed that they be named



for Washington, Franklin, Columbus and Penn. But it was 1825 before action was taken. Then it was resolved to honor Washington, Franklin, Logan and Rittenhouse, Penn's name being attached to the Center Square on which our City Hall now stands.

It was still not unusual to see Indians in the streets—members of the Lenni Lenape tribe living in semi-domestication in their villages in the neighborhood. They might be seen standing near the State House, where the women offered for sale to the citizens, moccasins, baskets and other articles, the men might be induced to bend their bows at “fips” and “levies” set in tree clefts which some one would place there and which were to be theirs if they should prove themselves good enough marksmen to bring down the coins with their arrows.



SECOND AND MARKET STREETS

Second and Market Streets in 1799, and later, was practically the center of the business activities of the city. In the print herein given there may be seen on Second Street north of Market the old Christ Church building erected in 1727 to replace the one story structure which had occupied the site since 1695. President Washington and President Adams each had a pew here, and here Benjamin Franklin and Henry Clay worshipped. Nearby, at 51 (now 135) Market Street, the printing shop of Benjamin Franklin was formerly located (1728-1766). On the northwest corner of Second and Market Streets, in 1812, was the apothecary shop of John Speakman, subsequently Speakman and Say, and later Thatcher and Thompson.

Second Street was the principal business street. Here were found the dry goods and other stores later established on Eighth Street. “Every kind of place

where the wants of an immense city are supplied," as stated by a writer of the day, were ranged on this thoroughfare. "Crowds upon crowds of buyers, sellers and gazers at the busy scene 'thronged the sidewalks from daybreak until long after dark.'" Barrels of sugar, coffee and fruit stood outside the merchants' doors. Flannels, muslins, silks and calicoes were hung over the doors in whole pieces to dangle in the faces of any who might come in, or were placed in rolls side by side on boxes standing at the street side.

The wooden market houses which filled High Street and Second Street were unsightly, but they did not fail to rivet the interest of visitors. To see the townspeople chaffering at the stalls with the German and the other farmers, and their wives and daughters who came to the city to sell meat and green produce, was a sight of an early morning which no traveler ever missed.



SOUTHEAST CORNER OF THIRD AND MARKET STREETS

The neighborhood of Third and Market Streets is rich in historic interest. Within a few blocks is the State House or Independence Hall, on Chestnut Street between Fifth and Sixth Streets, the birthplace of American Liberty, wherein the delegates from the American Colonies met and issued the Declaration of Independence; passed on July 4, 1776, it was publicly proclaimed in Independence Square on July 8. In this building, the Liberty Bell is carefully preserved. The bell was cast in 1752 for the Pennsylvania State House, bearing the inscription "Proclaim liberty throughout all the land unto all the inhabitants thereof." In a tiny house (still standing), on Arch Street near Third, lived Betsy Ross, who is said to have been employed by Washington in May, 1776, to make the sample flag with thirteen stripes and thirteen stars which was adopted as our national flag by Congress on



June 14, 1777. On the corner of Sixth and Market Streets stood the house of Robert Morris, financier of the Revolution, and next to this, the mansion used by Lord Howe during the British occupation, and later President Washington's residence.



INDEPENDENCE HALL

Wherein the Liberty Bell "proclaimed liberty throughout all the land unto all the inhabitants thereof," and unto all the nations of the world.

(Illustration courtesy of John Wanamaker)

In 1821, within three or four blocks of Third and Market Streets, a large majority of the sixty-eight founders of the College were in business.

With the advance of the market houses west on High Street, that thoroughfare was abandoned as a place of residence by the opulent and fashionable.\* Now the

\* *Poulson's Advertiser* of May 11, 1822, stated that "The extension of the market house on High, as far as Eighth Street, is calculated to prove a great convenience to the inhabitants of the western section of the city. It would be well worth the attention of two or three respectable growers of vegetables to take stalls at the western end of the market for the supply of the citizens who are now obliged either to purchase those articles of second hand dealers or extend their walk several squares to the old stands. It would also be an accommodation if in the same section of the market those articles usually procured of the Jersey people were exposed for sale. Clams, crabs, etc., are among the supplies wanted in that quarter."

more fastidious families founded their homes in the vicinity of Third and Spruce Streets. The "smart quarter" was spreading on this line west to Broad Street, the beginning of a well known tradition that those who would have social position in the city must reside within definite boundaries south of Market Street.

The sidewalks were chiefly of red brick, made since the earliest day from the clay upon which the city was set. It was the "Red City," as Dr. S. Weir Mitchell



CHRIST CHURCH

Wherein Washington, Adams, Franklin and other American Patriots worshipped.  
(Illustration courtesy of John Wanamaker)

named it a hundred years later in one of his historical romances. White marble steps, often with hand wrought iron railings, led up to the front doors, whose handsome Georgian panels, like the rest of the wood work, were usually painted white. The kitchen and laundry in the typical Philadelphia home were placed in the "back buildings." All was kept immaculately clean. Not a traveler to the city who did not remark upon the careful washing of the steps and pavements by the servants



in each well managed household. Along many of the streets, Lombardy poplars, introduced into the city from England by William Hamilton of the "Woodlands," and other trees, had been planted to create a pleasant impression of openness, coolness and rusticity.

The Quaker portion of the population was a factor of importance in Philadelphia's life. By reason of their wealth and position they gave character to much that proceeded within the city, and although outnumbered by families of other religious interests and attachments, they had put an indelible stamp upon the community. They controlled and directed many a large business, many a financial institution, many a school, many another private or public enterprise. They had prominent places in the drug trade, and a number of the men who were of the greatest value to the College in its early history were of Quaker training and ancestry, even if not active members of the Society of Friends.

### Pharmacy in 1821

In England, from whence came our physicians and apothecaries, the apothecaries had been separated from the grocers by a charter obtained from James I in 1615; later, by an act made perpetual during the reign of George I, their rights and privileges were extended, and they were obligated to compound their medicines by the formulas of the Dispensatory of the College of Physicians of London.

In the nature of the case, the conditions in America, far from the marts of the world, sparsely populated, newly settled, were distinctly worse than in England. The circumstances under which the colonists had begun their life on this continent made it difficult to obtain physicians save only in large towns. At first preachers, while they traveled from settlement to settlement to comfort the sick spiritually, often administered medicines. They could apply ointments and plasters, dress a wound and dose a suffering creature with calomel, ipecac, jalap and tartar emetic. Mothers kept for their children a variety of household remedies, knowledge about which had been handed down from generation to generation. Neighbor nursed neighbor in illness. There was a midwife for lying in patients. Each community was likely to have some matron who would gather, sell and prescribe "yarbs," and a man more deft or perhaps only more audacious than his neighbor, who would cup and bleed, or draw an aching tooth. Jimson weed was smoked in a pipe for asthma. Pokeberries, when ripe and the juice dried in the sun, were made into a plaster for cancer. Sour dock root was made into an ointment for tetter. Cat-mint tea was used for colic; sassafras root as a purifier of the blood; grape vine sap to make the hair grow; boneset for consumption. From a few boxes or jars in a corner of a general storé, customers might be supplied with Glauber's salt, cream of tartar, mustard, flowers of sulphur, and castor oil.

Where there were physicians, they were at best not very skilled advisers. The science of medicine was of slow growth and schools for the training of physicians were few even in Europe. The whole healing art continued in this country, as in the Old World, to be confused with a mass of credulity and superstition which could be only slowly dispelled from the popular mind. Tales of cures passed from tongue to tongue. When newspapers appeared they gave currency to many an account of miracles wrought by preposterous methods, as did the almanacs.

What men would believe about the value of some recommended remedy was almost without limit. This or that foolish method of healing the sick, the halt and the blind, of relieving physical distress of whatever nature, of saving life, would be eagerly tried. Rubbing wens with dead toads, warding off disease by burying a piece of fitch under the eaves of a house, treatment with the thighbone of a man who had been hanged, vipers' tongues, urine, dung, calculi, the brains of this and that animal, the head of a coal black cat burnt to ashes in a new pot which was to be blown into the eye for cataract, rattlesnake poison mixed with cheese formed into pills for palsy and rheumatism, spider's web for fever and ague, and sixty things as senseless as these taken together and mixed into some mess, distinguished an age which was as yet unacquainted with chiropractic or Christian Science. In no field was there so inviting an opportunity for the charlatan. The man who had enough self assertion for the part might peddle any recipe from town to town and reap a profit by his audacity. A bone or a stone would do for many—any sick man, or a friend of the sick could be induced to part with money for mixtures, the secrets of which had been begged or stolen from the Chinese, the Arabians or the American Indians.

At the very moment the College was being formed in Philadelphia, an "Indian Physician" was stationed at Center Square where he advertised that he would cure all diseases which are curable in their nature and state. "Three years' practice in the city," he declared, "had furnished ample testimonials of the superiority of the real Indian practice over all other medical practice in this country." The "strictest attention" would be paid to those who would be pleased to call upon the man, the poor being treated "in all cases gratis." (*Union*, March 2, 1821.) Another practitioner of the same school established himself in South Street between Sixth and Seventh Streets, where he flattered himself that he would be enabled "under Providence to effect cures by means of herbs and roots for all diseases incident to humanity." (*Ibid.*, Oct. 10, 1821.)

It was not far to go from the hair of a dog to cure its bite and a dung plaster for a wound or an ache to the pills and swills of the patent medicine man. Nostrums are supported by the same psychology, but the one of secret composition, the names and nature of whose ingredients are sedulously concealed, is the more insidious, on which account, as the maker and vendor knows, they are certain to yield him the greater income. The very mystery surrounding their manufacture makes it the more possible for him to play upon popular credulity. He was early on the ground. His "sovereign remedy" or "sure specific" would be accompanied by a list of three-score diseases, which it was "warranted" to cure. Supplied with the King's patent, signed, sealed and delivered in the presence of the proprietor, who added his autograph to the wrapper in attestation of the genuineness of the mixture, with the endorsement of the "whole eminent faculty," and signed testimonials of cures from fictitious persons, or if not fictitious, from men whose statements of approbation were forged, the situation was one to disturb—if not disgust—scientific men.

The Old English "patent medicines" were as familiar as laudanum and castor oil. What they were and the purpose they served were generally known and recognized. But there were scores of new medicines to which the most astounding curative powers were ascribed and which every day were touted everywhere.



The most audacious and industrious distributor of secret medicines in Philadelphia at this time was Dr. T. W. Dyott, who had a large "wholesale and retail drug and family medicine warehouse" at the northeast corner of Second and Race Streets. No one in the city, no one in the United States, carried on so considerable a business in panaceas. The announcements of his remedies and the certificates of his cures half filled a page, day after day, in the *Aurora*, the *Democratic Press* and other newspapers, which he used in bringing his name to the attention of the people. The picture of his large store with Conestoga wagons drawn up around it, to carry his medicines to suffering mankind in the South and West, was familiar to everyone. Furthermore, he was an agent for several glass manufacturers, bought old bottles, lime and cordwood, made bottles in Kensington, dealt in garden seeds, paints, dyers' supplies, chemical and pharmaceutical apparatus, butter pots, snuff, chewing tobacco, mustard, chocolate, lard, ham, brandy, gin, sugar plums and cow-skin whips.

He had "approved family medicines which are celebrated for the cure of most diseases to which the human body is liable, prepared only by the sole proprietor." Agents in New York, New Orleans, Cincinnati and in all parts of the country aided him in the distribution of his products. He would furnish his remedies to the "laboring poor at one-half the usual prices." What he could not sell he would barter for rosin, turpentine, lamp black, beeswax, cheese, rye and apple whisky, peach brandy, pearl ash, flax seed, bristles, rags, logwood, mackerel, shad and real estate in and near Philadelphia.

Dyott said that he was a grandson of a certain Dr. Robertson of Edinburgh whose "celebrated" compounds he was dispensing in America. But he also mixed medicines to which he attached his own name and sold the products of other quacks. He offered with a great flourish of language in the gazettes, day by day, "Robertson's Stomachic Elixir of Health," alleged to cure anything, from a cough to dysentery; "Robertson's Vegetable Nervous Cordial, or Nature's Grand Restorative," intended to dispel all nervous disorders, as well as gleet, syphilis, barrenness, scurvy and diseases arising from the immoderate use of tea; "Robertson's Gout and Rheumatic Drops," to be taken for gout, rheumatism, the stone, scalds, cramps, chilblains, fever and ague and a half hundred other complaints; "Robertson's Infallible Worm Destroying Lozenges" which might be given to the "youngest infant." A million persons had been cured by these nostrums, Dyott was not ashamed to claim over his own name on the bottles and boxes containing his medicine and in the newspapers of Philadelphia, day by day, in 1821.

Hardly less persistent as an advertiser of remedies was Abraham Small, a bookseller who had a store on Chestnut Street nearly opposite the United States Bank. He was the agent for "Hahn's Anti-Bilious Pills," a sovereign preventive of bilious and yellow fevers, dyspepsia, depravity of appetite, nausea, flatulency, stomach pain and constipation. These were particularly recommended to seamen starting out on long voyages who thus might medicate themselves for whatever ailment might overtake them wherever they happened to be. Small also sold "Hamilton's Worm Destroying Lozenges." Any one having bad breath, corrupt gums, an itching nose, epileptic fits, grinding of the teeth in sleep, irregular appetite, fetid stools, large and hard belly, and worms, should resort to the use of these lozenges.

"Hamilton's Grand Restorative" was "invaluable" for the speedy relief and permanent cure "of nervous disorders, constipation, impure blood, hysteria, cramps, gout, inward debility and indigestion." "Hahn's Genuine Eye Water" would cure all eye diseases. The "Genuine Persian Lotion" would remove freckles, scurfs, tetters and ring worms.

Many a doctor and druggist was lending his name to the patent medicine traffic for the money there was in it, but out of the welter of superstition, ignorance and fraud, a professional feeling was being developed among physicians and it was now on the point of embracing the apothecaries.

At first physicians had been their own apothecaries. They were such yet except in the larger towns and cities. They directly imported their own medicines from London with the aid of such supplies as might be found in the hands of dealers in Philadelphia, Baltimore, New York, Boston, and Charleston. Each vendor of drugs was likely to have a characteristic sign. In Philadelphia distinguishing signs of a London character were popular in the drug trade. Thus, there were apothecaries at the sign of the Golden Ball, the Golden Pestle, the Bell and Dragon, the Mortar and Dove, the Golden Heart, the Pestle and Mortar, the Unicorn and Mortar, the Blue Ointment and Galley Pot, Hippocrates Head, Boerhave's Head, Paracelsus' Head, etc. But nearly if not all supplemented their stock of medicines with paints, oils, glass, plums, raisins, figs, brimstone, glue, beeswax and a large variety of other merchandise. (Samuel Troth, *Amer. Jour. Phar.*, 1905, 423.)

Any physician who had gained a measure of success in a community surrounded himself with apprentices. As the lawyer trained his own assistants, so did the doctor take in young men who wished to prepare themselves for the "practice of physic." These medical apprentices became proficient in the use of the mortar and pestle for powdering a drug, in extracting a tincture in a kettle on the hearth, in rolling a pill on a slab, and in spreading a plaster. It is related that three of the apprentices of Dr. Rush during the yellow fever epidemic of 1793 were employed night and day in putting up powders of calomel and jalap, or calomel and rhubarb, the remedies which he so generally used in combating that dread disease. ("Institution and Progress of College of Physicians of Philadelphia," W. S. W. Ruschenberger.)

Now and again a physician would open a little dispensing shop and offer his preparations for sale. This was tended by the apprentices who after five or six years of menial and poorly remunerated service might qualify themselves to engage in the unregulated and unlicensed business of medicating the community on their own account.

### Separation of Pharmacy from Medicine

In an illuminating account of "The Beginnings of Pharmacy in America," M. I. Wilbert (*Amer. Jour. Pharm.*, 1907, 400) has stated that:

"The first record we have of the appointment of an apothecary to fill prescriptions other than his own or those of his preceptor, is to be found in 'Some Account of the Pennsylvania Hospital from Its First Beginning to the Fifth Month, called May, 1754,' written by Benjamin Franklin, then the clerk or secretary of the Board of Managers of the Pennsylvania Hospital. In this little pamphlet we find the following paragraph:



“The practitioners charitably supplied the medicines gratis till December, 1752, when the managers, having procured an assortment of drugs from London, opened an apothecary’s shop in the hospital; and it being found necessary, appointed an apothecary to attend and make up the medicines daily, according to the prescriptions, with an allowance of fifteen pounds per annum for his care and trouble, he giving bond, with two sufficient sureties for the faithful performance of his trust.’

“Jonathan Roberts, who was warmly recommended by Dr. Bond, was appointed as the first apothecary to the hospital, and served the institution faithfully and well until the spring of 1755, when he resigned to accept more remunerative employment.

“John Morgan, who was an apprentice of Dr. John Redman, succeeded as the second apothecary at the Pennsylvania Hospital. He was appointed on May 19, 1755, and served until the following spring, when he resigned.”

In 1757 John Morgan graduated from the College of Philadelphia (founded by Benjamin Franklin about the middle of the eighteenth century), receiving a collegiate degree, and in 1760 went to Europe to complete his medical education.

In 1765, having completed his studies in London, Edinburgh and Paris, he returned from Europe and “founded the first medical school attached to any college or university in this country” (Edgar Fahs Smith)—the Medical School of the College of Philadelphia. The medical department of the University of Pennsylvania was established in 1779, and in 1791 these two medical schools, by act of the Pennsylvania Legislature, were united under the University of Pennsylvania.

In addition to the part he played so honorably as a pioneer in medical education in this country, Dr. John Morgan, after his residence in England, and particularly in France, where pharmacy enjoyed an early and notable development, became a spirited advocate of the separation of the practice of pharmacy from medicine. While in Europe he wrote, “I am now preparing for America, to see whether, after fourteen years’ devotion to medicine, I can get my living without turning apothecary or practitioner of surgery.” At the very beginning, in his “Discourse Upon the Institution of Medical Schools in America,” delivered at the commencement of the College of Philadelphia, May 30-31, 1765, he said :

“We must regret that the very different employment of physician, surgeon and apothecary should be promiscuously followed by any one man. They certainly require very different talents.

“The business of pharmacy is essentially different from either, free from the cares of both, the apothecary is to prepare and compound medicines as the physician shall direct. Altogether engaged in this, by length of time, he attains to that skill therein which he could never have arrived at were his attention distracted by a great variety of other subjects.

“The wisdom of ages approved by experience, the most certain test of knowledge, has taught us the necessity and utility of appointing different persons for these different employments, and accordingly we find them prosecuted separately in every wise and polished country.

“The paying of a physician for attendance and the apothecary for his medicines apart, is certainly the most eligible mode of practice both to the patient and practitioner. The apothecary, then, who is not obliged to spend his time in visiting patients, can afford to make up medicines at a reasonable price, and it is as desirable as just in itself that patients should allow fees for attendance—whatever it may be thought to deserve.

“They ought to know what it is they really pay for their medicine and what for medical advice and attendance.”

Morgan’s recommendations, however, did not meet the approval of his contemporaries. The drug store, when it existed at all, was only a warehouse from which

Over

BLANKS of all sorts, Printed by ANDREW SCHEPHER, in Second Street

# This Indenture

Witneseth, That *Thomas Boulton* of the City of Philadelphia

HATH purchased, and by these Presents in full View of his Mother's Days, voluntarily, and of his own free Will and Accord, put himself APPRENTICE TO *The Managers of the Pennsylvania Hospital*

*An Apothecary*

to learn the Art, Trade and Mystery, and (after the Manner of an APPRENTICE) to serve *the said Managers or their Heirs* for the full End and Term of *Seven Years* next ensuing. During all which Term, the said APPRENTICE, his MASTER faithfully shall serve, his Secrets keep, his lawful Commands every where readily obey. He shall do no Damage to his said MASTER, nor see it done by others, without leaving or giving Notice to his said MASTER; he shall not waste his said MASTER's Goods, nor lend them unlawfully to any. He shall not commit Fornication, nor contract Matrimony, within the said Term: At Cards, Dice or any other unlawful Games, he shall not play, whereby his said MASTER may have Damage. With his own Goods, nor the Goods of others, without Leave of his said MASTER he shall neither buy nor sell. He shall not absent himself Day or Night from his said MASTER's Service, without his Leave: Nor handle Ale, Beers, Wines, or Play, Houses, but shall Things behave himself as a faithful APPRENTICE, ought to do, during the said Term. And the said MASTER shall use the utmost of his Endeavour to teach and instruct, or cause to be taught and instructed, the said APPRENTICE, in the Trade or Mystery of *an Apothecary* and procure and provide him sufficient Meat, Drink, and *Weekly Lodgings* fit for an APPRENTICE, during the said Term of *Seven Years & five Months*

*He shall likewise teach him or cause him to be taught to read write & cipher & shall also allow him a Lib of his own choice of a good one & shall of Apparel supply him according to custom*

AND for the true Performance of all and singular the Covenants and Agreements aforesaid, the said Parties bind themselves each unto the other firmly by these Presents. IN WITNESS whereof the said Parties have interchangeably set their Hands and Seals hereunto. Dated the *Twenty fourth* Day of *February* in the *Sixth* Year of the Reign of our Lord GEORGE the Third, King of Great-Britain, &c. and in the Year of our LORD One Thousand, Seven Hundred, and Sixty *six*.

*Wm. B. Redman* on behalf & by order of the managers of the Pennsylvania Hospital

*Thomas Boulton*  
*Hugh Roberts*

Indenture of Thomas Boulton, 1766-1771, first apprentice of the Pennsylvania Hospital "to learn the art, trade and mystery of an apothecary." (The indenture of John Morgan, 1755 and prior, as a medical apprentice to Dr. John Redman, was probably similar.) After serving his apprenticeship, Boulton was given his "one new suit of apparel," and then made (1771) assistant apothecary, and later (1773), apothecary, but resigned in a few months.

(Reproduction from "The History of the Pennsylvania Hospital, 1751-1895." By Thomas G. Morton, M.D.)



Pennsylvania Hospital July 22. 1778.

Applications having been made to the Managers of this Institution by Dr. Thomas Bond M.D. & Col. of the military Hospital, & Dr. Jonathan Bowne D.D. of the said Military Hospital, requesting the use of the Laboratory of the Purpose of preparing & compounding Medicines for the use of the military Hospitals; the Managers having taken the same into their Consideration, are ready & willing to accommodate them with the Use of the said Laboratory upon the following Conditions vizt.

That they will cause at their own Expence a proper Fence to be made from the North East Corner of the said Laboratory to the Wall enclosing the present Gateway <sup>including the present Gateway</sup> across the Hospital, so as to cut off all Communication between the said Laboratory & the Pennsylvania Hospital, having the said House for the Use of the said Hospital.

That all the Materials & Implements belonging to the said Laboratory shall be returned in the same good Order in which they are delivered, agreeable to an Inventory to be taken.

That neither the Officers employed in the said Laboratory nor any of the military be permitted to interfere with the Managers of the said Hospital, nor have any Connection with the Buildings or Patients here, or with the Officers.

Agreed by

<p>John Potts D.D. Thos. Bond M.D.</p>	<p>J. Bowne Saml. Rhoads W. Spronell Edw. Harrington Wm. Pemberton Samuel Powell John Reynolds</p>
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Contract of the Pennsylvania Hospital (1778) with the Continental Army for use of its Elaboratory "for the purpose of preparing and compounding medicines for the use of the Military Hospitals."

This elaboratory (obs., laboratory) was built in 1768. It was seized and used by the British Army during its occupation of Philadelphia.

(Reproduction from "The History of the Pennsylvania Hospital, 1751-1895." By Thomas G. Morton, M.D.)

the physician might obtain his supplies; druggists were mere warehousemen and dealers. Not until that picturesque figure of our medical history, Dr. Abraham Chovet, came to the city from Jamaica, was there one in town who would adopt the plan of writing prescriptions for his patients. Dr. John Jones followed, and by the end of the eighteenth century the custom was rather general, not only in Philadelphia, but in the other cities of the colonies. The apothecary thus came to occupy his own separate place in the community, and though as yet a man of no great standing, in such a manner were the foundations of pharmacy established. ("John Morgan," M. I. Wilbert, *Amer. Journ. Phar.*, Jan., 1904; "History of Medical Department of University of Pennsylvania," Dr. Joseph Carson; "Early History of Medicine in Philadelphia," Dr. G. W. Norris.) "The course pursued by Dr. Morgan," Dr. Carson has stated, "may be said to have given the original impulse to the cultivation of the profession of pharmacy and sanctioned its independent existence."



JOHN MORGAN

(Reproduction from "The History of Medicine in the United States." By Dr. Francis R. Packard)

M. I. Wilbert has written of John Morgan (1735-1789), the pharmacist physician ("John Morgan," *Amer. Jour. Phar.*, 1904, 11), as follows:

"Dr. Morgan was undoubtedly the first teacher of the theory and practice of medicine, materia medica, pharmacy and pharmaceutical chemistry in America. That he taught all of these branches appears from the announcement of the first course of lectures in the College of Philadelphia, quoted from the *Pennsylvania Gazette* for September 26, 1765, as follows:



"A course of lectures on *Materia Medica*, by John Morgan, M.D., etc. Price four pistoles.

"The course will commence on the 18th day of November, and will be given three times a week at the college, at three o'clock in the afternoon, till finished, which will last between three and four months.

"To render these lectures as instructive as possible to students of physic, the Doctor proposes, in the course of them, to give some useful observations in general, and the proper manner of conducting the study of physic.

"The authors to be read in *materia medica* will be pointed out. The various substances made use of in medicine will be reduced under classes suited to the principal indications in the cure of diseases. Similar virtues in different plants, and their comparative powers, will be treated of and an inquiry made into the different methods which have been used in discovering the qualities of medicines; the virtues of the more efficacious will be particularly insisted upon; the manner of preparing and combining them will be shown by some instructive lessons upon pharmaceutical chemistry and pharmacy. To prepare them more effectually for understanding the art of prescribing with elegance and propriety, if time allows, it is proposed to include in this course some critical lectures upon the chief preparations contained in the Dispensatories of the Royal College at London and Edinburgh. The whole will be illustrated by many useful and practical observations on diseases, diet and medicines."

This rather comprehensive announcement was followed in 1766 by another, which read in part:

"A course of lectures on the 'Theory and Practice of Physic' will be delivered for the benefit of Medical Students, with a preparatory course of Botany, Chemistry and *Materia Medica*, being the substance of a set of lectures delivered to his pupils last winter."

That Morgan had been the acknowledged teacher of chemistry in the Medical School of the College of Philadelphia would also appear from the following letter, written by Dr. Rush, as an application for the chair of chemistry:

"GENTLEMEN. As the professorship of chemistry which Dr. Morgan has sometime supplied is vacant, I beg to offer myself as a candidate for it.

"Should you think proper to honor me with the chair, you may depend upon my doing anything that lies within my power to discharge the duties of a professor, and to promote the reputation and interests of your college.

"I have the honor to be, with the greatest respect,

"Your most obedient humble servant,

"BENJ. RUSH."

"Philadelphia, July 31, 1769."

Dr. Morgan was one of the founders of the first medical society in the Province. This was the "Philadelphia Medical Society," organized February 4, 1765. Several years later this society was united with the "American Society for Promoting Useful Knowledge," and this, in 1769, was united with the Philosophical Society to form the "American Philosophical Society."

Benjamin Franklin (1706-1790), the printer philosopher, "venerated for benevolence, admired for talents, esteemed for patriotism, beloved for philanthropy" (Washington), has left the impress of his genius on practically every phase of our present day existence. Probably the most important and far reaching contribution

he made to the progress of medicine in America, was his markedly efficient work in the development of the Pennsylvania Hospital, established in 1751, the first public hospital of this country;\* in addition, he was a publisher of medical literature.

M. I. Wilbert (*Amer. Jour. Phar.*, 1906, 217) has written:

“Benjamin Franklin appears to have been one of the first, if not the first, publisher of medical books and pamphlets in the British Colonies. As early as 1734 he published an edition of ‘Poor Planter’s Physician,’ under the title of ‘Every Man His Own Doctor, or the Poor Planter’s Physician,’ prescribing ‘plain and easy means for persons to cure themselves of all



or most of the distempers incident to this climate, and with very little charge, the medicines being chiefly of the growth and production of this country.’ This book was probably written by John Tennent and originally printed at Williamsburg. It was subsequently reprinted in several forms and also translated into German.

“Among other medical publications from the press of Benjamin Franklin we find:

“‘An Essay on the Iliac Passion,’ by Dr. Cadwallader Colden, in 1741.

“‘An Essay on the West India Dry Gripes, with the method of preventing and curing that cruel distemper,’ by Dr. Thomas Cadwalader, 1745.

\* The first dispensary for the free distribution of medicines to the poor in this country, was the Philadelphia Dispensary, founded in 1786, and recently (1922) merged with the Pennsylvania Hospital. It was first opened in a building rented from Christopher Marshall, and has rendered 137 years of splendid humanitarian service built upon the policy that “the sick may be relieved in a manner perfectly consistent with those noble feelings of the human heart which are inseparable from virtuous poverty, and in a manner agreeable to those refined precepts of Christianity which inculcate secrecy in acts of charity and benevolence.”



“‘A letter to a friend; Containing remarks on a discourse proposing a preparation of the body for the small pox. And the manner of receiving the infection,’ by Dr. John Kearsley, 1751.

“‘Medicinae Britannica.’ ‘To which Mr. John Bartram has added a preface, notes, and an appendix containing a description of a number of plants peculiar to America, their uses, virtues, etc.’; also printed in 1751.

“Throughout his long and varied career Benjamin Franklin appears to have had a predilection for the friendship of medical men. In addition to the brothers, Thomas and Phineas Bond, Benjamin Franklin probably counted as friend or correspondent every prominent medical man in the British Colonies. In Great Britain itself Franklin’s friends were numerous and influential. He was on intimate terms with such prominent men as John Fothergill, Sir William Watson, Sir John Pringle, William Heberdeen, William Hewson, Thomas Percival, William Cullen and Joseph Black. In France and on the Continent of Europe, Franklin was known to, if not by, every prominent medical man who was in any way interested in the progress of the general sciences.

“Through this wide and varied acquaintance with medical men of all parts of the civilized world Franklin was able to, and did, assist a number of American students of medicine who had gone to Europe to complete their medical education. Not the least noteworthy of these several students was John Morgan, a son of Evan Morgan, a merchant of Welsh descent, who had been a friend and neighbor of Benjamin Franklin, and had also been associated with him as a member of the Board of Trustees of the Pennsylvania Hospital.

“John Morgan, after serving as an apprentice in the office of Dr. John Redman, was appointed and served one year as the second apothecary of the Pennsylvania Hospital; Morgan subsequently went to Europe, where, largely through the kindly assistance of Benjamin Franklin, who was then residing in Europe as the agent of the Pennsylvania Colony, he was brought in contact with and permitted to study under the leading men of the medical profession in London, and later in Edinburgh. It was no doubt due to his associations in the latter city that Morgan was led to conceive the idea of forming a medical school in connection with the College of Philadelphia, and at the same time to attempt to introduce the then novel practice of writing prescriptions and of having them compounded and dispensed by a regularly educated apothecary.

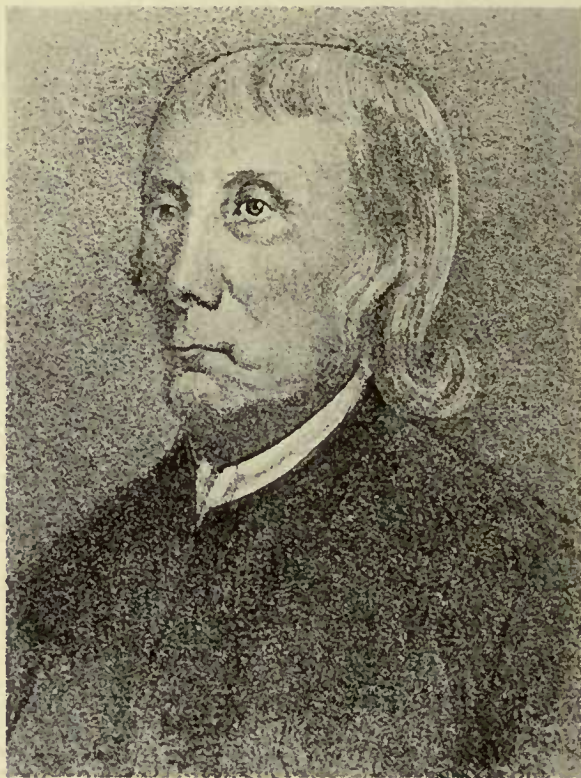
“The medical school founded by Morgan, in addition to acting as an incentive for the establishment of other schools, has itself taken a most important part in the progress of the science of medicine in this country, and was also the direct incentive that led to the establishment of schools of pharmacy.

“Altogether it may be said of Benjamin Franklin that in matters medical, as in matters political or scientific, he was, as a rule, far ahead of his contemporaries, either as the originator of ideas and innovations, the disseminator of useful knowledge, or the promoter and the champion of practices and teachings which his foresight and experience had taught him to be useful and beneficial. He was one of the foremost men of his age, and with the passing of years his true merit and worth will be more and more appreciated.”

At the close of the Revolutionary War, there were, perhaps, twenty apothecary shops in Philadelphia, but none had the position which was held by Marshall’s drug store at the sign of the Golden Ball. For many years, says the enlightened Daniel B. Smith, who had so many ideals for the pharmacist and threw so much light in writing and speech upon the history of pharmacy in Philadelphia, this was the only shop at which the physician was certain of securing good drugs and other medical supplies and of having his prescriptions properly prepared. (Daniel B. Smith, *Amer. Jour. Phar.*, Jan., 1830, 255.)

Christopher Marshall, the founder of the Marshall drug store, was born in Dublin, Ireland, in 1709, and after emigrating to this country was for some years a resident of Bucks County, Pa., and a member of the Middletown Monthly Meet-

ing. He then came to Philadelphia, and first established himself in the drug business in 1729, at Front and Chestnut Streets. In 1735 he purchased a property on the south side of Chestnut Street west of Second (present number 214), where he continued the business. He was a remarkable man in his day and filled many positions of honor and trust in our infant city. Though his principles as a Friend forbade it, he earnestly espoused the cause of the colonists, and with other militants seceded from the Society of Friends to build and support "The Free Quaker Meet-



CHRISTOPHER MARSHALL

ing House," still standing at the corner of Fifth and Arch Streets. His "Remembrancer," or Diary of the Revolution, is one of the most interesting and important of the contemporary records of the period covering the War of Independence. Christopher Marshall, Jr., and Charles Marshall, his sons, became his partners in 1765, and succeeded, in 1772, to the business, and, later, the latter became the active manager.

Charles Marshall was an apothecary, druggist, botanist and chemist. In his laboratories he manipulated his materials with knowledge and skill and won the highest confidence and esteem of the leading physicians of the city, whose friend and associate he became. The cause of his success was his "strict integrity, his scrupulous accuracy and his patient attention." (Daniel B. Smith, *Jour. Phila. Coll. Phar.*, Jan., 1830, 255-6.)



Charles Marshall retired from active participation in the business in 1801, the firm continuing, but unfortunately he retained his interest, and when, a few years later (1804), the firm became insolvent by lending its endorsement, all concerned with it were involved in bankruptcy.

His eldest daughter, Elizabeth Marshall (1768-1836) now became the proprietress of the business and under her skilful management it was soon placed on a sound financial basis. She was probably the first American woman pharmacist, and continued to manage the business until 1825, when it was sold to Charles Ellis and Isaac P. Morris.



CHARLES MARSHALL

Country doctors drew upon the Marshall store for their supplies. Alert and capable young men stood behind the counters and worked in the back room mixing medicines. From six to twelve of these were constantly employed and the store was a practical school from which not a few of the city's ablest druggists and apothecaries of the time were graduated. Among these were Charles Ellis and Isaac P. Morris, Dillwyn Parrish, prominent in business for many years at Eighth and Arch Streets and President of the College; and Frederick Brown, the originator of Brown's Jamaica Ginger, who was in business after 1822 at the northeast corner of Fifth and Chestnut Streets (an old stand universally known as the "War Office," because the building had been used during the presidencies of Washington and

Adams while Philadelphia was the capitol of the United States), and who became in time a leading and wealthy citizen. (*Amer. Jour. Phar.*, March and May, 1864.)

Another important drug store of this period was that of John Speakman at the northwest corner of Second and Market Streets, subsequently Speakman and Say, and later Thatcher and Thompson. It was in the room above this store that, at the suggestion of John Speakman, apothecary, the Academy of Natural Sciences of Philadelphia was founded on January 25, 1812, by a group of six persons, of which John Speakman and Gerard Troost—later first professor of chemistry at the College—were members.



ELIZABETH MARSHALL

The title of the institution was suggested on March 12, 1812, by Samuel Jackson—later first professor of materia medica and pharmacy at the College—who, however, was not a member of the Academy at this time. Gerard Troost was elected as the first president of the Academy. The paintings of John Speakman, Thomas Say and Gerard Troost, original members, hang on the walls of that institution. In its present buildings on the Parkway at Logan Circle, the Academy has one of the largest natural history collections in the country.

It is of interest to add that Daniel Thatcher and Isaac Thompson who, as Thatcher and Thompson, succeeded Speakman and Say, became original members of the Philadelphia College of Pharmacy in 1821; and Thatcher became, also, a member of the first Board of Trustees.

But as yet there were few shops like these. In many cases, in the retail as well as the wholesale stores, the sale of medicines in the early part of the nineteenth, as in the eighteenth century, was combined with trade in paints, varnishes, oils, window glass, dyestuffs and garden seeds. These heavy articles of merchandise were distributed by the same hands from which a customer received rhubarb, magnesia and calomel.

### Manufacture of Pharmaceuticals

An evolution, however, was taking place. Those who had been rolling pills, spreading plasters, powdering drugs in mortars, handling sieves, working screw-presses, filling jars with extracts and cerates, bottling castor oil, opodeldoc, God-



frey's Cordial, British Oil and the Old English "patent medicines," trimming heifers' teats to be put in alcohol for use on the mouths of nursing bottles, before there were rubber nipples for this purpose, and doing much more for their own customers in their back rooms, made more than they required for their own needs, and sold the surplus to other retailers. This was the beginning of the manufacturing of pharmaceuticals in our country which in the course of time made Philadelphia the leading center for such trade.

At the meeting of the Philadelphia College of Pharmacy held in College Hall on Zane Street in September, 1864, Samuel F. Troth (*Amer. Jour. Phar.*, 1874, 392) referred to the conditions of pharmacy in Philadelphia before the establishment of the College, stating that:

"Epsom salts was very little used when I was an apprentice; we used to purchase from 20 to 40 pounds of Glauber at a time, at  $2\frac{1}{4}$  cents per pound, while we would only buy a single keg of Epsom, holding about 25 pounds, at 15 cents. The first really nice Epsom salts I recollect having in our store, was the year the College was organized; John Farr, the noted chemist, was going to pay a visit to his friends in London, and offered to make some purchases for us, and one of the articles in that first importation of our house was two casks, 1190 pounds of beautiful Epsom salts, at a cost here of 7 cents per pound, which was so much in demand by the retailers that we increased our orders, until the Baltimore manufacturers put a stop to our importations of the article. Super. carb. soda, which has been such a common and universally used article of later years, was hardly ever seen when I was learning the business; I think the first we had in our store was purchased from Farr and Kunzi at \$1.25 per pound, in 1821, when we paid them the same price for tartaric acid.

"I attended the first and second courses of lectures of this institution, and should have applied for the diploma had there been any such prize to have been obtained, but the College did not even decide upon the form of diploma until I had been in business for myself between three and four years.

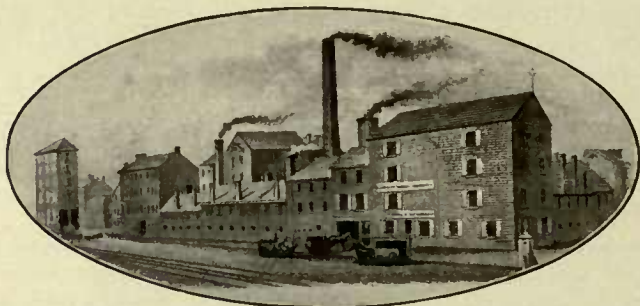
"Forty years ago, all the calcined magnesia we sold was burned in Abram Miller's pottery, opposite this building, where the public school now stands; we used to take a case of English carb. magnesia, pick out some of the nicest and hardest lumps, and pack the balance in earthen crocks procured from the pottery, and send them around to be put in the kiln when Miller burned his ware."

### Manufacture of Medicinal Chemicals

Probably the first to manufacture chemicals in this country was the firm of Christopher, Jr., and Charles Marshall who, as early as 1786, extensively made muriate of ammonia and Glauber's salt at their laboratory on North Third Street near the stone bridge over the Cohocksink Creek, and later, other chemicals.

In 1818 John Farr, of London, and Abraham Kunzi, of Switzerland, associated themselves as manufacturing chemists. Located at first on the corner of Arch and Twelfth Streets, they moved in 1820 to the south side of Coates Street (now Fairmount Avenue), above Fourth. Kunzi's retirement from the firm in 1838, brought forward two young men who were destined to become prominent figures in the chemical world—Thomas H. Powers, trained in Smith and Hodgson's store for a time after Daniel B. Smith's retirement from the business to take a teaching chair in Haverford College, a partner of Mr. Hodgson, and Farr's nephew, William Weightman. With them, Mr. Farr formed the new firm of John Farr and Company, and the factories were extended. They moved in 1839 to Ninth and Brown Streets. In 1841 the firm name was changed to Farr, Powers and Weight-

man, and at Mr. Farr's death in 1847, to Powers and Weightman. The reputation of the house grew rapidly until it became the leading establishment of its kind in the country and probably in the world engaged in the manufacture of medicinal and other chemicals.



LABORATORY OF POWERS AND WEIGHTMAN, NINTH AND PARRISH STREETS—1850

The history of the development of the chemical industry of this country would be incomplete without reference to the pioneer work of George D. Rosengarten. The manufacturing business of the firm of Rosengarten and Sons was established in 1822. The original partners were Seitler and Zeitler, the former a Swiss from one of the French Cantons, the latter a German from Würzburg. Shortly after Mr. Rosengarten became a partner in 1823, the business commenced to develop rapidly, and the firm was making quinine sulphate, sulphuric ether, spirit of nitre, ammonia water, acetic ether and Hoffman's anodyne. They manufactured morphine salts in 1832, piperine in 1833, mercurials and strychnine in 1834, veratrine in 1835, and iodide of lead, deuto—and protoiodide of mercury, iodide of iron, and iodide of sulphur, and codeine, bismuth and silver salts in 1836.

Originally in St. John Street, then on Arch Street above Twelfth, then at Broad and Vine Streets, then at Sixteenth and Vine Streets, and after 1856, at Sev-



LABORATORY OF GEORGE D. ROSENGARTEN, SIXTEENTH AND VINE STREETS—1836

enteenth and Fitzwater Streets, Mr. Rosengarten, who lived until 1890, saw the reputation of his house continuously grow with the growth of the country and reach far beyond the borders.

Like their competitors—Powers and Weightman—the excellence of the products of Rosengarten and Sons achieved world wide fame, and it was but natural,



therefore, that these two pioneer firms should amalgamate, as they did in 1905, as the Powers-Weightman-Rosengarten Company. Since then the business has been conducted by Harry B. Rosengarten (died February 19, 1921), and his four sons, Adolph G., George D., Joseph G., Jr., and Frederic.

### John Farr

John Farr (1791-1847). Son of Edward and Ann (Ward) Farr. Born in Lincolnshire, England. Early education in England, being especially interested in the study of chemistry. Came to this country in 1816, settling in Philadelphia. For nearly thirty years he was actively engaged in chemical manufacture as Farr and Kunzi, John Farr and Co., and Farr, Powers and Weightman, respectively, exerting an important influence upon the development of this industry. Was a lifelong member of St. Paul's P. E. Church and its warden. Member of the College (1821-1841).

### Thomas H. Powers

Thomas H. Powers (1812-1878). Born in Philadelphia. Son of Thomas and Susan Powers; maternal ancestry, colonial families of Society of Friends. Early education in Ludwick School, Walnut Street above Sixth. (Founded by Christopher Ludwick a wealthy German citizen, and one-time "Baker-general to the Army of the United States during the Revolutionary War"). Apprenticed (1828) to Daniel B. Smith, later Smith and Hodgson. Early evinced a love of chemical science, making original investigations "On Tartar Emetic" (1829), "On Barium and Some of the Salts of Protoxide of Barium" (1830), and "On the Preparation of Iodide of Mercury" (1830). Studied French and translated two elaborate papers by M. Robiquet and Boutron Charlard on "Bitter Almonds, and Their Essential Oils" (*Journal of Philadelphia College of Pharmacy*, Vol. IV, 1833, 67). Became a partner in Smith and Hodgson (1834), and demonstrated by experimental trial that he could successfully and profitably manufacture morphine, and urged his firm to embark in the enterprise, but the firm refused, and a great commercial opportunity was lost to Smith and Hodgson. In 1838, he left Smith and Hodgson and joined his friend, John Farr, in the chemical manufacturing business on Coates Street (now Fairmount Avenue) above Fourth, who associated with himself his nephew, William Weightman, and Thomas H. Powers under the firm name of John Farr and Co., which firm became, later, Powers and Weightman. Powers now devoted all his energies to his new position, acquiring complete mastery of the business and extending it greatly. Was elected a trustee of the College (1835-1843), and secretary of the Board of Trustees, but the rapidly increasing business of his firm prevented continued active participation in the work of the College, and he withdrew officially, although his interest in the College continued unabated; the new channel into which his energies were directed, prevented, also, subsequent contributions of scientific work, in which he took a deep interest and for which he had peculiar aptitude. He had an analytical mind, grasping almost intuitively the important points of a problem, a keenly retentive memory for details, and unusual initiative. Inflexibly outspoken in opposition to wrong, in conduct or principle, he was always considerate of others. His contributions to charity were many and increased with his business success, but were known to but few. The conscientious character of his early manhood remained unchanged. He was singularly unspoiled by success, as he had been undaunted by difficulty. His whole life was a bright example of industry, perseverance, Christian faithfulness and good works.

### William Weightman

William Weightman (1813-1904). Born in Waltham, Lincolnshire, England. Came to this country in 1829 at the solicitation of his uncle, John Farr, and obtained employment with Farr and Kunzi, manufacturing chemists, which became, successively, John Farr and Company, Farr, Powers and Weightman, and Powers and Weightman, of which, upon the death of Thomas H. Powers in 1878, he became the executive head. In 1883 Mr. Weightman admitted into partnership his two sons, Dr. John Farr Weightman and Dr. William Weight-



JOHN FARR



THOMAS H. POWERS



WILLIAM WEIGHTMAN



GEORGE D. ROSENGARTEN



man, both of whom died a few years afterwards. In 1893 Robert J. C. Walker, Mr. Weightman's son-in-law, was admitted into the firm. Upon Mr. Walker's death in 1903, his wife, Anne M. Weightman Walker, succeeded to membership in the firm, she being the only daughter of Mr. Weightman, and upon the death of the latter, she became the sole member of the firm until its consolidation with the firm of Rosengarten and Sons in 1905. William Weightman was a man of unflinching industry, eminently just in his transactions and held to an unusual degree the esteem and loyalty of his employees. Was elected a member of Philadelphia College of Pharmacy in 1856, and maintained an interest in the work of the institution until his demise.

### George D. Rosengarten

George D. Rosengarten (1801-1890). Born in Cassel, Germany, came to the country at eighteen, and in 1821 engaged in the wool business in Philadelphia. Was also a competent accountant, and having the confidence of Seitler and Zeitler, was employed to audit their accounts. In 1823 became a partner of Carl Zeitler, purchasing the interest of Seitler, under the firm name of Zeitler and Rosengarten; the next year Zeitler withdrew from the firm, and his interest was bought by George D. Rosengarten. In 1840 N. F. H. Denis, a young Frenchman, and pupil of the famous chemist Robiquet, became a partner and continued such under the firm name of Rosengarten and Denis until 1853, when he withdrew, and Samuel G. and Mitchell G., sons of George D. Rosengarten, were admitted into partnership, and the business conducted as Rosengarten and Sons. In 1860 Harry B. and Adolph G. Rosengarten became partners; the latter was engaged in the Civil War. His military career was a short, but brilliant one. He was killed at Murfreesboro, Tennessee, on December 29, 1862, while on a cavalry charge, being senior major in command of the 15th Pennsylvania Cavalry, and in command of the regiment in the absence of its colonel, Wm. J. Palmer, engaged in other military duty. George D. Rosengarten retired from the firm in 1879, after fifty-six years of business service. He died March 18, 1890, at the age of eighty-nine, after a life of unusual activity and usefulness.

### Manufacture of Technical Chemicals

Some who were not especially concerned with the manufacture of medicinal chemicals turned to the manufacture of technical chemicals. As early as 1793 John Harrison (son of Thomas Harrison, a well-known Quaker druggist of Philadelphia), the founder of the house of Harrison Brothers (recently amalgamated with E. I. du Pont de Nemours and Co., Inc.), after completing his scientific education in Europe returned to Philadelphia and began the manufacture of various chemicals, notably sulphuric acid made by the lead chamber process, in a laboratory on the north side of Green Street west of Third. In 1804 he erected a plant at Second and Huntingdon Streets, near Frankford Road, Kensington, continuing for a time his Green Street laboratory, and a few years later was making one-half million pounds of sulphuric acid annually. In 1814 Mr. Harrison introduced, for the first time in this country, the use of platinum for the concentration of sulphuric acid.

As Samuel P. Sadtler (*Amer. Jour. Pharm.*, 1921, 201) has stated:

"John Harrison was not only the earliest successful manufacturer of sulphuric acid in America, but the first in this country to concentrate it in platinum. Farr and Kunzi were next in Philadelphia (1822) to follow the lead of Harrison in making sulphuric acid, and shortly afterwards Wetherill and Bros., then (1829) Chas. Lennig, the founder of the present firm of Chas. Lennig and Co., Inc., and Carter and Scattergood in 1834."

Nitric acid was made by Christopher Marshall, Jr., at the close of the eighteenth century, and John Harrison began to make both nitric and muriatic acids in

1804. Carter and Scattergood followed in the manufacture of these acids, and also citric and tartaric acids in 1834. The manufacture of other chemicals then rapidly developed.

In 1785 Samuel Wetherill and Son went into the drug business on Front Street above Arch. Here, for many years, "Wetherill's Drug Store" was a landmark; and sons and grandson were brought up to the business.

Like Charles Marshall, Samuel Wetherill was a Free or Fighting Quaker, having been expelled from the Society of Friends for furnishing clothes to the patriot troops, and it is said that his timely shipment of supplies to Washington's little army at Valley Forge saved it from disbanding—whereupon, with other men in a like situation, he started the Society called "Free or Fighting Quakers," and helped to build "The Free Quaker Meeting House" at the southwest corner of Fifth and Arch Streets; Washington and Franklin being among the original contributors to its building fund. And by a curious coincidence, the body of Franklin lies interred just across the street from "The Free Quaker Meeting House" in Christ Church Cemetery. The Meeting House was completed in 1783 and from this time until the death of Samuel Wetherill (1816), the meetings were attended by the most eminent and intelligent people. Mrs. Madison, wife of the President, attended the meetings, and always referred to the sermons of Samuel Wetherill as most interesting. Gradually, however, the Free Quakers, never large in number, became fewer, and the Meeting House was finally closed in 1835.

Samuel Wetherill, Jr., was evidently the active member of the firm. The Wetherills imported white lead, paints and chemicals from London. They were the first manufacturers of white lead in this country, employing the corroding process, and making it before the year 1790. Their first white lead factory was built in 1804 at the northwest corner of Broad and Chestnut Streets, but its growth was opposed by prejudices against everything American, and partiality for everything English, and by the systematic exertions of the English manufacturers to suppress and keep down all rival establishments in this country; the factory burned down a few years later.

In 1808 the firm erected a new factory on the then Goose Pond at Twelfth and Cherry Streets, at a cost of \$30,000, which was burned down in 1813. The fire was of incendiary origin, started by a young British officer the day before he sailed for England. The factory was promptly rebuilt.

After Samuel Wetherill's death in 1816, Samuel Wetherill, Jr.'s, sons joined in the business, and the firm became Samuel Wetherill and Sons. Its greatest annual output up to 1820 was 4,000 hundred weight of white lead, and the highest price obtained was during the war of 1812, when sold at \$23 per hundred weight. In that year Samuel Wetherill and Sons brought lead ore in wagons from Tennessee and West Virginia and mined and smelted over 100 tons from small veins on Perkiomen Creek in Montgomery County, Pa., on Mill Grove farm owned by Samuel Wetherill.

After the death of Samuel Wetherill, Jr., in 1829, the firm became Wetherill Brothers, the store being located at No. 65 North Front Street, and the warehouse and mill on Coomb's alley back of Second Street. Samuel Wetherill, having bought ten acres of land on the bank of the Schuylkill River below Chestnut Street, moved



there in 1847; his sons (Wetherill and Brother), built the white lead and chemical works that continue to this day.

The firm of Mordecai and Samuel N. Lewis, afterwards John T. Lewis and Brothers, began the manufacture of white lead in 1812, of linseed oil in 1830, and of acetic acid in 1847.

It should be noted, also, that in 1807 John Wetherill and Samuel Budd engaged in the business of paint making and paint selling, and of wholesale druggists, as John Wetherill and Co., on Front Street above Market. They were not corrodors of lead or manufacturers of white lead. In 1816 John Wetherill retired from the firm, and his nephew, George Deacon Wetherill (a founder of the College and a member from 1821 to 1875), succeeded to his interest. Under the firm name of George D. Wetherill and Co., the business was carried on until the retirement of Mr. Budd in 1822, when Mr. Wetherill continued it under the same firm name, which remained unchanged until its incorporation in 1896.

Since 1835 many members of the Wetherill family have been identified with the business. Starting with one stone mill for grinding white lead in oil and one for colors, the house has kept up with the march of improvement. Time was when the trains of old Conestoga wagons, or veritable prairie schooners, came from the Western part of the Eastern states, then the "Far West," every six months or quarter of the year to load up with Wetherill's white lead and colors, and all the other merchandise they had to transport, long before the days of railroads and telegraph. It is of interest to add that the firm, while primarily a paint concern, remained continuously in the wholesale drug business until 1895.

Another firm which exerted an important influence on the development of technical chemical manufacture was Carter and Scattergood, conducted from 1834 to 1911, and then absorbed by "The Henry Bower Chemical Manufacturing Company." As Samuel P. Sadtler (*Ibid.*) has written:

"John Carter and Joseph Scattergood bought out (1834) the old-established business of John and Daniel Elliott \* founded in 1754 by their grandfather John Elliott. Joseph Scattergood graduated from the Philadelphia College of Pharmacy in 1829. The Elliott's place of business and factory was originally on Front Street between Chestnut and Walnut Streets, but in 1812 the manufacturing work was transferred to a new factory which they erected at Nineteenth and Pine Streets, John Carter becoming their apprentice on January 1, 1816. The list of chemicals produced by Carter and Scattergood was an extensive one, John Carter being the manufacturer and Joseph Scattergood the business man of the concern. It included citric, tartaric, oxalic, nitric acid and sulphuric acids, bichromate and prussiates of potash and many other articles, but their operations during the first ten years of their business were on a scale which in this day would be considered quite small."

### Establishment of Drug Milling

The pioneer drug mill in this country, perhaps in the world, was established by Charles V. Hagner at the Falls of Schuylkill. It was propelled by water power. Hagner began in 1812 with several tons of cream of tartar with which, to save the labor of powdering in mortars, a druggist named Dr. Haral had doubtfully entrusted him. Hagner agreed to perform the service for less than three cents a

\* Daniel Elliott was one of the founders of the College and a member of the first Board of Trustees.—EDITOR.

pound, which was the price paid for hand work, and hauling it out of the city in teams he put it on the mill stones used for grinding plaster, ores, etc. Under the old method of hand grinding, the powdering would have required the work of several men for many months; in twelve hours it was returned reduced to a powder, to the druggist's amazement and indignation. "He declared it had been ruined; that it was impossible in a single night to effect that which it would have occupied his men months to accomplish. A meeting of the principal druggists and other experts was held at his office to consider the matter, and the cream of tartar was examined and tested in various ways, resulting in its being pronounced perfectly good, unusually white, and finer than any of them had ever seen before." ("History of Philadelphia," Scharf and Westcott, Vol. III, 2277.)

The fame of the new method spread far and wide, and the industry of drug grinding was revolutionized. Hagner's success was so great that in 1820 he erected a mill at Manayunk and was one of the pioneers in building up that town, and in 1839 he purchased the Lancasterian school building in the city and established his drug mill business on a more extended scale.

### Pharmaceutical Events in 1821

Probably the most comprehensive survey of matters pharmaceutical of 1821 that has been published is that of Otto Raubenheimer, who in a paper read before the Historical Section of the American Pharmaceutical Association in August, 1921 (*Jour. A. Ph. A.*, 1922, 34), stated the following:

#### COLLEGES AND UNIVERSITIES FOUNDED

The first College of Pharmacy in the United States, namely, the Philadelphia College of Pharmacy, was established and a systematic course of lectures was given. This most important pharmaceutical event was duly celebrated by a Centennial in February and June, 1921.

The University of Virginia was also founded, and the 100th anniversary was celebrated from May 31 to June 3, 1921.

The Kings County Medical Society in Brooklyn, N. Y., was established.

McGill College and University founded at Montreal.

The University of Pennsylvania confers—only for a short time—the degree of Master of Pharmacy—the direct cause of the foundation of the Philadelphia College of Pharmacy.

Liebig goes to Paris to study under Gay-Lussac and work on Fulminates. Schönbein, of nitrocellulose and ozone fame, enters the University of Tübingen. Heinrich Rose graduates at the University of Kiel.

A. A. Meckel, of Halle, is elected professor of botany and forensic medicine at the University of Berne. Eilhard Mitscherlich joins the celebrated Berzelius at the University of Stockholm to pursue his inquiries on the connection between crystalline form and chemical composition. Mitscherlich in the same year succeeds Klaproth as professor of chemistry at the University of Berlin.

Friedrich Woehler, under the influence of Gmelin, deserts medicine for chemistry and goes to the laboratory of that distinguished chemist at Heidelberg.

Pereira studies pharmacy and chemistry in London.

Heinrich Robert Göppert, an apotheker's son, and later the founder of the first pharmaceutical institute connected with a university, that of Breslau, studies medicine in Breslau and Berlin.

Alexander Bunge, the celebrated Russian botanist, graduates from high school and enters the University of Dorpat.

Daniel Drake is appointed Professor of Medicine in the College of Ohio.



Nathan Smith establishes the Medical Department at Yale.

Ernst Heinrich Weber becomes Professor of Anatomy and Physiology at the University of Leipzig.

The Pharmacy Section of the French Académie de Médecine in Paris (established 1820) elects six new "titulary" members: Caventou, Clarion, Boudet, Dadet, Laubert and Derosne.

#### INVENTIONS AND DISCOVERIES

Faraday prepares Ethylene di-iodide by the action of sunlight on Ethylene and Iodine.

Doebereiner isolates aldehyde-ammonia and determines the relation of acetic and oxalic acid to alcohol.

C. Schlippe discovers Stibio-Natrium Sulphuratum, the double salt which still bears his name.

Lassaigue and Feneulle isolate Cathartin from Senna leaves and Winckler from Buckthorn berries.

Desfosses isolates Solanin.

Pelletier and Caventou and also Robiquet isolate Caffeine, which base was already discovered in 1820 by the German apotheker Runge, a fact which is frequently forgotten.

Pelletier and Caventou discover Acide Quinovique, as one of the constituents of Cinchona. It was isolated from the bark of China Nova, in which it occurs combined with lime.

Henry and Caventou isolate Gentianin.

Rose prepares Titanium Oxide.

Iodine is found in brine from springs in Germany.

Coindet introduces successfully Potassium Iodide as a remedy against goitre.

Fraunhofer brings forth the theory of undulation.

Fresnel gives birth to the theory of double refraction.

Faraday begins his classic work on the theory of electricity and electromagnetism.

Peschier isolates Polygalic Acid from Senega Root.

#### EDUCATIONAL EVENTS

Cagniard de la Tour noticed that many gases could not be liquefied above a certain temperature by any pressure.

Mitscherlich discovers dimorphism and polymorphism, and thereby reconstructs the science of crystallography.

Dulong discovers Specific Atomic Heat.

Seebeck notices Thermo-electricity.

Berzelius begins his classic work on the System of Atomic Weights.

Reichenbach establishes a chemical plant in Blansko, Moravia, for the destructive distillation of wood, which led to his discovery of Creosote in 1830.

Iodine Spring was discovered at Salt Sulphur Springs, W. Va.

Woehler discovers that by burning  $\text{Hg}(\text{CNS})_2$  the so-called "Pharaoh's Serpents" are evolved.

Hofschläger isolates Delphinic Acid from Stavesacre, said to be crystalline and volatile.

Payen and Chevallier distil Oil of Hops.

H. B. Kunth names the plant, which furnishes Guarana, *Paullinia Cupana*, discovered by Humboldt and Bornpland on the river Orinoco.

Bishop Agardh divides rootless plants into Algae, Fungi and Lichens.

Apotheker Wilhelm Meissner at Halle originates the word "Alkaloid."

Croton Oil is imported from India to England and enters the European materia medica.

The traveler Perrottet brings Resin of Elemi and living specimens of the tree from Manila to Paris, and Maujean, a French pharmacien, found two resins, one soluble in cold and the other in hot alcohol.

Buchu, namely, *Barosma crenulata*, was first imported by the drug house of Reece & Co., of London. It was introduced to the medical profession through R. Reece in *Monthly Gazette for Health*, February, 1821, 799.

## BORN IN 1821

## PHARMACISTS AND CHEMISTS

Theodor Poleck, the successor to the celebrated Duflos, at Breslau, Germany.

Otto Ziurek, the Berlin Apotheker, who in 1858 founded the first private chemical institute.

Edward Livingstone Youmans, American chemist.

Andreas Georg Staedeler, the Hanover apotheker and professor.

Lawrence Turnbull, Scottish-American chemist and physician.

James Sheridan Muspratt, Irish technical chemist, who studied under Liebig and who is the author of a master work on applied chemistry.

## BOTANISTS

In 1821 four celebrated botanists were born, namely, Nils Johan Andersson, of Sweden; Julius W. Wigand and Fritz Müller, both of Germany; Robert Bentley, well-known English botanist, teacher and author.

## PHYSICIANS

Elizabeth Blackwell, first woman M.D. in the United States.

William Paine, American physician and editor.

George H. Taylor, American physician and inventor.

Francis Minot, American physician and writer.

John Fox Hammond, American physician.

Elias Samuel Cooper, American surgeon.

Franz von Leydig, German physician, professor of anatomy and naturalist.

## SCIENTISTS AND OTHERS

James Croll, Scottish physicist.

Rudolf von Roth, German Orientalist.

August E. Mariette, French Egyptologist.

Samuel Eliot, American editor and author.

Nathan C. Webster, American editor and inventor.

Samuel Wetherill, American inventor and soldier.

George S. Appleton, American publisher.

Charles Robert Ingersoll, American statesman.

Perhaps the most noted born in 1821, having a great influence on physics, chemistry, pharmacy, medicine, biology and other sciences, are Hermann von Helmholtz, German physicist and physiologist, and Rudolf von Virchow, German pathologist. *The Scientific Monthly* for July, 1921, contains excellent biographies of both of these scientists.

## DIED IN 1821

## PHARMACISTS AND CHEMISTS

Charles Louis Cadet de Gassicourt, celebrated French military pharmacist.

Carl Wilhelm Juch, German pharmacist and chemist, who published the first commentary on a pharmacopœia, namely, the Ph. Borussica II, in 1805.

Franz Carl Achar, a pupil of Marggraf, German chemist, who in 1796 established the first beet sugar factory.

François Tingry, a student of Rouelle. Tingry became professor of chemistry and natural history in Geneva.

## BOTANISTS

Anders Johan Retzius, of Sweden.

Louis Claude Marie Richard, of France.



PHYSICIANS

Jean Nicolas Corvisart, founder of the flourishing clinical school at the Paris Hospital La Charité. He was appointed professor in the College de France and member of the Academie des Sciences. Napoleon I created him baron and member of the Legion of Honor.

Eric Bollmann, Hannoverian physician in the United States.

Samuel Bard, American physician and writer.

Timothy Childs, American physician and statesman.

Johann Peter Frank, a rare and happy mixture of German thoroughness and French intelligence, born 1745 in Rotalben, Palatinate (a countryman of the late C. Lewis Diehl and myself), became the founder of modern public hygiene by his master work, "System einer vollständigen medicinischen Polizey," published at Manheim in 1777-88 by Schwann, the printer of Schiller's "Räuber."

And last, but not least, Lyman Spalding, whose name will or should live forever as the originator of the United States Pharmacopœia.

POETS

I must not neglect to mention the death of John Keats, who died of tuberculosis in Rome on February 23, 1821, on the very day when the Philadelphia College of Pharmacy was established. Keats was born in London on October 29, 1795, and attended school in Enfield. In 1810 he was apprenticed to a surgeon at Edmonton, and in 1815 he went to London to practice as a hospital pharmacist. In July, 1816, he passed the examination at Apothecaries Hall, but shortly afterwards left pharmacy to become a poet.

BIBLIOGRAPHY

Pharmacopœa Rossica, the Russian Pharmacopœia.

Sir William Jackson Hooker: Flora Scotica.

F. Magendie: Formulaires, which introduced the alkaloids into therapeutics.

Schubarth: Vergleichende Nomenklatur.

A. B. Lambert publishes in London "An Illustration of the Genus Cinchona."

Ruiz and Pavon, two Peruvian botanists, between 1821 and 1826 wrote the *Newwa Quinologia*. This work, however, remained unpublished until it was purchased by John Eliot Howard, the English quinine manufacturer, who published it in London in 1862, folio, 163 pages and 30 beautiful colored plates. The illustrations of cinchona are taken from Pavon's specimens in the herbarium at Madrid, together with 3 plates representing the structure of several barks.

Johann Peter Frank (1745-1821) published an important treatise on therapeutics, *i. e.*, "De curandis hominum morbis epitome," Vienna, 1792-1821.

The celebrated Magendie, whose name continues to live in pharmacy and medicine through Magendie's Solution of Morphine Sulphate, founded the first periodical devoted exclusively to physiology, *i. e.*, *Journal de physiologie expérimentale*.

Jules Germain Cloquet begins the publication of his splendid atlas, *Anatomic de l'homme*, consisting of 5 volumes, illustrated with 300 folio plates.

Johann Friedrich Meckel, of Halle, called the younger Meckel and the German Cuvier, the greatest anatomist in Germany before Johannes Müller, published (1821-30) his great system of comparative anatomy.

Apotheker Stoltze edits (1821-25) *Deutsches Jahrbuch der Pharmazie*.

Berzelius begins the publication of *Jahresberichte über die Fortschritte des Chemie und Mineralogie*.

Karl Johann Bernhard Karsten, the mineralogist, publishes *Metallurgisch de Reise*.

Jean Marc Gaspard Itard publishes his "Treatise on Otology."

Apotheker J. M. Schiller, of Rothenburg, the promoter of the idea of one Pharmacopœia for entire Germany, writes a Treatise how Pharmacopœias and Dispensatories should be improved.

## 42 First Century of the Philadelphia College of Pharmacy

The second volume of De Candolle's *Regni vegetabilis systema naturales*, published in Paris.

Varnhagen, of Schmalkalden, apotheker and book dealer, undertakes to publish an almanach with biographies of eminent pharmacists, chemists and physicians.

Taxe or price list for medicines in Darmstadt was published.

Already at this early date Apotheker Schmidt, of Sonderburg, calls attention to the practice that laboratories manufacture galenicals which should be prepared by the pharmacist himself.

James Cutbush, chemist and apothecary at 25 South Fourth Street, Philadelphia, published his "Synopsis of Chemistry," which in alphabetical order contains chemical names, synonyms and definitions.

Charles W. Coindet: *Nouvelles Recherches sur les effets de l'iode* (Bibl. univ. de Genève).

*Claudii Galeni Opera Omnia*, in 20 volumes, by Dr. Carolus Gottlob Kuhn, a Latin translation of Galen's Greek masterwork.

And so, with these events as the background, the amazing progress of American Pharmacy during the past century has been achieved.



## CHAPTER II

## FOUNDING OF THE COLLEGE

In 1821 Pharmacy was probably at a lower ebb than it had been for many years. The dispensing of drugs and medicines had fallen into the hands of those who, for the most part, were simply tradesmen. The division of labor, as the economist has termed it, in a commercial center like Philadelphia, had produced the druggist (a name reserved for the wholesale druggist), the manufacturing chemist, the drug grinder, the oil and paint dealer, the varnish maker, and the apothecary, who was a compounder of prescriptions and a retail drug dealer, though in many cases these branches of trade were still combined.

The retailer, while the physician was dispensing his own medicine, had been little more than a storekeeper, *i. e.*, he simply kept drugs in stock for sale to physicians. Now that he was performing difficult and important tasks in the compounding and dispensing of drugs, he needed scientific training, which he had but imperfect opportunities of obtaining. He possessed but the most rudimentary knowledge regarding the properties of the materials he sold. Tests were not applied to determine the purity, quality and strength of products. Arsenic and cream of tartar were sold over the counter most carelessly. Fatal results now and again resulted from ignorance and worse. Many of the more eager, with commercial ends in mind, lowered their prices. Older and better established shops must follow to meet such competition, and in consequence the market was filled with inferior, if not entirely spurious, drugs and preparations. (*Amer. Jour. Phar.*, Sept. 1916, 389.) Alum was mixed with cream of tartar, corn with ginger, in the drug mills. (*Ibid.*, July, 1851, 203.) The bark which was available for use for fever and ague, a physician in Upper Merion Township, near Philadelphia, complained, was "actually inferior to oak saw dust." (*Poulson's Advertiser*, Nov. 3, 1821.) And as Samuel Jackson stated in 1821, this condition of affairs was not solely due to the druggist and apothecary; "the great body of practitioners, especially those residing in the country, knowing medicines only by their names, have been ignorant of the very different qualities subsisting among them. In their purchases, incapable of making a selection as to quality, the lowest price was preferred. Inferior, deteriorated and sophisticated medicines and drugs met with a ready sale, while the choicest and most select, because of higher price, could very seldom meet with a purchaser." (*Phila. Jour. Med. and Phys. Sciences*, Vol. V, No. 2, 1822.)

### Drug Standards

On the other hand, however much standards may or may not have been lowered in two or three decades, it was quite certain that there was in general an awakening sense of the importance of the practice of pharmacy, a widening appreciation of the necessity of more and better information with reference to materia medica and related branches of knowledge, which affected the whole community,

and which was plainly reflected in the attitude of some men engaged in the drug business who were deeply conscientious and highly intelligent. That the sale of opium, poisons in great variety, materials calculated to exert the most untoward results upon the takers of them, should be unregulated, when it was known that the most ignorant fellow, if he liked, might enter the trade, furnished ground for a feeling of profound disquietude.

No one knew better than the physician, who was progressing all the time, what danger lay on this side, and the University of Pennsylvania, whose home was now in the old house on Ninth above Chestnut Street, built by the State for the use of the President of the United States while Philadelphia was still the seat of the Federal government, decided to act in the matter. It would establish standards for the apothecary. It would try to teach him the rudiments of his art, point out to him its close connection with the profession of medicine, fill him with a sense of his public responsibilities, and in some manner put upon him a distinguishing mark if he should seem to be qualified for his tasks.



UNIVERSITY OF PENNSYLVANIA, 1802-1826

(Illustration, courtesy of Edgar Fahs Smith)

### Teaching of Pharmacy at the University of Pennsylvania

It was in 1816 that the Trustees of the University of Pennsylvania established a Faculty of Natural Sciences, covering the teaching of botany, natural history (including geology and zoölogy), chemistry, mineralogy and comparative anatomy, and gave a course in these sciences. In connection with this course, Dr. James Mease was granted permission to open a regular course of lectures on pharmacy in the University and continued his lectures for two or three years. (M. I. Wilbert, *Amer. Jour. Phar.*, Oct. 1916, 449.)

The subject passed to Dr. John Redman Coxe. From 1809 to 1818 he had been professor of chemistry in the medical school of the University. In the latter year, his place was taken by Dr. Robert Hare, and he was transferred to the chair of materia medica to succeed Dr. John Syng Dorsey; in 1819, the Board of Trustees resolved that the teaching of the pharmaceutic art should be a part of the duties



of the professor of materia medica and pharmacy,\* and that a course of lectures be established intended for pharmaceutical students.

Coxe was a grandson of Dr. John Redman, a prominent figure in the early medical history of the city, a pupil of Dr. Benjamin Rush and a medical graduate of the University of Pennsylvania of the class of 1794. He had passed through the yellow fever epidemics and enjoyed a training abroad. He had been the editor of the *Medical Museum*, one of the earliest of the country's medical periodicals, and was the author of a dispensatory,

Now in 1819, when it was decided by the University to establish a course of lectures for pharmaceutical students, Coxe was also dean of the medical faculty and an influential figure in the medical school. His success, however, in attracting young men to him as students, was not great, and he developed a plan for granting degrees to apothecaries which he thought would establish closer relations between himself and the more intelligent leaders of the drug trade. After conferring with a number of these, he prepared a "Statement" in March, 1820, which sixteen of them signed, saying that they did not hesitate to recommend the "plan" which Dr. Coxe had generally outlined in his paper "to the consideration of the Trustees of the University of Pennsylvania." The statement was as follows:

"Pharmacy is a branch of the science of medicine of the highest importance to the public welfare. It is the art of properly preparing, preserving and compounding the various objects of the materia medica for the use of the practicing physicians. Inasmuch as most of the means by which this is effected are truly of a chemical nature, an intimate acquaintance with chemistry can scarcely be considered as not being absolutely essential to the apothecary, to whose hands these means are for the most part confided, and it is consequently of the greatest importance to society that he should be perfectly grounded both in the theoretical and practical part of the art he professes.

"Nor is it of less importance that the physician himself should possess an adequate acquaintance with the branch of his science that is so closely connected with carrying into effect his curative indications; without a knowledge of which, it is impossible for him duly to appreciate the purity of the medicines he may prescribe, or to be enabled to detect the ignorance of the apothecary by whom his prescriptions may be prepared. Whatever may be the rank he holds in the estimation of the public, and however great his talents, it is obvious that his success in practice must greatly depend on the confidence which he may have in the knowledge and integrity of the person to whom he confides the responsible task of compounding his prescriptions, and of the assurance he may feel that such confidence is not misplaced in the employment by the apothecary of inert or deteriorated articles. Feeling, as we all must, that in matters of life and death so much confidence is actually placed in the integrity of the apothecary, it cannot be doubted that the more honor we attach to his profession, by so much the more may we reasonably hope a generous and laudable ambition will lead him to guard against any injury which the public might sustain by any inattention, or want of information, on his part, and it, therefore, is presumable that an honorary degree, awarded by the University to such members as have taken every measure to become perfect masters of their profession, cannot but prove of the utmost benefit to society. Instead of degrading this important profession, it becomes the guardian of the public to honor those who may deserve their approbation by having undergone a regular initiation into the mys-

\* The first school in America to include pharmacy in the title of one of its professors was the Medical School of the College of Philadelphia, when Dr. Samuel Powell Griffiths was elected professor of materia medica and pharmacy in 1789. On the fusion of the College of Philadelphia with the University of Pennsylvania in 1791, Dr. Griffiths was continued as professor of materia medica and pharmacy until he resigned in 1796.—M. I. WILBERT.

teries and arcana which are attached to it; this can only be the case with those who, feeling a proper pride, will bestow on their education such attention as every unprejudiced person must perceive it to deserve, and this can scarcely be hoped for, unless some honorary distinction shall await their exertions by which they may be separated from those unworthy members who, from pecuniary motives alone, are associated with them.

"Pharmacy has been divided into theoretical and practical—the first consisting not merely of speculative opinions, but of a knowledge of facts and principles tending to explain the rationale of processes—the latter comprehending the mere manual labor employed in those processes.

"The former of these may, therefore, be justly styled scientific pharmacy, which is equally essential to the physician and to the apothecary. It is, as before affirmed, closely connected with chemistry, inasmuch as it is founded on the principles of that science and can in no wise be separate therefrom. It establishes beyond a doubt the necessity of chemistry to the physician and evinces clearly that he cannot be deficient in it without being correspondingly defective in his practical pursuits.

"In former times the apothecary and the grocer were united together. The experience of the best physicians led them, however, to perceive the incongruity of this connection and measures were adopted to separate them. In London, by the exertions of Dr. Maycron and others, an act of incorporation was procured for the apothecaries from James I on the plea that medicines might be better prepared and in opposition to persons who impose unwholesome remedies on the people. They were even so highly estimated that by an act made perpetual in the reign of George I they were exempted from serving upon juries or in ward and parish offices. They were liable to have their shops visited by the Censors of the College, who were empowered to destroy such articles as they found imperfect; and they were obliged to compound their medicines according to the formulas prescribed in the College Dispensatory.\*

"It is suggested that by a close attention for at least three years in an apothecary's shop to the practical part of their duties and after two courses of lectures on the subject of chemistry, materia medica and pharmacy such persons may be subjected to an examination by the professors of those branches in the University, and, if found qualified, may receive a degree under some appropriate denomination which, being publicly known, may ensure them a greater chance of popular favor than will be probably granted to those who are neglectful or indifferent to the high responsibility they are invested with.

"In order that this measure, should it meet with the approbation of the Trustees, may not have an unfair tendency, it is suggested that it may be proper to grant an honorary degree of the same nature to those apothecaries of standing in Philadelphia who may sanction the proposed plan, as it is believed that there are few, if any, who will not view it as tending to render their profession more honorable and deserving of that estimation in which it ought unquestionably to be held.

"In addition to what is stated above it may be urged in favor of the plan proposed that in Europe no one can practice the duties of the apothecary without having undergone a regular education of, it is believed, seven years and becoming a member of the Apothecaries' Company. Such an incorporated association does not exist here; and in no other way than by the measure proposed can the benefit be anticipated or realized by the community."

### Institution of Master of Pharmacy Degree by the University

Such consideration as was requested was given the subject by the Board of Trustees of the University of Pennsylvania, and on February 6, 1821, it adopted the following resolutions:

"Resolved, (1) That the degree of Master of Pharmacy be, and it is hereby instituted, to be conferred hereafter by the Trustees of this University on such persons exercising or

\* Evidently, the "Dispensatory of the College of Physicians of London" is meant.—  
EDITOR.



intending to exercise the profession of an apothecary as are and shall be duly qualified to receive the same.

"(2) That the Faculty of Medicine be requested to report to this Board at their next meeting, a proper form of diploma and also a list of such apothecaries in the City and Liberties of Philadelphia as are desirous and, in their opinion, deserving of obtaining the degree of Master of Pharmacy; and, unless sufficient reasons to the contrary shall appear, the degree of Master of Pharmacy shall be conferred on such individuals respectively.

"(3) That every person who shall have served a regular apprenticeship of at least three years, with a respectable apothecary, or a master of pharmacy, and who shall exercise or intend to exercise the profession of an apothecary, in this State or elsewhere, may, on application to the Board, obtain the degree of Master of Pharmacy; provided, he shall produce a certificate of the Faculty of Medicine, signed by the dean thereof, of his being qualified to receive the same, which certificate the Faculty may grant on the attestation of the professor of chemistry, materia medica and pharmacy, who shall have examined the candidate. He must also produce a certificate of his good moral character.

"(4) That in the future it shall be requisite for obtaining such degree, that the candidate shall have attended at least two courses of lectures on chemistry, materia medica and pharmacy in this University." (*Poulson's Advertiser*, February 19, 1821.)

### Reaction of Druggists and Apothecaries

The reaction of the druggists and apothecaries to these resolutions was immediate and pronounced. In some pride was hurt; with others professional standing was at stake; Dr. Coxe, who was manifestly responsible for what had been done, was not a man in whom they reposed confidence as a pharmaceutical adviser or teacher. He was assailed on all sides. Writers attacked the resolution in the press. One signing himself "Equity" sent a long communication to the *Philadelphia Gazette*. The action of the Trustees, he said, "would lessen competition among the vendors of medicine" since it would diminish the number of apothecaries, and the profits of those who remained would be increased.

The country was in an era of "hard times"; all business was stagnant, and to require that apothecaries should have diplomas to carry on their trade would be a heavy tax upon them. It was hardly to be expected that the professors of chemistry, materia medica and pharmacy in the University of Pennsylvania would examine candidates for degrees, that the dean would give out certificates and that the janitor would furnish parchment and tin boxes for nothing. To get a diploma as a doctor of medicine cost a graduate in gratuities to the different professors about \$40, and if the cost of becoming a master of pharmacy should be only \$10 or \$15 that sum would be more than most apothecaries could well afford to pay. The project of "taxing them for the benefit of the University" had been devised "at an unfortunate time when many of them found it difficult to pay their necessary shop and house expenses."

The incomes of some apothecaries, if the University's system were adopted, would be diminished if not totally destroyed. They had entered upon the business in good faith, but it was not declared that any one wishing to engage in it must have served an apprenticeship of at least three years and that the University, and it alone, was the proper judge of their professional qualifications and moral character. In a word it was a "tyrannical act" calculated to deprive many of "the means

of subsistence," for at such a time, if they were to offer themselves as day laborers, they could not obtain employment. The ruin of fifty or sixty apothecaries whose income would amount to but a few hundred dollars apiece, and whose stock in trade could not average much more, might appear "like a very trifle to some people of large fortune," but it was a very different matter to the "sufferers."

Anyway certain members of the Faculty of Medicine might very probably be the best judges of the qualifications of an apothecary. A physician might know the theory, but when he opened a dispensing shop he generally had the forethought to obtain the services of a practical apothecary for a time at least. Many things belonging to the art were not to be met with in books of chemistry, materia medica and pharmacy; success in it depended quite as much on practice as on study. Professors might examine some men now engaged in business and find them ignorant on many subjects, but they might, on the other hand, be possessed of knowledge which the examiners would possibly be unable properly to appreciate.

It was contended that such a regulation of the business by the University would keep the shops supplied with good medicines and lessen the number of mistakes occurring from ignorance and inattention. But this might not be the result after all. There was a vulgar saying that "one man may steal a horse where another dare not peep over a hedge." The master of pharmacy finding himself in a privileged class would very likely give less attention to the details of the business, committing it in all probability to assistants, who might be mere boys, as they were in many cases in dispensaries kept by the physicians themselves. It was to be proven that masters of pharmacy would be more careful in mixing drugs and filling prescriptions than were shopkeepers who might not be so honored by the University.

It was argued by defendants of the resolution that the University was not "sovereign." The public need not withdraw its confidence from the ungraduated apothecary. But, in this case, as a matter of fact, it was "sovereign" and ruled "the empire of opinion with despotic sway." A law of the legislature of Pennsylvania limiting the number of apothecaries in Philadelphia would not restrict the freedom of trade so effectually as these resolutions of the Trustees.

Hitherto the business of making and selling medicines in Philadelphia had been as free as any other. True some were deficient in skill, but this was the case in other professions, and the apothecaries were as well qualified to do what they were engaged in doing as other men.

Many new shops had been opened in the past few years; there would have been more but for the physicians' raising the character of some dealers and crying down that of others, not so much in the interest of their patients and the cause of good service, as for their own advantage. Sometimes it was because the physician and the apothecary were of the same religious faith, sometimes because the doctor was promised a percentage on the business which he could direct to the store. He might say to his patient: "I would thank you to buy your medicine at such a shop. The owner is a particular friend of mine, or he belongs to our meeting, or I go snacks with him in the profits." But he did not do this; he pretended to other motives and created a false impression to the advantage of one dealer and to the disadvantage of others.



The writer concluded that "if men of age and respectability" should submit to being examined by members of a different profession on their qualifications for a business in which they had been engaged for twenty or thirty years "without feeling something like degradation they must possess but little of the spark of independence."

The proposed degree was to be conferred on men who were not alumni of the University and never were matriculated at any college. The policy was irregular. When the degree of master of arts was instituted, the authorities did not pretend to decide as to the qualifications of every literary character in the City and Liberties



HENRY TROTH

of Philadelphia, choosing some and rejecting others. Why then should the Faculty of Medicine be asked to report to their board a list of the apothecaries who in their opinion were deserving of the diploma of master of pharmacy? The Trustees should revise their arrangements and exercise a care how they introduced "anomalies into collegiate practice"; they should "discourage the spirit of monopoly and respect the rights of every man." (*Phila. Gazette*, March 3 and 6, 1821.)

Another anonymous writer, "Apis Bombilicus," declared that the action of the University could not fail to excite "the deepest concern and astonishment in the minds of not only those who are votaries of science but of every reflecting person." (*Ibid.*, March 19, 1821.)

The druggists and apothecaries were aroused. Only recently they had met together to take under advisement a grave occurrence. A dealer of the city had purchased a case of Persian Opium in New York City. It was spurious. A committee was appointed to investigate the subject and the whole shipment was withdrawn from sale.

The *esprit de corps* of the group was now strong enough for them to resent the action of the University of Pennsylvania. That some were to be taken from their number by an outside body and proclaimed as qualified for their pursuits, while others were to be left in a doubtful position, could not be agreed to. Misgivings concerning Dr. John Redman Coxe as a teacher, the knowledge that the apprentices were to be taken away from their tasks in the shops at unseasonable hours to hear lecturers, a belief that better results could be gained in courses conducted by men who knew the practical side of pharmacy rather than from courses given under the auspices of physicians, together with the conviction that problems other than the establishment of a school confronted the apothecary—all these considerations were weighty in determining a few men to initiate a movement which led to lasting consequences.

Henry Troth was a prosperous young Quaker apothecary. He had come to Philadelphia as a boy and was apprenticed to the "drug and apothecary business," and had now a retail and wholesale store of his own on Market Street below Seventh Street. Peter K. Lehman was a descendant of a German who had settled in Germantown. Like Troth, in his youth, a man now of but 34, he was the proprietor of a drug store at the Sign of the Golden Lion well out Market Street on the south side near Tenth Street. Troth and Lehman foregathered. The trade as a whole needed to be elevated by mutual action. It should be put upon a higher plane, not only through the education of apprentices, but by the inspection of drugs and drug products and the formulation of a code of professional conduct. These reforms should proceed from within and be directed by the druggists and apothecaries themselves to meet their own needs and requirements.

### First Meeting of the Druggists and Apothecaries

Troth and Lehman visited their neighbors engaged in the trade to enlist their interest and support in the calling of a meeting to be held in Carpenters' Hall on February 23, 1821. In these days this hall was the most convenient of public assembling places. The old Carpenters' Company, an eighteenth century trades guild founded in 1724, had built the edifice in 1770. Set back from Chestnut Street, between Third and Fourth Streets, in a little court, it had been available for the use of the representatives of the various counties of the Province of Pennsylvania when they came to Philadelphia in July, 1774, for a Provincial conference to discuss the situation of affairs with reference to Great Britain. It was decided to call a convention of the colonies, and in September following, the Hall was occupied by the delegates from the various colonies who were drawn to the city to attend the first meeting of the Continental Congress. For days, in their gigs and on their saddle horses, they came in over the Southern road from the Carolinas, Virginia and Maryland, and down the Second Street road from New



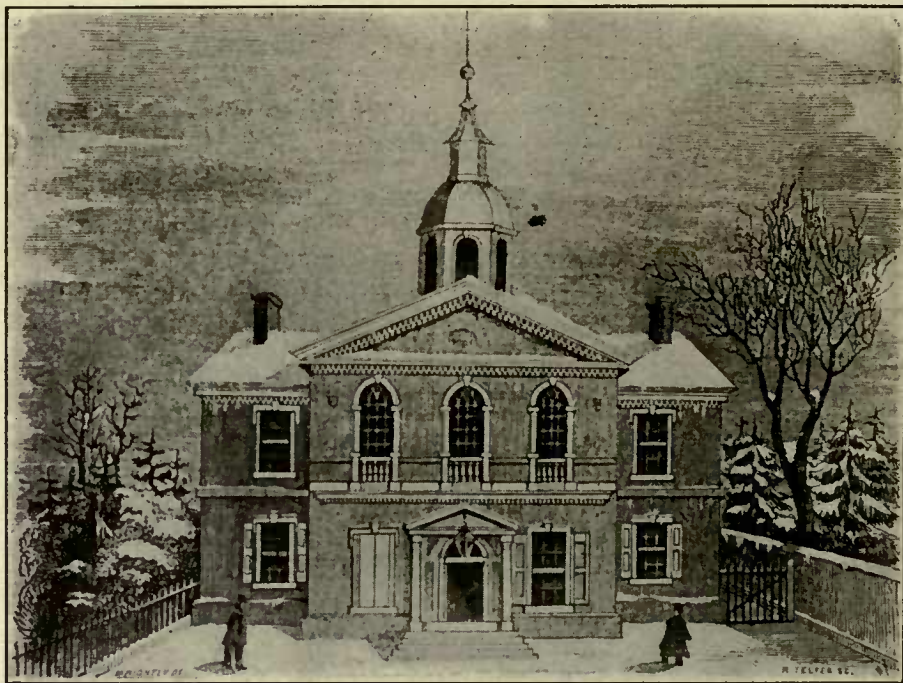
England and New York. Here was Patrick Henry, the impassioned Virginia orator, who had stopped at Mount Vernon for George Washington. Joined by Edmund Pendleton, the three rode their steeds together into the city. In the company in the Hall when it was complete were Peyton Randolph, Richard Henry Lee, Richard Bland (who would have come on this occasion he said, if it had been to Jericho); John and Samuel Adams, John Jay, Roger Sherman, Cæsar Rodney, the two Rutledges, the two Livingstons, Thomas McKean, John Dickin-



PETER K. LEHMAN

son—fifty patriots not yet ready to sever their relations with the British crown but so bent upon the redress of their country's wrongs that the sound of their voices in this small apartment prophetically proclaimed all that came to pass two years later in the State House.

The Hall had other uses. At the very time that the Congress was meeting here the carpenters were hospitably housing the books of the Library Company of Philadelphia, which the townspeople might come to consult and borrow at certain hours of the day. More recently until a building (now the Girard National Bank) could be erected in Third Street, the Bank of the United States had made use of the Hall, and much more that does not concern our narrative transpired in the formative days of the republic within the four walls which now held the Philadelphia druggists and apothecaries.



CARPENTERS' HALL

Wherein the Congress of the American Colonies met, and wherein American Pharmaceutical Education was Born

Carpenters' Hall is one of the historic shrines of the nation. The interior is in practically the same condition as when that First Continental Congress assembled within it on September 5, 1774. On the side wall is the legend: "Within these walls Henry, Hancock and Adams inspired the delegates of the colonies with nerve and sinew for the toils of war" (Pamphlet of Carpenters' Company, 1922). And so the Congress of the American Colonies met within this Hall, and inaugurated those measures which led to the Declaration of Independence, and terminated so favorably for civil liberty in America and throughout the world; and within this Hall, also, on February 23, 1821, was born American pharmaceutical education.

A very prominent wholesale druggist of the day was Stephen North, doing business at 14 North Second Street (old number), a few doors south of Christ's Church.\* No one in the trade advertised so largely in the *Gazette* except Dr. Dyott, who was so plainly a commercial adventurer that he was not included in the company drawn together to improve and elevate the trade. North was an agent for a number of manufacturers in England. They often sent him their products for sale on commission on which account drugs purchased from him were to be had in their "original packages." He announced in the newspapers that he had for sale almost any article "connected with the drug and apothecary business on as good terms as any person in the United States." He also offered day by day a large stock of paints, glassware and dyestuffs, by advertisement in the *Philadelphia*

\* Stephen North was second Vice-President of the College from 1821 to 1824, and first Vice President from 1824 to 1826. He zealously co-operated in founding the institution and faithfully served it until his demise in 1826. Shortly before his death, he removed to the northeast corner of Sixth and Market Streets.



*Gazette* for April 13, May 1, June 7 and August 30, 1821. On account of his leading position and by reason of the respect in which he was held by his colleagues, he was called to the chair and presided over the meeting in Carpenters' Hall.

Peter Williamson, of Southwark, to be for many years a well known figure in the city, was chosen to act as secretary of the meeting.

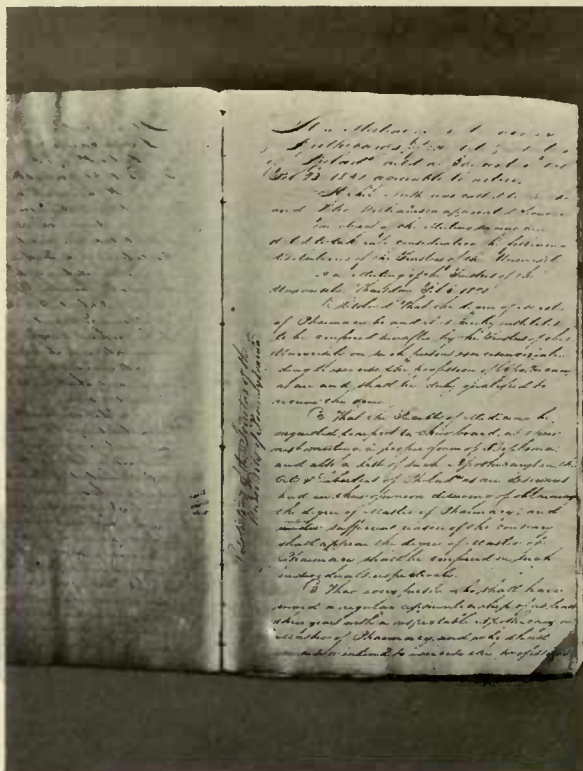
The discussion was general and very spirited. Some of those present were in an awkward position. They had been visited by Dr. Coxe; they had expressed themselves as favorable to the very plan which the Trustees of the University had formulated and adopted, and which was the cause now of so much animated dissent. Resolutions were presented for debate and finally a course was agreed upon.



PETER WILLIAMSON

It was admitted that "any propositions emanating from a respectable source, whose object is to increase the usefulness and respectability of the business of druggist and apothecary" were "entitled to attentive consideration. But if it should appear, on mature reflection, that such propositions were open to serious objections and inadequate to the full attainment of the objects which they had in view, or that other plans may be substituted more efficacious in their nature and better calculated for producing the desired result—in such a case we consider it our duty to express our opinions and adopt such measures as may, on mature reflection, appear to be dictated by sound reason and correct judgment." Coming then to the "plan pro-

posed to the druggists and apothecaries of the City and Liberties of Philadelphia” by the Trustees of the University, the meeting was of the opinion that it was “liable to serious objections and inadequate to the attainment of the objects” in view.



MINUTES OF THE FIRST MEETING OF THE COLLEGE

### Appointment of a Committee on Plan

A committee was appointed to determine whether it might not be “preferable to adopt a plan as a substitute, distinct from the one proposed.” This committee was made up of the following personnel, remarkable for their ability: Samuel Jackson, Daniel B. Smith, Robert Milnor, Peter Williamson, Stephen North, Henry Troth, Samuel Biddle, Charles Allen and Frederick Brown. All were young men; it was “an enterprise of youth,” observes La Wall, for the average age of those about whom there is definite information was but twenty-eight years. (*Amer. Jour. Phar.*, March, 1921, 175.) They immediately proceeded to the performance of their task and made their report to a second meeting held in Carpenters’ Hall on March 13, 1821.

The Committee remarked upon the impression generally prevailing that “for some time past” there had been “a departure,” due “to a concurrence of various circumstances,” from “the correct customs and established principles of the drug and apothecary business.” As a consequent effect, there was a “deterioration of many drugs and medicines in constant use of great importance in practice,” and



"medicines of inferior or sophisticated qualities" were "too often introduced into the shops." The "irregularities," it was found, were due in great part to "the want of proper pharmacological information on the part of some druggists and apothecaries who vend," and also, it was observed, "of physicians who buy." To the "mischiefs" which were "necessarily attendant upon such a state of things," those interested in the trade had frequently adverted. The Trustees of the University had seen the need of a change of conditions. Their "motives and views" were highly commendable, and their plan, so far as it should extend, would be "useful." It was apparent, however, "to those most conversant with the species of abuses that exist in the business and require correction," that the proposal of the University was not well adapted to correct existing irregularities, and "whatever benefit might be derived from it would be perforce prospective and slow in operation."

"This action of the University," the report continued, "has had one happy effect," since it had recalled the subject to the attention of the druggists and apothecaries. "It has," said the committee, "roused them to a sense of the propriety of placing their business on the respectable footing it ought to possess as a branch of the science of medicine, by eradicating from it all present and preventing a recurrence of future injurious practices, by creating the means of easily acquiring a perfect and scientific knowledge of drugs and medicines, and the most approved modes of preparing them." Such "desirable and highly important objects," it was stated, could "only be effectually attained by the interposition and active agency of the druggists and apothecaries themselves."

The method "best adapted to effectuate the reformation generally desired in the business and to obtain the advantages which have been the object of much solicitude," the committee believed to be "the establishment of a College of Apothecaries, the attention of which will be constantly directed to the qualities of articles brought into the drug market, in which subjects relating to their business and its objects can be discussed, and information beneficial and interesting to the trade communicated"; and it was proposed to establish a school of pharmacy "in which lectures designed especially for the instruction of druggists and apothecaries should be delivered."

### Recommendations of the Committee on Plan

The committee, therefore, recommended that an association of the druggists and apothecaries of the City and Liberties of Philadelphia should be formed "on the plan and for the objects suggested," and offered a constitution for such an association to the consideration of the meeting. The constitution was presented and adopted, to be signed by those present, who numbered sixty-eight, about one half of all those identified with the trade in the city and outlying districts. (*Poulson's Advertiser*, April 13, 1821; and *National Gazette*, March 30, 1821.)

It was preceded by this "Preamble":

"Pharmacy is an important branch of the science of medicine. Deposited by the division of the science in the hands of the apothecary, it requires, on his part, intelligence, skill and integrity to prepare and compound medicines for administration to the sick; to distinguish and select those drugs that are of the best quality, and possessed of those virtues,

on whose efficacy reliance is placed to cure diseases, and to deal in no others. On the qualifications of the apothecary in these respects must depend in no small measure the success of the physician and his practice and often the lives of his patients. The business, therefore, to be conducted correctly and with safety to the community, renders varied, extended and peculiar information necessary, not easily acquired without a regular course of studies and practical education; and without which, mistakes are liable to occur involving health and life.

"The different modes in which medicines can be prepared differing in strength and consequently in their powers; the ease with which mixtures and sophistications totally destroying their virtues can be made and which are difficult of detection, offer great incitements to cupidity, and open a wide door to abuses that experience teaches are inevitably introduced by an unregulated competition. More injuries have been sustained by society from such a competition than benefits have been conferred; for the reduction of price has chiefly been effected by a deterioration of quality. The existence of a state of things so pregnant with evils of great magnitude must bring the profession into disrepute and loudly calls for a timely and effectual remedy upon those who feel an interest in maintaining its respectability. In order, therefore, to provide the means of instruction by the establishment of a school of pharmacy in which shall be taught those branches of knowledge essential to the education of an apothecary; to invite a spirit of pharmaceutical investigation and research, and to diffuse information amongst the members of the profession; to guard the drug market from the introduction of spurious, adulterated, deteriorated, or otherwise mischievous articles, which are too frequently forced into it; by watching and giving early warning of their appearance; to regulate the business as far as may be practicable and consistent with our social institutions; to establish such rules as may promote an harmonious intercourse among its members; to remedy many existing abuses; to advance the character and forward the interests of the profession, the undersigned Druggists and Apothecaries of the City and Liberties of Philadelphia, agree to associate together under the Constitution hereunto annexed, to the principles of which they give their earnest support and by which they will abide."

### Founders of the College

The following sixty-eight druggists and apothecaries composed the list of original members:

Charles Marshall	Thomas Cave	Stephen North
Joseph Allen	John Elliott	Thomas Wiltberger
William Lehman	Isaac Thompson	Charles Allen
Mathias Pleis	Jeremiah Morris	George Babe
Robert Milnor	Jacob Bigonet	Peter K. Lehman
Peter Thompson, Jr.	Samuel Jackson, M.D.	William C. Poole
Elisha Crowell	Henry Troth	James W. Simes
Peter Williamson	Wm. Revoudt, M.D.	Warder Morris
Mordecai L. Gordon	George H. Burgin, M.D.	John P. Wetherill
William Heyl	Frederick Klett	Frederick Brown
Edward B. Garrigues	Edmund Pryor	Geo. D. Wetherill
Thomas McClintock	Caleb Ash, Jr.	Charles Ellis
Wilson Jewell, M.D.	Thomas Oliver	Thomas A. Mason
William Baker	Jeremiah Emlen	George Glentworth
John J. Smith, Jr.	Richard Jordan	Charles Thompson
James L. Smith	Edward Lowber	Charles Wetherill
Alexander Fullerton, Jr.	Algernon S. Roberts	Edward Needles
Solomon Temple	Charles Yarnall	Daniel Elliott
Daniel Thatcher	Daniel B. Smith	Eleazer L. Cohen
Samuel Biddle	Charles Treichel	Thomas Evans
Samuel P. Wetherill	Charles Marshall, Jr.	Anthony Ecky
James S. Ewing	Henry M. Zollickoffer	Anthony H. Morris
Charles Rizer	Daniel Laws	



### Administration of the College

Four times a year the members would hold meetings. There would be sixteen trustees, one half of the board to be chosen annually. It would be the duty of this body, the constitution said: "To establish a school of pharmacy, provide suitable apparatus and a library and appoint one or more lecturers as may be deemed expedient, on materia medica, chemistry and pharmacy, and on such branches of natural science as may be useful in the instruction of an apothecary; to appoint a committee of inspection who shall examine all articles of drugs and medicines brought into the market and submitted to them; to appoint a committee of equity to settle any disputes that may arise in the transactions of business by the members of the College which may be referred to them."

It was provided that each member should make an annual contribution of five dollars. New members might be admitted, if they had been "regularly educated as a druggist or apothecary," or had received a diploma from the College, and were of "correct moral deportment," by a three fourths vote of the Board at any stated meeting.

An important provision was found in Article VIII, which was as follows:

"Complaints may be preferred against any member of this College to the board of trustees for malpractice and misconduct in his business; and, if on investigation, it shall appear that he has been guilty of adulterating or sophisticating any articles of medicine or drugs, or of knowingly vending articles of that character, or of deteriorated qualities, the facts may be reported by the board of trustees to a meeting of the College, publicly called, when, a majority of all the members of the College concurring, he may be expelled."

### Elections of Officers of the College

On March 27, 1821, the first stated meeting of the College was held, and officers were elected. Very properly the dean of Philadelphia's apothecaries, Charles Marshall, though nearly eighty years of age, was chosen president. William Lehman, a cousin of Peter K. Lehman who had discussed the subject in the first instance with Henry Troth, an A.B. of the University of Pennsylvania, and also a graduate of the medical school of that institution, now for some years a prominent druggist and a member for Philadelphia in the Pennsylvania State Legislature, and Stephen North, who had presided at the first meeting, were elected vice-presidents. Daniel B. Smith, learned philanthropist and public spirited Philadelphian, destined to play so large a part in the history of the College, as in the direction of other movements in the city, was elected secretary, and William Heyl, treasurer. The following made up the first Board of Trustees:

Samuel P. Wetherill, Dr. Samuel Jackson, Daniel Elliott, Charles Allen, Henry M. Zollickoffer, Jeremiah Morris, Henry Troth, Peter K. Lehman, Charles Marshall, Jr., Warder Morris, Peter Williamson, Daniel Thatcher, Samuel Biddle, Thomas McClintock, Frederick Brown and Thomas Wiltberger.

### Establishment of the School

The Board of Trustees organized on March 29, 1821, by electing Samuel Price Wetherill, of the Wetherill firm, as its chairman, while Peter Williamson, active in the meeting for organization, became its secretary; and committees were appointed



DANIEL B. SMITH

to take into consideration the subject of establishing a school of pharmacy and to draft by laws for the government of the Board of Trustees. On April 9, an adjourned meeting of the Trustees was held, at which the committee on by laws presented a draft which was adopted; and the committee on school of pharmacy reported a plan recommending lectures on materia medica and pharmacy, and on pharmaceutical and general chemistry, three times a week, which was adopted, also. A week later rules for the regulation of the school were approved, as follows:

"1st. There shall be two lecturers to the College, viz.: one on materia medica and pharmacy, and the other on pharmaceutical and general chemistry.

"2nd. They shall be elected by ballot at a meeting of the Trustees called for that purpose and shall continue in office unless removed by a vote of two thirds of the board.

"3rd. The Trustees shall have a general power of superintending and regulating the lectures of the two professors, fixing the price of tickets, etc.

"4th. The lectures shall commence in the first week in the 11th month (November) and continue three times a week at such place and hour as the Trustees shall direct until finished.

"5th. The price of tickets for the present shall be for the course of materia medica and pharmacy, \$15; and the other branch, \$12; and apprentices to persons following the drug business who are not members of the College shall pay in addition \$5 as a matriculating fee.\*

\* On April 16, 1821, however, the price of the tickets was reduced from \$15 to \$12 for the first course, and from \$12 to \$10 for the second course, the matriculation fee to non-members to be \$5.—EDITOR.



"6th. The members of the College shall have free access to the stated lectures of the two professors.

"7th. The lecturers shall receive all the emoluments arising from their respective courses of lectures, except the matriculating fee.

"8th. The Board of Trustees shall provide a suitable lecture room for the institution, and make such other provision to accommodate the lecturers as they may deem expedient.

"9th. Every person upon whom a diploma of this College shall be conferred must be of good moral character, have arrived at the age of 21 years, have attended two courses of each of the lectures and have served out an apprenticeship of at least four years with a person qualified to conduct the drug and apothecary business.

"10th. All persons who have attended two courses of each of the lectures shall have free access to the future lectures of the professors."

### Samuel Price Wetherill

Samuel Price Wetherill (1790-1839) was the third son of Samuel Wetherill, Jr., who gave his four sons the best possible education of their day, in chemistry, pharmacy, astronomy, mineralogy and horticulture, as taught by the famous Priestly and others, each son showing in later life high attainment in the work which their subsequent financial independence led



SAMUEL PRICE WETHERILL

them to select. Samuel Price Wetherill's fondness for chemistry, botany and allied sciences no doubt led to his election in 1821 as the presiding officer of the Board of Trustees of the College, also as second vice president of the College (1825-1826), but soon after his father's death, he inherited by selection one of the five farms owned by his sire, and chose the one known as the "Mill Grove Mines Farm," including saw and grist mill, on the Perkiomen

Creek, formerly inherited from Admiral Audubon, of the French Navy, by his father. Here Samuel turned his attention to improving the farm in various ways, and the stretch of acreage sloping southwesterly to the creek offering a chance for the culture of the finest variety of grapes, he terraced the acres in quite a number of long rows, and planting the vines, made such a success of his pastime that for fifty years or more after his death the terraces and vines continued as a memory. It is interesting to add that three of the founders of the College were Wetherills—Samuel Price, George D., and Charles, and that the following members of the family have been members of the College (for the years given): Ashfield H. Wetherill (1824-1834); William Wetherill, M.D. (1837-1872); John Wetherill, Jr. (1837-1856); Samuel Wetherill (1843-1851); and J. Bloomfield Wetherill (1858-1869). It should be added, also, that the great, great nephew of Samuel Price Wetherill—Samuel Price Wetherill, Jr., is a member of the present Board of Trustees of the College.

### Conferring of Master of Pharmacy Degree by the University

Meanwhile the position of Dr. John Redman Coxe and the University Trustees was embarrassing to the last degree. They could not abandon the ground which they had taken. The Commencement Day of April 5, 1821, when the first degrees of master of pharmacy were to be conferred, approached; the honor had been promised to a number of the apothecaries, though some now declined it. Dr. Coxe began by inserting an announcement in *Poulson's Advertiser*, which was as follows:

"The apothecaries of this city who are desirous of obtaining the degree of Master of Pharmacy at the ensuing commencement conformably to the resolutions of the Trustees of the University of Pennsylvania are respectfully requested to forward their claims to the Dean of the Faculty to be laid before the Medical Faculty previously to the next meeting of the Trustees.

"An erroneous impression having been sedulously advanced that an examination of the apothecaries was essential to obtaining this degree, it is right to state that this is not the case; such an examination is merely *prospective* and has reference only to those who have not yet commenced the business.

"It is desirable that applications may be made to the Dean by the 22nd inst. as the commencement will take place as soon as possible after the examination of the medical candidates is completed.

"The printers of the different daily papers are requested to give this notice an insertion." (Issue of March 15, 1821.)

This done, Coxe turned to the columns of the *National Gazette*, the literary newspaper of the city, and the editor published the "Statement" which had been signed by the sixteen prominent apothecaries and druggists of the city in the previous year, upon which the action of the Trustees of the University had been based. He accompanied the "Statement" with a list of the signatures, and a letter to the editor defining his own position in the premises. The signers were as follows:

Edward Lowber	George H. Burgin
Stephen North	Thatcher and Thompson
J. Morris	Thomas Cave
Daniel B. Smith	Samuel P. Wetherill
Samuel Jackson	Christopher Marshall
Charles Marshall, Jr.	J. Y. Bryant
Charles Allen	Robert Milnor
John White	John and Daniel Elliott

Plainly, Dr. Coxe was not without his defense, for in the list of those who had endorsed his project were the names of Stephen North, who had presided at the



meeting in Carpenters' Hall, now a vice president of the new College; Daniel B. Smith, another vice president; Christopher and Charles Marshall, Jr., sons of the venerable Charles Marshall, its president; Samuel P. Wetherill, chairman of its Board of Trustees, Jeremiah Morris, Charles Allen, Daniel Thatcher, Samuel Jackson, members of the Board of Trustees; while all of the others except three, Christopher Marshall, J. Y. Bryant and John White, were charter members of the College.

In his letter to the editor of the *National Gazette*, Coxe took the entire responsibility for what had been done, finding an excuse for his bringing the subject into public notice in the "misunderstanding either real or assumed" which was discernible in the minds of several writers in the press. "From a long acquaintance with most of the elder apothecaries of this city," he said, "I had become desirous that a profession so respectable in itself should be rendered more so by adopting the European plan of granting degrees to those who from due attention and a regular education have qualified themselves to practice with benefit to the community an art so important to our dearest interests." No one with whom he had conversed on the subject had doubted the utility of the plan. "After fully weighing the subject and knowing that some one must take the laboring oar, if it was actually to be accomplished," he had drawn up a "statement" of the reasons which operated on his mind for wishing its adoption. That statement had received "the sanction of some of our most respectable apothecaries, as their signatures thereto fully demonstrate." He had presented the statement to the Board of Trustees who gave it their approbation. After due deliberation of its merits they had passed their resolutions. "Such," said Dr. Coxe, "is the history of this affair. The public will appreciate my motives and will perceive that I was influenced solely by a desire of rendering the apothecaries a just tribute of respect; and by awakening in them a proper *esprit de corps* and making it probable that in the future whoever engaged in the business might be fully depended on for a thorough knowledge of it and every confidence be maintained between themselves, the physicians and the public. It is to me indifferent (so that these ends are accomplished) whether it be through the agency of an apothecaries' company, or of the resolutions of the Trustees. It is presumable both have the same object in view; certainly there ought to be no dissension in the means of carrying it into effect. Had the apothecaries pursued the measures they are now adopting before I had actually engaged in the business, I should not have considered any steps on my part necessary; as it is altogether optional for any individual to accept or refuse the proffered diploma from the University." (*National Gazette*, March 24, 1821.)

"Advantages would no doubt have accrued from this accession to the original plan of the Medical Department had it not been superseded by the establishment by the apothecaries themselves of a distinct school which, being under their own management, and directed to the one object of advancing the usefulness and respectability of the profession, is naturally more popular, and at least equally efficient." ("History of the University of Pennsylvania," 3d ed. 197, Dr. George B. Wood.)

"Equity" returned to the discussion in the *Philadelphia Gazette*. The Dean of the Medical School had spoken of a "misunderstanding," but he had neglected

to say in what this misunderstanding might consist. If there had been a mistake it arose from the wording of the resolutions as they came from the Trustees. The public was now informed by an advertisement of March 15, to which Dr. Coxe no doubt referred, that there would be no examination of candidates prior to the investment of them with degrees at the coming commencement. If this were so, it made the matter "worse and worse." This was "a new species of insult and degradation" for the apothecary. Now all would be made to depend "upon the sovereign will and good pleasure of the worthy dean of the Faculty of Medicine, who had not scrupled to aver that 'scarcely more than one in ten of the apothecaries of Philadelphia can be considered as competent to the business.'"

The public now knew that he was the originator of the measure. He it was who after the first distribution of the free degrees would get the fees from those who should attend his courses. This operation at \$20 a course and the graduation fees, which might make the whole expense to a candidate \$80 or even \$120, would be very profitable, as any one might see. This was too great a sum for young men to pay. If the University should have engaged a suitable professor to teach pharmacy and had made the fees moderate there might have been no objection to the plan. As it was everything was to be determined by the "caprice" of one man who desired that all the business of the city should be conducted by ten or fifteen shops. An honorary degree is intended usually to raise the person of its recipient in the community, and it might have this effect. But in this case it raised the person on whom it was conferred by "sinking his rivals," who, "as respects moral character and professional abilities," might be his "equals."

This "piece of business throughout" had been managed in a "most bungling manner." It was "an unwarrantable assumption of power on the part of the University and an injudicious innovation in academical practice." The Trustees must retrace the erroneous steps into which, as appears by his own confession, they have been led by one of their professors. (*Phila. Gazette*, March 28 and 29, 1821.)

The arrangements at the University proceeded. At the commencement on April 5, 1821, sixteen men received diplomas attesting to their skill in pharmacy as follows:

John Hart, 8 South Second Street.  
 John White, 82 North Front Street.  
 John Y. Bryant, 27 Market Street.  
 Robert Milnor, 161 South Second Street.  
 Anthony Ecky, 53 South Seventh Street.  
 Thomas Cave, 45 Market Street.  
 Charles Marshall, Jr., 310 Market Street.  
 Christopher Marshall, 19 North Fourth Street.  
 Mordecai Y. Bryant, 241 North Second Street.  
 Mordecai L. Gordon, 58 North Second Street.  
 James D. Rooney, Southwest Corner of Green and Second Streets.  
 Charles Treichel, 99 Walnut Street.  
 George F. Garretson, Corner of Race and Fourth Streets.  
 David B. Ayers, 164 North Third Street.  
 John Stitt, Corner of Race and Sixth Streets.  
 William Poole, 62 North Second Street.

(*Poulson's Advertiser*, April 9, 1821.)



It is of interest to add that, as Martin I. Wilbert (*Amer. Jour. Phar.*, 1907, 409) has stated:

"While provisions had been made by the Board of Trustees of the University for instituting a course in pharmacy, the project met with such strenuous opposition from the druggists and apothecaries of Philadelphia that not a single student ever attended the lectures in the Medical Department with the view of securing the degree of Master of Pharmacy. A careful review of the minutes of the Board of Trustees and also of the minutes of the Medical Faculty of the University of Pennsylvania failed to show any record of students in pharmacy, and there is but one other record of the degree of Master of Pharmacy having been awarded. This was at the medical commencement on April 4, 1823, when the degree of Master of Pharmacy was conferred on Dr. Charles T. Wilstach, a graduate of the Medical Department of the University of Pennsylvania of the class of 1820."

### New College Meets Commendation

The new College of Apothecaries now was receiving much public commendation. The action of the trade in forming such an organization, said the *National Gazette*, the most discriminating newspaper in Philadelphia, "will no doubt attract attention in the other cities of the Union and serve as an operative example. The considerations upon which it has been established deserve to be brought into view everywhere throughout the United States." (Issue of March 30, 1821.)

The *National Intelligencer* of Washington, the most influential journal in the United States, assigned great importance to the movement, since a "large proportion of the medicines used in this country, the Western and Southern sections particularly, came from Philadelphia." "We know," stated this newspaper, "of no late institution which promises to be of more general utility and importance." In no line of business probably was there "as much carelessness, indeed deception, as in the sale of drugs and medicines, nor is there any other business in which the public is so immediately and vitally interested." "It is bad enough," the writer in the *Intelligencer* continued, "to be obliged to take good medicines, but much worse to take those which are adulterated," and "any institution having for its object the correction of such abuses is worthy of public notice and approbation." The officers of the College were rated "among the most respectable and wealthy inhabitants of Philadelphia," and there could be "very little doubt as to the efficacy of the measures they adopt to carry into effect their praiseworthy intentions." (Issue of October 30, 1821.)

### First Professors of the College—Jackson and Troost

On April 23, 1821, the Board of Trustees of the College met again. At this time Samuel Jackson, a graduate in medicine of the University of Pennsylvania, who had inherited his father's drug business on North Fourth Street, destined to attain much note as a teacher and scientist, was elected professor of materia medica and pharmacy. Gerard Troost, a Hollander, had become a prominent figure in the city. He had been the first president of the Academy of Natural Sciences, of Philadelphia. Now he was occupied to some extent at the Museum of Natural History of Charles Willson Peale, which enjoyed the hospitality of the State House, and was making a geological survey of the country surrounding the city for the

Philadelphia Society for Promoting Agriculture, in the "segment of a circle," an area radiating fifteen miles from the Rotunda on High Street west of the Delaware. Richard Peters, president of the society, described him as "an intelligent and scientific character to whom every farmer and inhabitant residing within the bounds of the country which he is about to explore should show every attention and



SAMUEL JACKSON

afford whatever assistance he may require to serve the interest of agriculture." (*Democratic Press of Phila.*, Sept. 29, 1821.) Before the College had yet been formed he had projected lectures on mineralogy. (*Poulson's Advertiser*, Feb. 21, 1821.) This plan failing, he proposed a course on pharmacy and chemistry, advertising in *Poulson's Advertiser*, March 12, 1821, as follows:

"The subscriber having devoted the greatest part of his life to pharmaceutical and chemical preparations, proposes to deliver a course of lectures on these subjects, in which will be exhibited every process and combination made use of in the ordinary practice of medicine and the arts. The lectures will include the commerce and natural history of drugs, etc. Subscription papers will be found at the store of Messrs. Samuel P. Wetherill and Co., North Front Street, No. 65; Messrs. Littell and Henry, Booksellers, South Second Street, No. 74, and the Hall of the Academy of Natural Sciences." (G. Troost.)

He was marked for a chair in the new school and the Trustees elected him professor of chemistry. But he held the post for only a year. His foreign accent made it difficult for his students to follow his lectures and derive benefit from them,



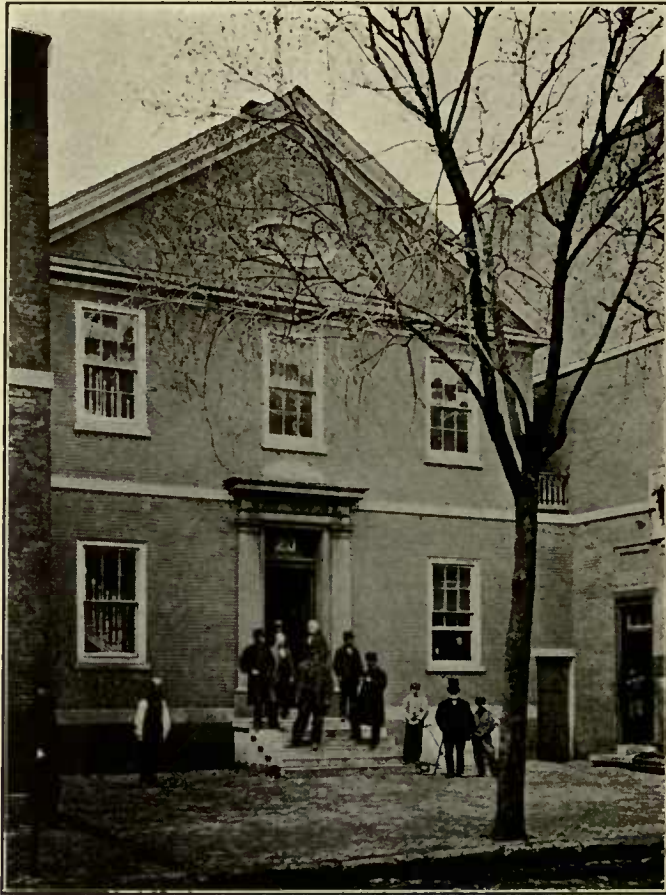


GERARD TROOST

so after satisfying his idealist sympathies for a time at the communistic center at New Harmony, Ind., he passed to Tennessee, where, at the University of Nashville, and as state geologist, he continued his usefulness. His place in the College was taken by George B. Wood, who had given the first of a course of chemical lectures in Carpenters' Hall on April 10, 1821, with the encouragement of Charles Marshall and Daniel B. Smith, and who had been in mind for the chair when Troost was elected.

#### First Home—German Society Hall (1821-1832)

Both the College and the Board of Trustees still held their meetings in Carpenters' Hall. The Trustees must find a room in which the lectures might be given. In July, 1821, for two hundred dollars a year, they procured the use by lease of rooms in the Hall of the German Society, a brick building on Georgian lines, situated on the west side of Seventh Street between Market and Chestnut Streets for the purposes of a respectable beneficial organization which had been established in 1764. Later, it was used as the "City Gas Office," and the Master Builders' Exchange now occupies the site. At once plans were laid for collecting a cabinet of "choice and selected specimens of drugs and medicines," and a library for the use of the students attending the school. (A list of the books in the collection is printed in the Druggist's Manual, published by the College in 1826, 113.)

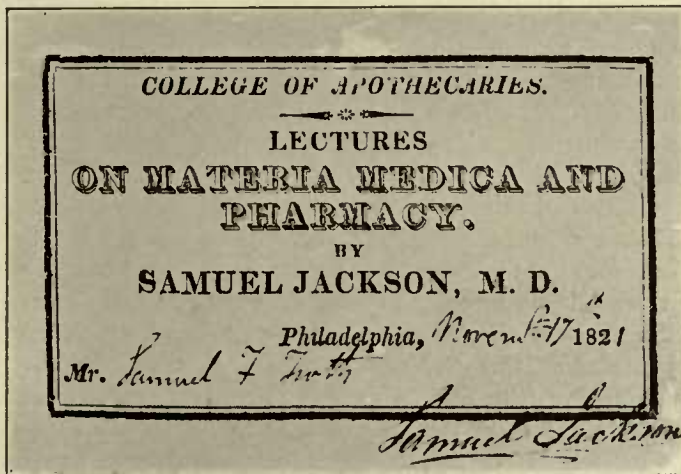


GERMAN SOCIETY HALL  
The First Home of the College—1821-1832

The Trustees began to advertise the courses of lectures. It was noted that in Europe pharmacy had been withdrawn from the care of the physicians and consigned to that of the apothecary, and that this division had been recognized and sanctioned by the medical profession, and that :

“Colleges of apothecaries and other similar institutions have been established, devoted expressly to instruction in Pharmacy and its subsidiary sciences. On the Continent, most of the respective governments have prohibited, under heavy penalties, any one from selling or preparing Drugs and Medicines for administration who has not passed through a course of instruction and become practically acquainted with the business. In Great Britain most Apothecaries are regularly instructed by attendance on the lectures of the College of Apothecaries of London and Dublin and are associated as members, while abuses in the business are guarded against by severe penalties enacted by Parliamentary statute. In this country Pharmacy has been entirely neglected as a science. Previous instruction has not been considered indispensable in order to capacitate an apothecary for pursuing his profession, while very few practitioners of Medicine possessed more than a superficial acquaintance with the principles and details of Pharmaceutic knowledge. From this state of things, many evils, some of a serious and aggravated nature, have flowed, urgently requiring correction. Many



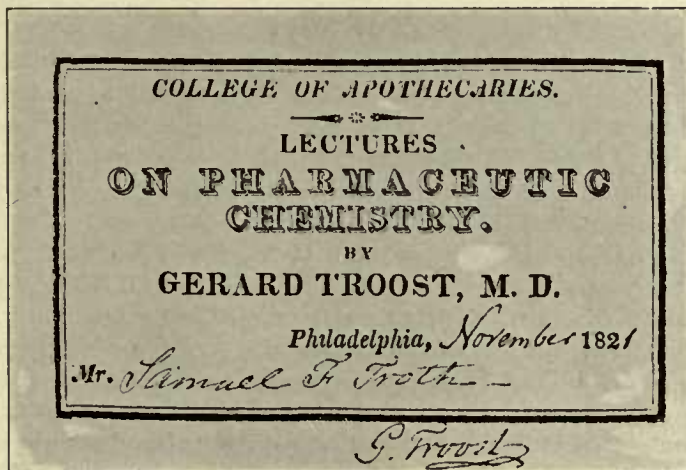


apothecaries of this city have long been sensible of the necessity of taking some efficient measures by which the irregularities and abuses that have crept into their business should be abolished; and that their profession should be placed on that respectable footing to which it is entitled by its usefulness to society and as an important branch of the science of medicine." (*Philadelphia Gazette*, October 25, 1821.)

With these views the Philadelphia College of Apothecaries offered to the public the courses of lectures of Dr. Jackson and Dr. Troost.

**First Lectures of the College**

Jackson opened his course of lectures on Friday evening, November 9, 1821, and Troost on Saturday evening, November 10, 1821. Thus was instituted the



work of the first college of pharmacy in the United States. The event marked "an era in the medical history of our country." (*Jour. Phila. Coll. Phar.*, Dec., 1825, 2.)

The result had not been achieved without internal struggles. Selfish counsel had to be overcome. The apothecaries of the city, stated that Daniel B. Smith, one of the ablest of their number, practiced their art but "loosely and clumsily." "Most, and indeed all" of those who had established the school were men who made no pretensions to accurate science or profound learning." "By education," said some, "the promoters of the College would raise up young men who would take the business out of the hands of those who have created it." (*Amer. Jour. Phar.*, July, 1837, 97.) Their apprentices would soon be better apothecaries than they themselves had ever been. But the sponsors of the movement were men of vision. They had "felt the evils of being ignorant of scientific principles and of a deficient pharmacy," said Smith, "and they were resolved to apply a remedy." (*Jour. Phila. Coll. Phar.*, Jan., 1830, 243.) "We would educate a race of young men better instructed than ourselves," he told those whose objections reached his ears, and if, then, "we should be forced by their competition to reform our own shops and to review our old studies both we and the community would be the gainers." (*Amer. Jour. Phar.*, July, 1837, 97.)

### Incorporation of the College

A charter for the Philadelphia College of Apothecaries was sought of the Legislature of the State of Pennsylvania early in 1822, and through William Lehman, an influential member of that body, and a vice president of the College, the act of incorporation as the Philadelphia College of Pharmacy was passed by the Senate and the House of Representatives and approved by Governor Joseph Heiser on March 30, 1822. It is said that William Lehman took the liberty, on his own responsibility, of altering the title in the bill from the Philadelphia College of Apothecaries to the more appropriate one of Philadelphia College of Pharmacy, thereby compelling the unassuming "apothecaries" of the College to get together later and approve the change.

### Early Days

The Philadelphia College of Apothecaries now became the Philadelphia College of Pharmacy. For the first time in the State, for the first time in the country, the important bearing of the pursuit of the pharmacist upon the general welfare was recognized in a statute book. The College was incorporated because "to dispense drugs and medicines for the use of the sick requires knowledge and skill of a peculiar kind, an ignorance of which opens the door to numerous abuses and evils, and is pregnant with serious consequences to health and life," and "because it is the duty of every good government to protect, as far as in it lies, its citizens from those ills and dangers to which they become exposed in the multiplied relations of society, by promoting and encouraging wholesome institutions and regulations calculated to advance the well being, security and interests of the community."

As the work proceeded, the zest for it increased in the hearts of the friends of the institution. When Charles Marshall retired from the presidency in 1824, because of physical infirmities, William Lehman was advanced to that position. When Mr. Lehman died in 1829, the place was taken by Daniel B. Smith, who served in the office for a period of twenty-five years, with the useful aid, much of this time, of Henry Troth, acting as vice president and as chairman of the Board of Trustees.





BENJAMIN ELLIS

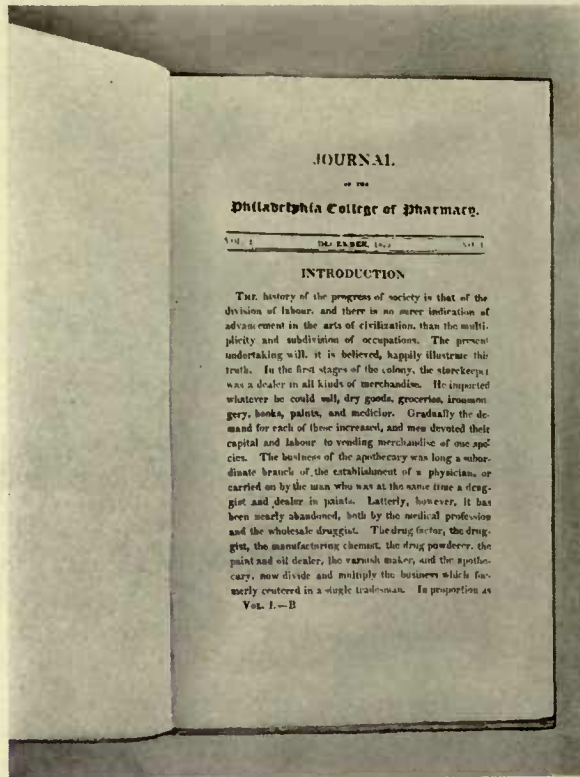
The election of George B. Wood as professor of chemistry in 1822, in succession to Gerard Troost, almost from the first day identified with the school a man of exceptional ability who would in no long time achieve wide renown. He occupied the chair for fees which he computed would not exceed \$200 a year, with auditors who he believed would not number more than thirty of an evening. (George M. Beringer, *Amer. Jour. Phar.*, Feb., 1921, 99.)

Dr. Samuel Jackson, after serving six years in the College as professor of materia medica, entered the Faculty of the Medical School of the University of Pennsylvania, where he had a long and distinguished career, and in 1827, Dr. Benjamin Ellis succeeded Jackson and "filled that station with great reputation and success, having the happy faculty of infusing into the minds of his pupils an ardent love of service." (*Jour. Phila. Coll. Phar.*, 1832, 180.) In 1831, Wood was transferred to the chair of materia medica and pharmacy and Franklin Bache was elected to the chair of chemistry, a union of minds which set the school forward so distinctly that it came to have an eminent national and indeed international position.

### Journal of the College

Philadelphia was deservedly recognized to be the foremost seat of medical education in the country; it was likewise coming into a place of leadership in all that related to the teaching of pharmaceutical science. The school was aided in gaining

its reputation by its early publications. In 1825 it founded the *Journal of the Philadelphia College of Pharmacy*, which began to appear in December, 1825, and was designed as a medium for the publication of original essays indicating the advance in the pharmaceutical sciences, for the transactions of the College, and such other material as might be advantageous to communicate to the public. For thirty years, the French had had their *Bulletin de Pharmacie*, later called the *Journal de Pharmacie*, which, appearing from time to time, had added much to the knowledge of the times.



TITLE PAGE OF JOURNAL OF THE COLLEGE (Reduced Size)

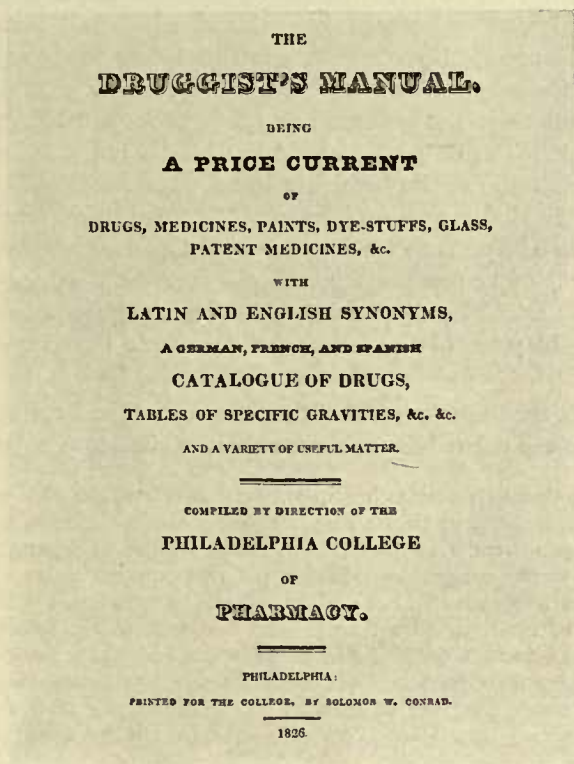
The publishing committee in charge of the *Journal of the Philadelphia College of Pharmacy* was composed of Samuel Jackson, Editor, Henry Troth, Solomon Temple, Ellis H. Yarnall, and Daniel B. Smith, and the first article in the first number was one by Mr. Smith "On the Preparation of Glauber's and Epsom Salt and Magnesia from Sea Water," which had been read as a paper before the College in October, 1825. It was proposed that there be monthly issues, but only four appeared before April, 1829 (October, 1825, May, 1826, September, 1827 and November, 1827), when Dr. Benjamin Ellis began the publication of a new series. Associated with him in the undertaking were Daniel B. Smith, Charles Ellis, Samuel A. Griffiths, Jr., and George B. Wood, the printer being John Grigg, on Fourth Street just north of Market Street.



The journal was now to make its appearance quarterly for a price of \$2.50 per annum, and so it proceeded until 1835. It had been courageously carried forward, issue by issue, without great pecuniary support, as may be well understood, by Dr. Benjamin Ellis, and after his death, in 1831, by Dr. R. Eglesfeld Griffith.

### Druggist's Manual

In 1826 the College issued "The Druggist's Manual," which a committee of members had prepared—a catalogue of drugs and medicines, with columns to be filled in with pencil or ink, for the purpose of forming a price current. The first and principal list of names was made out in Latin "according to the modern scientific nomenclature," to which were added paints, dyestuffs, glassware, surgeons' instruments and miscellaneous articles. The old Latin synonyms and the English syno-



TITLE PAGE OF DRUGGISTS' MANUAL (Reduced Size)

nymy were found in other tables for cross referece, and there were lists of drugs in the French, German and Spanish languages with English translations of the terms. Following these were tables of weights and measures and specific gravities, the doses of familiar drugs, and the verbal contractions used in prescription writing, and other material information useful in compounding medicines. Thus was attained "one of the first objects aimed at by the College." It was regarded as "a harbinger of more important works" which would "exert a decided influence over the prosperity of American Pharmacy." (*Jour. Phila. Coll. Phar.*, 1827, 96.)

### Patent Medicine Abuses

For a long time a number of old patent medicines covered with wrappers which ascribed the most remarkable properties to the compounds were in general use. They had originally come from England and certain recipes had been on file at the Office of Rolls in London since the time the patents were granted. Now they were made in this country in various ways. In May, 1822, a committee was named by the College to consider a proposal for correcting such abuses which had grown up in connection with the sale of these remedies.

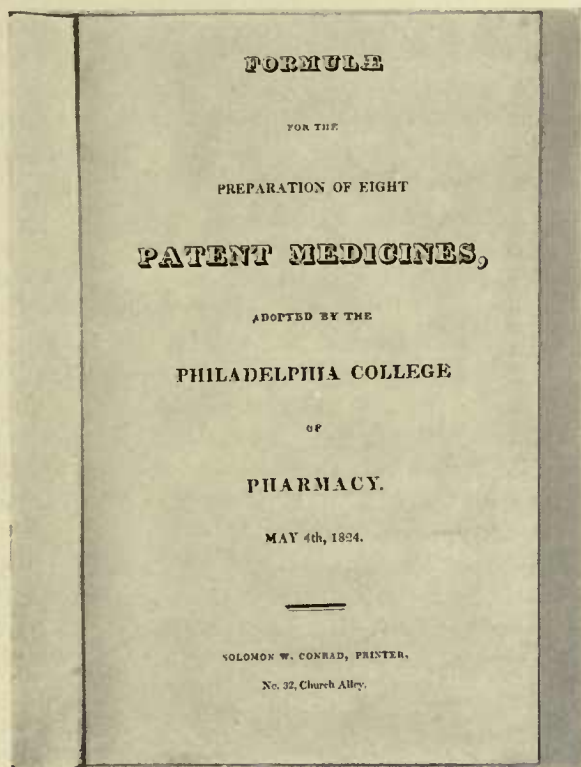
In 1824 Daniel B. Smith, Solomon Temple and Samuel Jackson were ready with formulas for eight of the medicines most in use—Hooper's Female Pills, Anderson's Scots Pills, Bateman's Pectoral Drops, Godfrey's Cordial, Dalby's Carminative, Turlington's Balsam of Life, Steer's Opodeldoc, and British Oil. It was an important service. For instance, ivory black, which had been used in many cases for making Hooper's Female Pills, was rejected as "a clumsy and barbarous ingredient." In Bateman's Drops, the committee found  $7\frac{1}{2}$  grains of opium to the pint in one formula in use by American apothecaries and 106 grains to the pint in another formula. The camphor content varied still more. Castor appeared in some recipes in place of catechu "which it in no way resembles." The amount of Opium contained in Godfrey's Cordial varied "in a very dangerous degree" from 4.46 parts down to 0.92 parts to 1,000 parts of the liquid. Compounders of British Oil were using oil of turpentine, flaxseed oil, spermaceti oil, and oil of bricks, "a nauseous and unskilful preparation" which had long been banished from the pharmacopœias. In place of the latter, the committee introduced Seneca oil or American petroleum.

In conclusion, the committee called the attention of the Trustees of the College to the character of the printed directions for these medicines as follows:

"We are aware that long custom has so strongly associated the idea of the genuineness of the patent medicines with particular shapes of the vials that contain them and with certain printed labels as to render an alteration in them an affair of difficulty. Many who use these preparations would not purchase British Oil that was put up in a conical vial, nor Turlington's Balsam in a cylindrical one. The stamp of the excise, the king's royal patent, the seal and coat of arms, which are to prevent counterfeits, the solemn caution against quacks and imposters, and the certified lists of incredible cures have not even now lost their influence. In stripping these medicines of their extravagant pretensions and false assertions, the committee are aware that they incur some risk of decreasing their sale. As they now stand, however, they carry a falsehood on their very front and are a reproach to the profession. Owing to the very gross falsifications that have been vended under their name, the confidence of the public in them, and their consequent sale, have no doubt lessened. If the Trustees should, therefore, adopt the report which is now laid before them; have suitable papers of directions for the medicines prepared and printed; and make arrangements for furnishing them to such of the members as should adopt these recipes, the committee believe that the reputation of the College preparations would soon become widely spread and that we should reap the benefit of the examination which has now been made in an increased public confidence in the institution and its members, the influence of which would be felt in extending the drug business of our city."

The report was adopted and the formulas were directed to be prepared and published by the College.





TITLE PAGE OF FORMULÆ OF THE COLLEGE (Reduced Size)

When, in 1829, a college of pharmacy was formed in New York city, it adopted the Philadelphia College of Pharmacy formulas for patent medicines, simply adding one for balsam of honey. (*Jour. Phila. Coll. Phar.*, April, 1834, 60.)

Worse than these were the new secret nostrums. The Medical Society of the City of New York was playing an honorable part in "stripping quackery of its mystery and borrowed plumes," and exposing its wickedness while it deceived the "multitude" and practiced "upon their credulity and ignorance at the expense of their purses and too frequently of their health and even lives." The Philadelphia College of Pharmacy endorsed and gave currency to the New York reports concerning Chambers' Remedy for Intemperance, Leroy's *Médecine Curative* and Swaim's Panacea. (*Jour. Phila. Coll. Phar.*, Nov., 1827, 114-27.)

The Swaim swindle was of particular interest to Philadelphia. William Swaim had been a bookbinder in the city. One day he saw a recipe for a medicine in a volume upon which he was adjusting the cover, and while exactly identical preparations were being sold under other names, he appropriated it to himself and by skillful advertising began to rake in the shekels from a gullible public. He soon moved into one of the finest residences in the city at the corner of Seventh and Chestnut Streets, and near his house erected public baths in which he taught Philadelphians, yet little accustomed to them, the value of the tub, shower and swimming pools, a much more useful service than the distribution of his remedies.

The "Panacea" as a "purifier of the blood" had no "parallel." It was "the most useful spring and autumn alterative ever known." It was commended to all who were affected with "scrofula or King's evil, scurvy, eruptions of the skin or any of these distressing diseases arising from impurity of the blood, also those who suffer from diseased liver or dyspeptic complaints, or from indiscretion of their youth, or those whose constitutions are broken down by mercurial, antimonial or arsenical medicines."

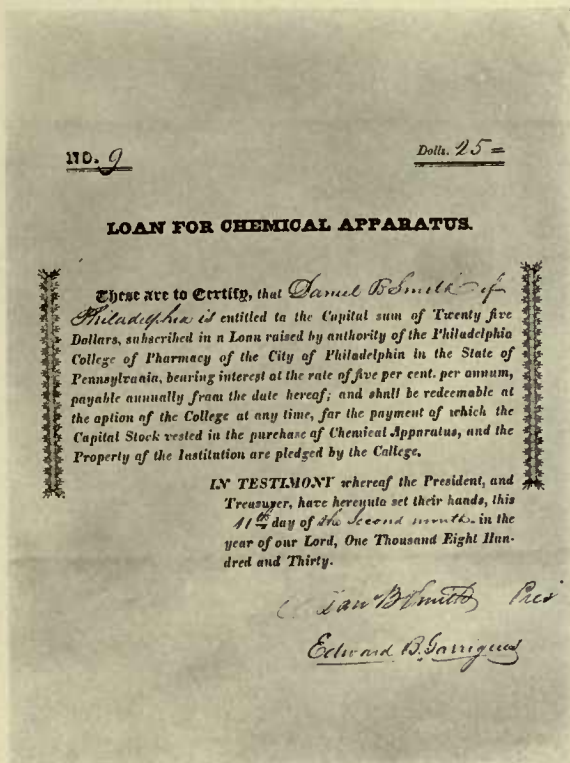
The effect of taking it was "such as not to interrupt either business or pleasure," Swaim averred in his advertisements. There were "no instances of failure" when it was "properly used." Professors and "the most eminent practitioners in every part of the United States, and in every part of the world" gave high praise to the "invaluable medicine." But there were "numerous and multiplying frauds." At least fifty mixtures more or less injurious were made in imitation of this one. None was genuine without Swaim's signature on the wrapper and the great picture of Hercules, looking like a cave man, who was slaying a hydra-headed dragon with a knotted club. The price was \$3 a bottle, as much as it cost for a stage and boat ride to New York, or \$30 a dozen.

Robert Hare, professor of chemistry in the University of Pennsylvania, obtaining a bottle of the medicine from Peter K. Lehman, analyzed it, found that it contained mercury and published the fact, to meet with the angry protests of Swaim in space which he hired in the daily press. (*Jour. Phila. Coll. Phar.*, Oct., 1829, 239.)

### Early Achievements

Here were results of undoubted value, the prophecies of the founders were being fulfilled, their hopes were coming to fruition. No pretentious plan was devised for the granting of degrees. The students who finished their prescribed course and satisfied their professors upon examination as to their proficiency were designated as "graduates in pharmacy." Their number was not large—only three in 1826, the first year when any were graduated (when the first diploma was issued), one in 1827, three in 1828, seven in 1829, four in 1830. Prior to 1850, only 146 had been graduated from the school, though a vastly larger number had heard the lectures and been profited thereby.

In 1826 the College authorities felt that they could truthfully make this statement of its achievements in the first five years of its history. "At this time," they said, "the College includes nearly the whole of the druggists and apothecaries of the City and Liberties who have thus voluntarily placed themselves under a system of regulation and subjected themselves to punishment on a conviction of improper conduct in their business. A spirit of improvement and desire of information have been widely diffused throughout the profession; greater attention is paid to the selection of medicines of good qualities; to elegance in the official preparations; to care and neatness in the compounding of prescriptions. In a word, a manifest advancement is clearly to be discerned in the whole business of the apothecary; the pharmacy of this city has been elevated in its character and the institution of the Philadelphia College of Pharmacy promises to attain all the important beneficial and interesting objects that are derived from European legislation, freed from the objectionable provisions of its arbitrary enactments."



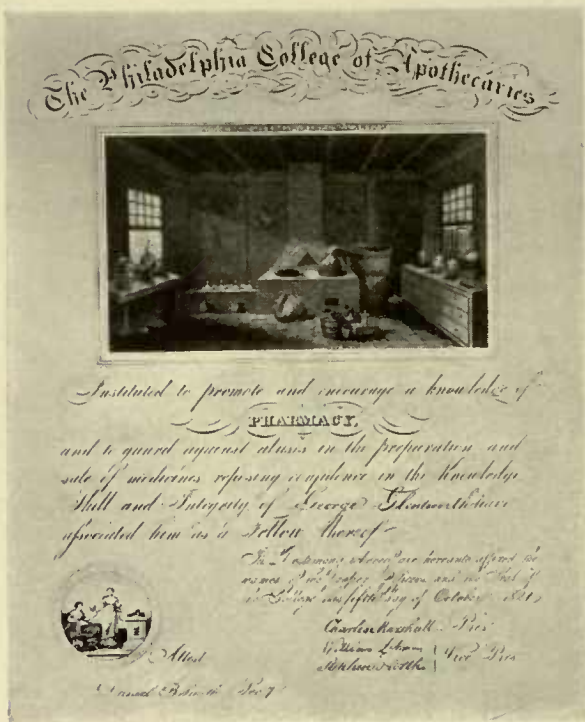
LOAN FOR CHEMICAL APPARATUS (Reduced Size)

In 1829 a committee appointed to discuss the propriety of opening a loan for \$1,000 to purchase chemical apparatus, stated that:

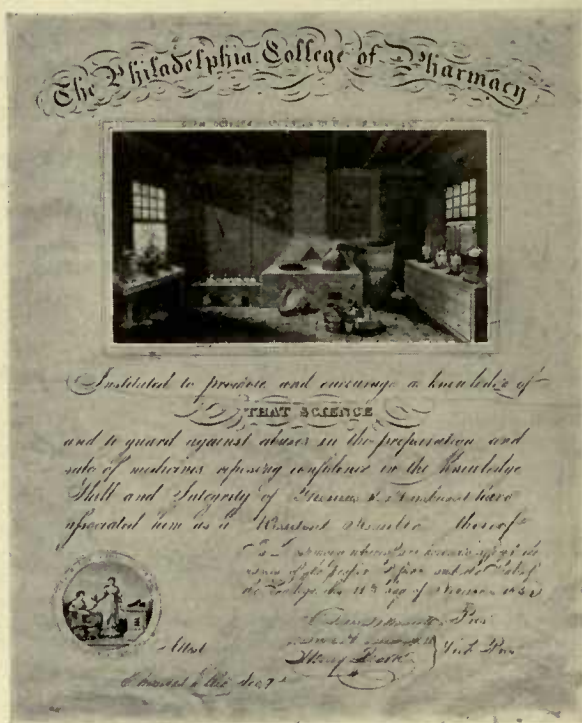
"The Philadelphia College of Pharmacy has now been in existence for more than eight years; during that period it has with slender funds and through many discouraging circumstances effected more for the improvement of American Pharmacy than all that has been done before or attempted in this country. It has produced union and concert, a more liberal spirit and more elevated views among the apothecaries of Philadelphia; it has had the honor of establishing the first school of pharmacy which this country has seen; it has established the first and only journal devoted exclusively to the science and art of the profession; it has resolved a company of shopkeepers into a scientific association, the inspiring influence of which we are just beginning to feel; it has founded a valuable professional library; and, more than all, it has educated a race of young men with more accurate science and more extensive knowledge than their predecessors, who are just coming upon the stage of action and enrolling themselves as members of the institution which they must regard as their alma mater, in whatever part of the world their future lot may be cast." (*Jour. Phila. Coll. Phar.*, 1829, 23.)\*

\* Not the least important factor in the success of the College at this time, despite the "slender funds and many discouraging circumstances," was the unswerving faith and earnestness of the Board of Trustees (which included the officers of the College) in the performance of their duties; thus, it is interesting to record that, on May 21, 1827, the Board of Trustees decided that "a fine of 6¼ cents be imposed on members of the Board for absence at roll call, and 12½ cents for absence from meetings." In these days "fips" and "levies" (6¼ and 12½ cents), in shimplasters, so called, were used. These were small credit slips or notes issued by a number of city institutions and business houses, and circulating as currency.





(Reduced Size)




(Reduced Size)

THE PHILADELPHIA COLLEGE OF PHARMACY

To all whom it may concern

**Whereas** CHARLES HAROLD DINGEE has served a regular Apprenticeship to the Drug and Apothecary business, has attended two full courses of Lectures in the School of Pharmacy of the said College and after an examination by the Professors and a Committee of the Trustees has been deemed by them qualified for conducting the business of **DRUGGIST AND APOTHECARY**. He is hereby declared to be a **GRADUATE** in the Philadelphia College of Pharmacy.

**In Testimony** whereof etc. hereunto annexed the Signatures of the proper Officers and the Seal of the said College this twenty eighth day of March in the Year of our Lord One thousand eight hundred and Twenty two.


 William Johnson, President  
 John Marshall, Secy


(Hand engrossed)  
(Reduced Size)

THE PHILADELPHIA COLLEGE OF  
Pharmacy

TO ALL WHOM IT MAY CONCERN

**Whereas** Charles H. Dingee has served a regular Apprenticeship to the **DRUG AND APOTHECARY** business, has attended two full courses of Lectures in the School of Pharmacy of the said College and after an examination by the Professors and a Committee of the Trustees has been deemed by them qualified for conducting the business of **DRUGGIST AND APOTHECARY**. He is hereby declared to be a **GRADUATE** in the Philadelphia College of Pharmacy.

**In Testimony** whereof etc. hereunto annexed the Signatures of the proper Officers and the Seal of the said College this 28th day of March in the Year of our Lord One thousand Eight Hundred and Twenty two.


 William Johnson, President  
 John Marshall, Secy

Samuel Jackson, Jr. (Prof. of Chem.)  
 John V. Storer (Prof. of Pharm.)  
 William Johnson (President)  
 John Marshall (Secy)  
 James H. Smith (Prof. of Med.)  
 Dir. President

ATTEST *[Signature]*

(From copper plate)  
(Reduced Size)

**Buildings of Early Philadelphia**  
For Educational, Scientific and Humanitarian Purposes



PENNSYLVANIA HOSPITAL, 1755-1922  
Eighth and Pine Streets



UNIVERSITY OF PENNSYLVANIA MEDICAL DEPARTMENT, 1826-1872  
Ninth Street above Chestnut



AMERICAN PHILOSOPHICAL SOCIETY  
(After Removal of High Stone Steps), 1789-1889  
Independence Square



LIBRARY COMPANY OF PHILADELPHIA, 1790-1879  
(Philadelphia Library)  
Fifth and Library Streets

These buildings were occupied for the years stated; in some cases, other buildings were occupied during earlier periods, and in other cases, at later periods.



**Buildings of Early Philadelphia**  
For Educational, Scientific and Humanitarian Purposes



GERMAN SOCIETY HALL, 1822-1832  
(Occupied by Philadelphia College of Pharmacy), Seventh Street above Chestnut (West Side)



ACADEMY OF NATURAL SCIENCES, 1826-1840  
Twelfth and George (Sansom) Streets



JEFFERSON MEDICAL COLLEGE, 1828-1846  
Tenth and Walnut Streets



FRANKLIN INSTITUTE, 1825-1922  
Seventh Street above Chestnut (East Side)

Benjamin Franklin was an original member of the Pennsylvania Hospital, then clerk or secretary of the Board of Managers and then president. He founded the American Philosophical Society, the College of Philadelphia, later merged with the University of Pennsylvania, the Library Company of Philadelphia, and indirectly, remote as it may seem, through John Morgan, the Philadelphia College of Pharmacy; because it was Franklin who had Morgan elected apothecary of the Pennsylvania Hospital and gave him material aid in his medical studies abroad, so that when he returned to this country, he strenuously fought for the separation of pharmacy from medicine, and as a result, "the course pursued by Dr. Morgan may be said to have given the original impulse to the cultivation of the profession of pharmacy and sanctioned its independent existence" (Dr. Joseph Carson, 1869), and to have led, eventually, to the institution of the Philadelphia College of Pharmacy. The other organizations referred to were founded after Franklin's demise.

Speaking in the same year (1829), Daniel B. Smith said that as a result of the foundation of the College the practice of pharmacy had "experienced a most salutary and remarkable improvement." "There was," said he, "not any business or trade in the community as nearly allied to the learned professions and for a fair reputation in which a greater degree of probity and intelligence is required by public opinion. The merchandise in which we traffic is brought from every region of the globe, and consists of so great a variety of the productions of the animal, the vegetable and the mineral kingdoms that to be a skilful druggist is to be not merely a well-informed merchant, but a learned naturalist." (*Ibid.*, Jan., 1830, 241-3.) By degrees the College would "render the title of a Philadelphia apothecary by another name for a profound chemist and naturalist and thus place the business where it ought to be—in the rank of the liberal professions." (*Ibid.*, 258.)

### Certificates of Membership in College

Commenting upon the certificates of membership and the seal of the College, Thomas S. Wiegand (*Amer. Jour. Phar.*, 1902, 453), has stated that:

"On examining some old certificates of membership in the College of Apothecaries, which have lately come into the possession of the College, two of them issued in 1821, the year when the College was organized, I observed above the sketch of the laboratory on the certificate a legend which differs somewhat from that on the certificate now in use by our College. It reads thus '*Quem scit uterque exerceat artem*'—the translation of which is, 'Let each one practice the art which he knows.' In the year following, 1822, the title of our College was adopted and the act of incorporation secured. The committee who were charged with the duty of having the certificate altered to correspond with the corporate name, had the legend changed to a quotation from one of Cicero's writings, and it reads, '*Quam quisque novit artem in hac se exerceat*'—the translation of which is, 'Let each one exercise himself in the art which he knows.'

"One other fact should be noted in connection with these legends on our certificates—that they all point to the importance which the organizers of our College attached to the educational qualification of those who should become members of the profession and associates in the College work.

"This is so well shown by the legends:

- (1) Let each one work in the business he knows.
- (2) Let each one exercise himself in the art which he knows.
- (3) The legend of the seal, which goes further and tells the members that it is *safety* to know all these things.

"Let us all heed the lessons that the worthy pioneers of pharmacy so wisely planned, and so earnestly worked to carry out when organizing our College; then our present pharmacists will live in the kind remembrances of their successors when they have left their active labors to younger hands."

The legend of the seal of the College reads: "*Nosse haec omnia salus est*," the translation of which is: "To know all these things (as exemplified by the design of the seal) is safety"—that is, safety of health and life.

## CHAPTER III

## IN A HOME OF ITS OWN—ZANE STREET BUILDING (1832-1868)

## Wood

The coming of George B. Wood, a young New Jersey Quaker, to the College in 1822, in the second year of its existence, to follow the not very successful Gerard Troost with lectures on chemistry, was the beginning of a connection which continued for thirteen years. He was only twenty-five years of age. After taking his A.B., he entered the medical school of the University of Pennsylvania, and he had but lately received his degree of doctor of medicine. Eager and ambitious, with a



GEORGE B. WOOD

comprehension of many branches of learning he, in 1831, upon the death of Benjamin Ellis, was transferred to the professorship of materia medica and pharmacy.

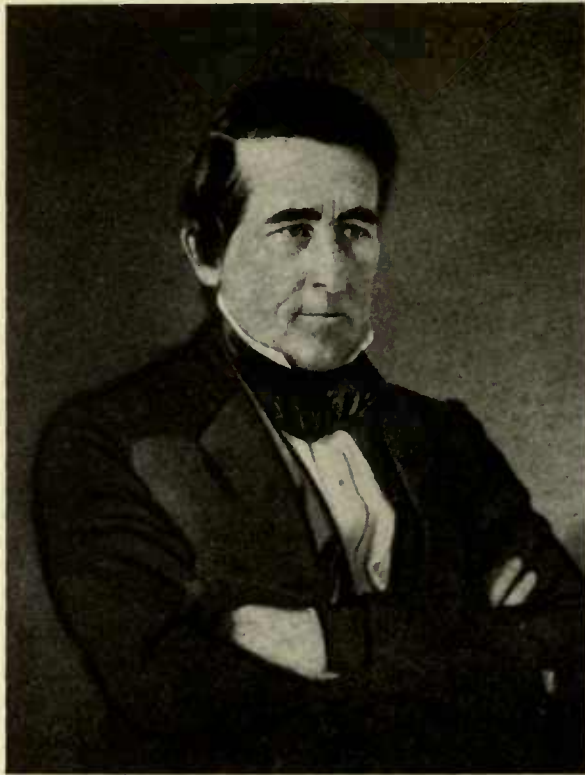
Wood is held to have been one of the foremost teachers of his time. Precise in elocution, sedate of disposition, rather formal, and indeed ceremonious in manner, making others feel at times a certain constraint when in his society ("Memoir of George B. Wood," S. Littell), his courses were the admiration of his students. His power as a lecturer all freely conceded, and his auditory was always filled. By the



introduction of living specimens of medicinal plants taken from the fields and forests, supplemented when he was a professor in the University from his own private conservatories and botanical garden, he awakened the liveliest interest in his hearers. His use of pictures and charts when these as yet were but little relied upon in class rooms, his resort to the cabinet of minerals and drugs for illustration of the subjects about which he spoke, gave his courses a high reputation, which was increased by his growing fame as a scientific writer.

### Bache

Franklin Bache was five years older than Wood. He had graduated in the department of arts in 1810, and later, after studying in the office of Dr. James Rush, from the medical school of the University. He was a great grandson of Benjamin



FRANKLIN BACHE

Franklin through the marriage of "Poor Richard's" daughter Sarah with Richard Bache.\* His father was Benjamin Franklin Bache, the indomitable editor of the *Aurora*, the well-known Philadelphia anti-Federalist newspaper during the Washington and Adams administrations who had been victim of the yellow fever epi-

\* Benjamin Franklin had two children, William, who became the last royal Governor of New Jersey, and Sarah, who married Richard Bache, the president of the Republican Society of Philadelphia at the beginning of the Revolution and subsequently Postmaster General of the United States (1776-1782).

demic of 1798. After a few years in the army, to which he was drawn as a surgeon in the War of 1812, he settled in Philadelphia, his native city, for the practice of medicine. But his interest called him to lecturing, writing and scientific research. Some of the public-spirited men who were concerned in the foundation of the Philadelphia College of Pharmacy a little later (1824) formed the Franklin Institute. Bache became, in 1826, one of the public lecturers on chemistry in this latter institution, and now in 1831, he resigned that post to come to the College to conduct a course on the same subject.

The association of Wood and Bache constituted a notable era in the history of the school. They were eminently qualified to serve as pioneers in the development of those branches of knowledge connected with its particular sphere of usefulness, and though Wood joined the Faculty of the Medical School of the University of Pennsylvania in 1835 as professor of materia medica and pharmacy, as the successor of John Redman Coxe, and Bache passed to the Jefferson Medical College in 1841, and they were to develop their scientific careers under new auspices, they continued their writings in the field of pharmacy and put their lasting mark upon the pharmaceutical education of the country.

Bache was not so brilliant as Wood in the lecture room, he was not inventive. It was his service to sift the truthful and valuable from the work of others. Methodically and conscientiously, he would present it in well-chosen phrases, simply and clearly, without figure of speech, though not without recourse at times to anecdote or the introduction of a humorous remark. His students then, while they felt themselves in the presence of one from whom they could derive great profit, were not likely to be warmed or entertained as they might be in the lecture rooms of other men. ("Memoir of Franklin Bache," Dr. G. B. Wood. Prepared for the College of Physicians; also "Historical Memoirs of the Philadelphia College of Pharmacy," Edward Parrish.)

### Early American Pharmacopœias

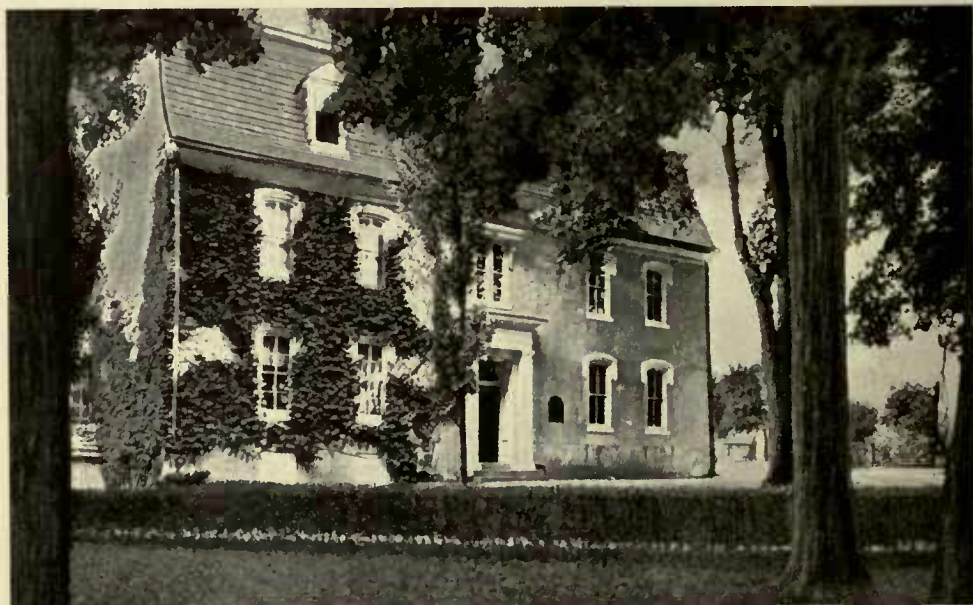
While these men labored for the College, adding to its reputation, it had for its president, wrote Dr. George B. Wood in 1860, a man who "contributed more than any other one individual to the impetus which carried the pharmacy of this country to its present relatively high position." This was Daniel B. Smith, who stood "among the first apothecaries of his time in literary and scientific attainment, peculiar skill in his art and general reputation," ready at all times to support and promote whatever movement might be instituted to forward the interests of the College and the profession of pharmacy. (*Amer. Jour. Phar.*, 1883, 341.)

The pharmacopœias in use in this country prior to 1820 were incomplete and unofficial. The medical profession had "no authorized pharmaceutical guide and the apothecaries no general recognized standards for the preparation of medicine." British, French and German books were to be found in the libraries of leading physicians and in the "back rooms" of the principal apothecaries. The pharmacopœias of the London, Edinburgh and Dublin Colleges—these had not yet been united—were more looked to perhaps than any others, and "the fact that these works, in many particulars, in the strength of medicines and their mode of preparation, aided by the adoption of the one or the other of them in different localities or

by different individuals in the same place, gave to the pharmacy of this country an irregularity and uncertainty hardly now to be appreciated and it is to be hoped never again realized." (Wm. Procter, Jr., *Amer. Jour. Pharm.*, April, 1846, 1.)

### The First Pharmacopœia Published in the United States

The first pharmacopœia published in the United States of America was published by Styner and Cist of Philadelphia in 1778. It was printed entirely in Latin upon 32 pages, the text occupying upon each page  $4\frac{1}{4}$  inches in length and  $2\frac{1}{2}$  inches in width. It was compiled by Dr. William Brown, Physician-General to the Hospitals of the United States, at the Continental Hospital located in Lititz, Lancaster Co., Pa., in the building now occupied by the Lititz Academy, formerly the Brothers' House, "for the use of the Military Hospital belonging to the Army of the United States of America. Adapted especially to our present state of need and poverty, which we owe to the ferocious cruelty of the enemy, and to a cruel war brought unexpectedly upon our fatherland." A second edition appeared in 1781, on the title page of which Dr. William Brown is mentioned as author.



MORAVIAN CHAPEL, BROTHER'S HOUSE, BUILT 1761, LITITZ, PA.

Building used by order of General George Washington as a military hospital during 1777-1778. The tablet on the wall was erected by the Lititz Moravian Congregation "in memory of the brave soldiers of the Continental Army who died in this building."

Dr. Brown was a son of the Rev. Richard Brown, and was born in Virginia in 1748. His grandfather was Gustavus Brown, a Scotch physician and surgeon of repute. After receiving his early education at home, he was sent to Edinburgh, Scotland, where he finished his academic course and attended medical lectures. On his return to Virginia he began to practice his profession near Alexandria, where he intermarried with the Alexander family. On the breaking out of the war for



Independence, he offered his services, and, although but twenty-eight years of age, was soon advanced to the responsible position of physician-general to the hospitals of the United States Army. He died in 1792 and was buried in the family burying ground of the descendants of John Alexander, a younger son of the Earl of Sterling. On his tombstone is inscribed the following:

"In Memory of William Brown, M.D., formerly Physician-General to the Hospitals of the United States. . . . His zeal and fidelity as a patriot; his patience, diligence and skill as a physician; his benevolence, courtesy and integrity as a man, secured him the applause of his country, and the honor and endowment of his profession, the respect of the wealthy and the veneration of the poor. . . . As a husband, father and master, he was tender, instructive and humane; he lived without guile, and he died without reproach."

Upon one of the blank pages of a copy of the first edition of this Pharmacopœia in the possession of the Historical Society of Pennsylvania, there is written, in the handwriting of Dr. Brown, a letter addressed by him to Dr. Moses Bloomfield, Junior Physician and Surgeon of the General Hospital, which is photographically reproduced in the following pages by courtesy of the Historical Society of Pennsylvania,\* as are, also, the pages of the first edition of the volume itself, which have not been hitherto published.

The letter to Dr. Bloomfield reads as follows:

FOR DR. MOSES BLOOMFIELD,  
Jun. Phys. & Surg. Gen. Hosp'l.

For the sake of expedition and accuracy in performing the Practice, & also to introduce a degree of uniformity therein throughout the several hospitals, the following Pharmacopœia has been compiled, consisting of such formulæ as it is always in our power to obtain; at the same time blank pages are interleaved for the insertion of any favourite or more usefull formulæ which the prescribers may choose to make use of in addition or in place of any of those herein contained; but these have in a series of Practice been found both convenient & efficacious & are recommended to be generally used in the hospitals by

WM. BROWN,  
*Phys. Gen'l, M.D.*

---

\*The Historical Society of Pennsylvania was organized in 1824 and incorporated in 1826. Daniel B. Smith, apothecary, one of the incorporators of the Society, was the first president of the American Pharmaceutical Association and one of the most active spirits of the Philadelphia College of Pharmacy. The Society began in a humble way, occupying, successively, the rooms of the American Philosophical Society, the Athanæum, premises belonging to the Pennsylvania Hospital, and lastly its present building at Thirteenth and Locust Streets. From nineteen original members, it has increased to 2,800, and its library contains thousands of volumes, pamphlets and relics of rich historical interest.

For Dr Moses Bloomfield  
Surgeon Major Gen Hosp.

For the sake of expedition and accuracy in performing the Practice, & also to introduce a Degree of uniformity therein throughout the several Hospitals, the following Pharmacopœia has been compiled, consisting of such formulae as it is always in our power to obtain; at the same time blank pages are interlined for the insertion of any favourite or more useful formula which the Physicians may choose to make use of in addition or in place of any of those herein contained; but these have in a series of Practice been found both convenient to Physicians, & are recommended to be generally used in the Hospitals by  
J. Brown

Phar. Co. 1799

# PHARMACOPOEIA

SIMPLICIORUM

ET

EFFICACIORUM,

IN USUM

NOSOCOMII MILITARIS,

AD EXERCITUM

Fœderatarum Americæ Civitatum

PERTINENTIS;

HODIERNÆ NOSTRÆ INOPIÆ RERUMQUE  
ANGUSTIIS,

Feroci hostium sævitiz, belloque crudeli ex inopinato  
patriæ nostræ illato debitis,

MAXIME ACCOMMODATA.

PHILADELPHIÆ:

EX OFFICINA STYNER & CIST. M DCC LXXVIII.

**D**ISTINGUUNTUR æstimo medicamentorum formulæ, quæ apud commune operarium preparari et componi debent; ceteræ inter nosocomiorum officinas sunt extemporè miscendæ.

Plurimæ sunt formulæ solidæ et siccæ quæ commodius vel saltem elegantius liquidâ formâ adhiberi possent, nisi defuerit imprimis phialarum copia; et omnia, quæ minus efficacia, pro recipientibus vel causa elegantie tantum usui sunt, quales aquæ simplices, &c. variaque emplastra et unguenta vice necessaria aut-utilia, transportandi incommodo vitare velimus.

Lititz, Martii 12. 1778.

Moses Bloomfield.

PHARMACOPOEIA, &c.

PARS I.

MEDICAMENTA INTERNA.

I. AQUA ACIDULA, (Pocca Roman.)

REC. Aceti vinosi, vel  
pomacei, *unc. iv.*, vel  
Pulv. crem. tartar. *drachm. ii.*  
Aquæ fontanæ *lib. iſs.* Miscæ.  
Pro potu communi antiseptico, *unc. iv.* 6tis  
die, vel ad libitum, sumendæ:

Addi possint, pro te nata, spiritus vini  
tenuis *unc. ii.*

2. AQUA VINOŒA.

REC. Vini Maderensis *unc. viii.* vel  
rubri *unc. xii.*  
Aquæ fontanæ *lib. i.* Miscæ.

A 2

Pro

[ 4 ]

Pro potu--- in statu ac decursu febris ca-  
strensis et malignæ utendo, ad vacillan-  
tem tonum corporis sustinendum, *virisque*  
*naturæ medicatrices* refocillandas, evocan-  
dasque--- *unc.* iv. 6iis die, vel sæpius  
fumendæ.

3. AQUÆ HORDEATA, ORIZATA, ex  
PANE COCTO, vel ex PANE TOSTO.

Fiunt priores tres coquendo hordei perlati,  
vel orizæ *unc.* ii. vel panis domëstici  
*unc.* iv. in aquæ fontanæ *lib.* iv. ad dimidiū  
consumptionem, i. e. ad *lib.* ii; et aqua ex  
*pane tosto*, infundendo per semihoram panis  
tosti jam præ foco ferventis *unc.* iv. in  
aquæ fontanæ *lib.* ii.

Usurpari possint hæc pro potu communi,  
et inter se mutari vel pro ægri desiderio,  
vel promptuarii rerumque nosocomii  
commodo.

4. AQUA CALCIS.

REC. Calcis vivæ *lib.* i.

Affunde gradatim

Aquæ fontanæ *cong.* ii.

Post

[ 5 ]

Post ebullitionem, subsidentia depuretur  
mixtura; deinde per chartam-coletur, et  
in vasis vitreis bene clausis fervetur.

Dosis a *lib.* i. ad *lib.* ii. die.

Utilis est etiam in chirurgicis, pro lotionè,  
ad ulcera mali moris, &c.

5. BOLUS C RETA.

REC. Cretæ ppt *scrupul.* i.

Laudani liquidi *gutt.* v.

Mucilag. gum Arab. q. s.

Sumendus 2da 3tia vel 4ta quaque hora.

6. BOLUS VOLATILIS.

REC. Sal. C. C. volat. vel

Sal. ammon. volat. (a)

Camphoræ ana *gr.* v.

Conserv. rosarum q. s.

Pro una dosi 3tia vel 4ta quaque hora  
sumenda.

7 Fit

(a) Si desit sal volatile ad hunc bolum componen-  
dum, uti possint ejus loco sal. ammoniac. crud. *gr.* x.  
cum sal. tartar. *gr.* v. quo sal volatile ammoniac. ex-  
temporè præparetur.

[ 6 ]

7. Fit etiam cum OPIO, addendo

Opii puri *gr.* ʒ.

Eodem modo sumendus.

8. BOLUS E RHÆO cum MERCURIO.

REC. Pulv. rhæi *gr.* xxv.

Calomel. ppt. *gr.* v.

Syrup. sacchar. q. s.

Mane sumendus.

9. BOLUS LIXIVALIS.

REC. Sal. tartar. *gr.* x.

Conserv. rosar *scrupul.* i. M.

Ter quaterve die sumendus.

10. COLLYRIUM VITRIOLICUM.

REC. Vitriol. albi *scrupul.* i.

Aquæ fontanæ *unc.* iv. M.

Ter die utendum.

11. \* CONSERVA ROSARUM. *Pharm.*  
*Lond.*

12. DE-

[ 7 ]

12. DECOCTUM CORTICIS PE-  
RUVIANI.

REC. Pulv. crass. cort. Peruvian. *unc.* i.

Aquæ fontan. *lib.* iii.

Coque ad *lib.* ii. et cola.

Dosis ab *unc.* i. ad *unc.* iv. quaque, vel 2da  
quaque hora.

13. DECOCTUM CORTICIS cum  
SERPENTARIA.

Fit addendo decocto corticis Peruviani, sub  
finem coctionis,

Rad. serpentariæ contus. *semunciom.*

Dosis ab *unc.* i. ad *unc.* iii. quaque, vel 2da  
quaque hora.

His utrisque addi possit, pro re nata,  
Elixir vitrioli acid. *drachm.* i.

14. DECOCTUM CORTICIS cum VINO.

Fit addendo decocto cort. Peruviani

Vini rubri *lib.* ii. vel

REC. Singulorum P. Æ. et misce.

Dosis ut decocti cort. Peruvian.

15. DE-



## 15. DECOCTUM RADICIS SARPAPARILLÆ.

*REC.* Rad. sarsaparill. *unc.* iii.  
 Aquæ fontanæ *lib.* iii.  
 Coque ad *lib.* ii. et sub finem coctionis adde  
 Rad. glycyrrhiz. *drachm.* ii.  
 Colaturæ dosis a *lib.* i. ad *lib.* ii. die.  
 Adde, pro re nata,  
 Vini antimonalis *drachm.* ii.

## 16. DECOCTUM TORMENTILLÆ.

*REC.* Rad. tormentillæ contus. *unc.* i.  
 Pulv. C. C. C. *unc.* ii.  
 Pulv. gum. Arabic. *semunciam*  
 Aquæ fontanæ *lib.* iii.  
 Coque ad *lib.* ii. et sub finem coctionis adde  
 Cort. cinnamomi contus. *drachm.* i.  
 Colaturæ admisce  
 Sacchari albi *drachm.* ii.  
 Dosīs ab *unc.* ii. ad *unc.* iv. ter quaterve die.  
 Adde, pro re nata,  
 Laudani liquidi *gutt.* xl.

## 17. ELECTA-

## 17. ELECTARIUM CORTICIS CHALYBEATUM.

*REC.* Pulv. cort. Peruvian. *unc.* i.  
 Rubiginis, vel limaturæ ferri ppt.  
 Pulv. canellæ albæ ana *drachm.* ii.  
 Syrupi q. s. M.  
 Dosīs *drachm.* i. ter quaterve die.

18. \* ELECTARIUM LENITIVUM.  
*Pharm: Edin.*

Vel, omittatur cassia fistularis,  
 et duplicentur tamarindi.  
 Dosīs *drachm.* ii. mane.

19. ELECTARIUM LENITIVUM  
 cum NITRO.

*REC.* Elect. lenitiv. *unc.* ii.  
 Pulv. sal. nitri *semunciam.* M.  
 Dosīs *drachm.* i. bis terve die.

## 20. ELECT. LENITIVUM BALSAM.

*REC.* Elect. lenitiv. *unc.* ii.  
 Balsam. capivi  
 Gum. guaiac. ana *semunciam;* M.  
 B Dosīs

Dosīs *drachm.* i. omni nocte, vel mane et  
 vespere.

## 21. ELECT. seu LOHOCH de SPERMATE CETI.

*REC.* Spermatis ceti *unc.* i.  
 Mellis *unc.* ii.  
 Balsam. Peruvian. *drachm. fs.* M.  
 Dosīs *drachm.* i. 2<sup>da</sup> quaque hora, vel sæ-  
 pius, urgente tussi.

## 22. Fit etiam, cum OPIO, addendo

Laudani liquidi *drachm.* i.

23. \* ELIXIR PAREGORICUM.  
*Pharm. Lond.*

## 24. \* ELIXIR VITRIOLI ACIDUM.

*REC.* Canellæ albæ  
 Rad. zingiberi ana *unc.* i.  
 Spiritus vini tenuis *lib.* ii.  
 Digere leni calore, et cola: Adde grada-  
 tim miscendo  
 Olei vitrioli *unc.* viii.

Mixtura

Mixtura subsidentia depurata coletur per  
 chartam.

Dosīs *gutt.* xxv. bis terve die, in poculo  
 aquæ fontanæ fumendæ; vel misceri  
 possit cum potu communi ad gratam  
 aciditatem.

## 25. ENEMA COMMUNE.

*REC.* Aquæ fontanæ calidæ *unc.* xii.  
 Salis communis *semunciam*  
 Olei olivarum, vel ol. sem. lini,  
 vel axungiæ porcine *unc.* i. M.

## 26. ENEMA ANODYNUM.

*REC.* Infusi feminum lini *unc.* vi.  
 Laud. liquidi *gutt.* xl. M.

## 27. EPITHEMA VESICATORIUM.

*REC.* Unguenti basilic. flav. super alutam,  
 linteum, vel chartam crassè ex-  
 tensi, q. s.

Asperge

Pulv. subtil, cantharidum, q. s.  
 Post levem manu pressionem, excute

B 2 super-

superfluum pulverem unguento non hærentem:

Pauxillo aceti, madefactâ prius cute, applicetur.

28. FOTUS ANODYNUS.

REC. Capit. papaver. hortens. *unc. i.*  
Aquæ fontanæ *lib. iii.*

Coque ad *lib. ii.* et adde  
Aceti *lib. fs.*

Vel eidem quantitati aquæ calidæ et aceti  
adde laud. liquid. *drachm. ii.*

29. FOTUS SPIRITUOSUS.

REC. Aquæ calidæ *lib. ii.*  
Aceti  
Spir. vini tenuis ana *lib. fs. M.*

30. GARGARISMA COMMUNE.

REC. Sal. nitri *drachm. i.*  
Aceti *unc. ii.*  
Mellis *semunciam*  
Aquæ fontanæ *unc. vi. M.*

31. GAR-

31. GARGARISMA ADSTRINGENS.

REC. Decocti cort. Peruvian. *unc. vi.*  
Elixir vitrioli acid. *drachm. i.*  
Mellis *unc. i. M.*

32. HAUSTUS ANODYNUS.

REC. Laudani liquidi *gutt. xxv.*  
Aquæ fontanæ *unc. fs.*  
Syrupi *drachm. ii. M.*

33. INFUSUM CHALYBEATUM.

REC. Rubiginis, vel limaturæ  
ferri ppt. *unc. iv.*  
Rad. gentianæ contus. *unc. ii.*  
Cort. Canelle albæ contus. *unc. i.*  
Vini pomacei veteris *lib. viii.*  
Infunde per aliquot dies.  
Dosis *unc. ii.* ter quaterve die

34. INFUSUM SEMINUM LINI.

REC. Sem. lini integr. *unc. ii.*  
Aquæ bullientis *lib. iv.*  
Sepone ad focum per horas duas, et cola.  
Dosis

Dosis *unc. iv.* 6tæ die; vel pro potu communi.

35. INFUSUM SASSAFRAS.

REC. Radicis, ligni, vel corticis fassafra-  
contus. *unc. i.*

Aquæ bullientis *lib. iv.*

Infunde per 4 horas, et cola.

Dosis *unc. iv.* 6tæ die.

Addi possit, pro re nata

Vini antimomialis *semuncia.*

36. INFUSUM SERPENTARIÆ.

REC. Rad. serpentariæ *unc. i.*

Aquæ bullientis *lib. ii.*

Infunde per 4 horas; et cola.

Dosis *unc. ii.* 3<sup>ta</sup> vel 4<sup>ta</sup> quaque hora.

37. INFUSUM SENNÆ.

REC. Fol. sennæ *semunciam*

Fruct. tamarind. *unc. i.* vel

Pulv. crem. tartar. *semunciam*

Aquæ bullientis *lib. i.*

Infunde per horam, et cola.

Pro

Pro unâ dosi; *unc. iv.* quaque semihorâ sumendæ ad alvi solutionem.

38. INJECTIO MERCURIALIS.

REC. Unguenti mercurialis *semunciam*;  
Solve in

Olei olivar. vel amygdal. d. *unc. iv.*

Utenda mane et vesperè, vel ter die

39. INJECTIO BALSAMICA.

REC. Balsam. capivi *drachm. ii.*

Ol. olivar. vel amygdal. d. *unc. iv. M.*

Utenda mane et vesperè, vel ter die.

40. LINIMENTUM ANODYNUM.

REC. Axungie porcine *unc. ii.*

Laudani liquidi *semunciam.*

Misce intime.

Ad hæmorrhoides; vel ad dolorem spasticum ægrè tolerabilem.

41. LINI-

## 41. LINIMENTUM CAMPHORATUM.

REC. Camphoræ *semunciam*.  
Ol. olivarum, amygdal. d. jug-  
landum, vel sem. lini sine calore  
expressi *unc. ii* M. s. a.

## 42. LINIMENTUM VOLATILE.

REC. Linimenti camphorati *unc. ii*.  
Sp. fal. volat. ammoniac. *semun-*  
*ciam*. M.

43. MAGNESIA ALBA. *Pharm. Edin.*

Dosis a *drachm. j* ad *drachm. ii*.---Pro ca-  
thartico leni et utili, valente acido sto-  
machi indigeno.

## 44. MUCILAGO GUMMI ARABICI.

REC. Gum. Arabic. *unc. iv*:  
Aquæ fontanæ *unc. x*. M. s. a.

45. \* OLEUM RICINI, *Emptitium*.

46. PILU-

## 46. PILULÆ ALOETICÆ.

REC. Aloës succotrin.  
Saponis Hispan. ana. P. Æ:  
Syrupi *ss*.  
Dosis a *gr. x*. ad *gr. xxv*.

## 47. PILULÆ AMMONIACÆ.

REC. Gum. Ammoniac. *unc. ii*:  
Saponis Hispan. *unc. i*.  
Balsam. capivi *q. s* M.  
Dosis a *gr. x*. ad *gr. xv*. ter die.

## 48. PILULÆ ANTIMONIALES cum MERCURIO.

REC. Tartar. stetic. *drachm. i*.  
Calomel. ppt. *drachm. ii*.  
Syrupi *q. s*.  
Formetur massa in pilulas 120.  
Dosis i. omni nocte, vel bis terve die.

## 49. PILULÆ CALOMELANÆ.

REC. Calomel. ppt. *scrupul. i*.  
Miccæ panis *scrupul. ii*.  
Syrupi *q. s*.

C

For-

Formetur massa in pilulas 20:  
Dosis i. ii. vel iii. omni nocte, vel bis die.

## 50. PILULÆ CHALCANTHICÆ.

REC. Sal. martis calcinati *drachm. i*.  
Terebinthinæ venetæ *drachm. ijs*.  
Pulv. gum. myrrh. *q. s*.

Formetur massa in pilulas 60.

Dosis ab i. ad iii. ter die.

## 51. PILULÆ ex HYDRARGYRO.

REC. Hydrargyri *drachm. i*.  
Mellis *drachm. i*.

Tere simul in mortario marmoreo ad per-  
fectam globulorum extinctionem:

Dein adde

Miccæ panis *q. s*.

Formetur massa in pilulas 60.

Dosis i. vel. ii. mane, et ii. vel iii. vespere,  
cum decocto rad. sarsaparillæ--- ad luem  
veneream.

52. Pi-

52. PILULÆ e JALAPIO cum MER-  
CURIO.

REC. Pulv. rad. jalapii *semunciam*.  
Calomel. ppt. *drachm. i*.  
Syrupi *q. s* M.

Dosis a *scrupul. i*. ad *scrupul. ii*.

## 53. PILULÆ e SENEKA.

REC. Pulv. rad. senekæ *scrupul. i*.  
Saponis Hispan. *semunciam*. M.

Dosis a *gr. x*. ad *gr. xv*. 6ties die.

Ad calculum--- vel ad febres intermitten-  
tes pertinaciores.

54. \* PILULÆ ex EXTRACTO MY-  
ROBALANI. (a)

REC. Corticis, vel radice myrobalani  
contus. *q. s*.

Aquæ fontanæ *q. s*.

Coque ut fiat decoctum fortius, et cola:  
Deinde per evaporationem leni calore  
peractam,

C 2

(a) Anglicè WHITE WALNUT, sive BUTTER-NUT.



peractam, more solito fiat *extractum molle*,  
ex quo tormentur pilule gr. v.

Dosis a ij. ad v.---Pro cathartico leni, grato  
et efficaci; vi quoque tonicâ pollenti.

## 55. PILULÆ c RHÆO.

REC. Pulv. rhæi gr. xxv.  
Pulv. aromatic. gr. v. vel ol. cin-  
namom. gutt. i.  
Syrupi. q. s. M.

Pro unâ dosi---hora somni, vel mane su-  
menda.

## 56. PILULÆ FOETIDÆ cum ALOE.

REC. Gum. afæ foetid. *scrupul.* i.  
Aloës succotrin. gr. v.  
Mucilag. gum. arabic. q. s.

Formetur massa in pilulas 4.

Dosis a ii. ad iv.---Utenda in gravi sto-  
machi flatulentia cum alvi constipatione;  
quæ aliquando in febre malignâ et ca-  
strensi occurrit, ad flatum deorsum ex-  
pellendum.

57. Pi-

## 57. PILULÆ OPIATÆ.

REC. Opii puri *scrupul.* i.  
Saponis Hispan. *drachm.* i. M.

Formetur massa in pilulas 20.

Dosis i. vel. ii. hora somni.

## 58. PILULÆ PICEÆ.

REC. Picis liquidæ q. v.  
Pulv. cascariillæ q. s. M. s. a.

Dosis gr. xv. vel *scrupul.* i. ter die.

## 59. PILULÆ SAPONACEÆ cum RHÆO

REC. Saponis Hispan. *drachm.* vi.  
Pulvis rhæi *drachm.* ii.  
Syrupi q. s. M.

Dosis a *scrupul.* i. ad *scrupul.* ii. bis terve die.

## 60. PILULÆ SCILLITICÆ.

REC. Pilul. ammoniac. *unc.* i.  
Pulv. scillæ aridæ *drachm.* ijs. M.

Dosis gr. x. vel gr. xv. ter die.

61. \* PUL-

## 61. \* PULVIS AROMATICUS.

REC. Canellæ albæ.  
Rad. zingiber. ana P. Æ. M.  
Fiat pulvis.

Dosis a gr. v. ad *scrupul.* i.

## 62. \* PULVIS ALUMINOSUS.

REC. Alum. crudi,  
Terræ japonicæ, ana P. Æ. M.

Dosis a gr. viii. ad *drachm.* fs.

## 63. PULVIS ANTIMONIALIS.

REC. Tartar. emetic. *drachm.* i.  
Cretæ ppt. *unc.* i. M.

Dosis a gr. x. ad *scrupul.* i. pro emetico;  
vel a gr. ii. ad gr. viii. 3<sup>ta</sup> vel 4<sup>ta</sup> quaque  
hora, pro diaphoretico.

64. PULVIS ANTIMONIALIS  
NITROSUS.

REC. Tartar. emetic. gr. ii.  
Salis nitri *drachm.* iiii. M.

Dosis

Dosis a gr. xv. ad *drachm.* fs. 2<sup>da</sup> vel 3<sup>ta</sup>  
quaque hora.

## 65. Fit etiam cum OPIO, addendo

Gum. opii gr. ii.  
Eodem modo sumendus.

66. PULVIS CAMPHORATUS  
NITROSUS.

REC. Camphor. *drachm.* fs.  
Sal. nitri *drachm.* ii. M.

Dosis a gr. xv. ad *drachm.* fs. 2<sup>da</sup> vel 3<sup>ta</sup>  
quaque hora.

## 67. Fit etiam cum OPIO, addendo

Gum. opii gr. ii.  
Eodem modo sumendus.

## 68. \* PULVIS CORTICIS PERUVIANI.

Dosis a *drachm.* fs. ad *drachm.* i. quaque vel  
2<sup>da</sup>. quaque hora.

69. PUL-

69. PULVIS CORTICIS cum  
SERPENTARIA.

REC. Pulv. cort. Peruvian. *unc.* i.  
Pulv. rad. serpentar. *drachm.* ii. M.

Dosis *drachm.* *ss.* quaque, vel 2<sup>da</sup> quaque  
hora.

## 70. PULVIS CORTICIS cum OPIO.

REC. Pulv. cort. Peruvian. *unc.* i.  
Laudani liquidii *gutt.* xxx.

Terantur simul in mortario ut intimè misce-  
antur.

Dosis *drachm.* *ss.* quaque, vel 2<sup>da</sup> quaque  
hora.

71. PULVIS C CILAPIO cum CRE-  
MORE TARTARI.

REC. Pulv. jalapii *drachm.* i.  
Crete ppt. tartari *semunciam.* M.

Dosis *scrupul.* i. 2<sup>da</sup> vel 3<sup>da</sup> quaque hora, ut  
sivus leniter moveatur.

72. Pul-

72. PULVIS GUAIAICINUS AN-  
TIMONIALIS.

REC. Gum. guaiaci *drachm.* ii.  
Camphoræ *drachm.* *ss.*  
Tartari emetic. *gr.* *iss.* M.

Dosis a *gr.* xv. ad *gr.* xxv. ter die.

## 73. PULVIS GUAIAICINUS NITROSUS.

REC. Gum. guaiac. *drachm.* i.  
Sal. nitri *drachm.* ii. M.

Dosis a *scrupul.* i. ad ii. ter quaterve die.

## 74. PULVIS NITROSUS.

Est sal nitri in pulverem redactus.

Dosis a *scrupul.* i. ad ii. 2<sup>da</sup> quaque hora.

## 75. \* PULVIS IPECACUANHÆ.

Dosis *gr.* xv. pro emetico.--- vel *gr.* i. 4<sup>ta</sup>  
quaque hora, ad diarrhæam.

D

76. Pul-

76. PULVIS IPECACUANHÆ  
cum OPIO.

REC. Pulv. Ipecacuanhæ *scrupul.* i.  
Gum. opii *gr.* v.  
Crete ppt. *drachm.* ii. Misce intimè.

Dosis a *gr.* x. ad *scrupul.* i. ter die, ad diar-  
rhœam;--- vel *drachm.* *ss.* hora somni, ut  
eluctetur fudor.

## 77. PULVIS SCILLITICUS NITROSUS.

REC. Pulv. scillæ aridæ *drachm.* i.  
Salis nitri *drachm.* *iiss.*  
Piperis Jamaicensis *drachm.* *ss.* M.

Dosis a *gr.* v. ad *gr.* xv. ter quaterve die.

## 78. SOLUTIO EMETICA.

REC. Tartari emetici *gr.* v.  
Aquæ fontanæ *unc.* v. Fiat solutio.  
Dosis *unc.* *ss.* quaque semihora ad vomitum:

## 79. SOLUTIO CATHARTICA.

REC. Sal. cathartic. amar.  
vel Glauberi *unc.* i.  
Mannæ opt. *unc.* *ss.* Solve in  
Aquæ calidæ *unc.* iv. et cola.

Pro

Pro unâ dosi, duabus haustibus intervallo  
semihoræ sumenda.

80. SOLUTIO MERCURII CORROSIVI  
SUBLIMATI.

REC. Mercurii corros. sublimat. *gr.* xvi.  
Aquæ fontanæ *lib.* i. M.

Dosis a *drachm.* ii. ad *semunciam*, mane et  
vespere.

Utilis est etiam pro lotionè phagedænicâ.

## 81. \* TINCTURA CORTICIS PERUV.

REC. Pulv. cort. Peruvian. *unc.* ii.  
Cort. aurantium contus. *unc.* *iss.*  
Rad. serpentariæ contus. *semunciam.*  
Spiritus Jamaicensis *lib.* *iss.*

Infunde per 4 dies, et cola.

Dosis a *drachm.* i. ad *semunciam* bis, ter, qua-  
terve die.

82. \* TINCTURA OPII, vulgo LAN-  
DANUM LIQUIDUM.

REC. Gum. opii *unc.* ii.  
Piperis Jamaicensis *drachm.* ii.  
Spiritus vini tenuis *lib.* *iss.*

D 2

Diger-

Digere leni calore, et cola.

83. \* VINUM ANTIMONIALE.

REC. Vitri antimonii *unc. iv.*

Teratur in mortariō vitreo ut fiat pulvis;  
cui affunde

Vini Maderensis *lib. ii.*

Digere leni calore per decem dies; dein  
per chartam cola.

Dosis a *semuncia* ad *unc. i.* pro emetico; vel  
a *gutt. xx.* ad *gutt. xl.* 2<sup>da</sup> quaque hora,  
pro diaphoretico--- ad febres, &c.

84. \* SYRUPUS SACCHARI.

*Syrupus Communis, Pharm. Edin.*

Vel, ejus loco uti possit syrupus empyreu-  
maticus, ex infulis emptitius, *molasses*  
vulgo dictus.

PARS

PARS II.

MEDICAMENTA EXTERNA,  
scu CHIRURGICA.

1. \* ACETUM LITHARGYRITES.  
vulgo EXTRACTUM SATURNI.

REC. Lithargyri lævigati *lib. i.*  
Aceti vinosi optimi *lib. iv.*

Digerantur per aliquod tempus; dein co-  
quendo et commovendo, quantum fieri  
possit, solvatur lithargyrus, et conti-  
nuetur coctio donec acetum syrapi spissi-  
tudinem habeat: Hoc effuso eodem mo-  
do repeti possit operatio, si lithargyro ad  
fundum manenti novum pro portione  
apponatur acetum.

2. AQUA SATURNINA.

REC. Aceti lithargyritis *drachm. ii.*  
Aquæ fontanæ *lib. i. M.*

Utilis est pro lotionem--- ad intertriginem scu  
inflammationem externam (*phlegmon*); 1<sup>o</sup>  
com-

componendis cataplasmatibus antiphlo-  
gisticis,--- pro collyrio, in quibusdam  
ophthalmiis; et pro injectione (nonnun-  
quam sed cautè usurpanda) in stillicidiis.

3. \* CAUSTICUM LUNARE, *Pharm.*  
*Lond.*

4. \* LAPIS INFERNALIS, *Pharm. Lond.*

5. \* MERCURIUS PRÆCIPITATUS  
RUBER, *Pharm. Lond.*

6. LINTEUM PRÆPARATUM.

REC. Vitrioli Cærulei *drachm. i.*  
Aquæ fontanæ *unc. i. M.*

Fiat solutio, cui immergatur linteum more  
solito carptum, ut de toto madefiat; se-  
ponatur super mundam tabulam donec  
aridum sit; dein servetur pro usu.

7. \* TINCTURA MYRRHÆ ET ALOES.  
*Pharm. Lond.*

8. \* EM-

8. \* EMPLASTRUM COMMUNE.

REC. Lithargyri *lib. iii.*  
Ol. olivarum *lib. vi.* Misce et coque  
ut fiat emplastrum, s. a.

9. \* EMPLASTRUM ADHÆSIVUM.

REC. Emplast. communis *lib. ii.*  
Picis Burgundicæ *lib. i.*  
Liquefiant simul ut fiat emplastrum.

10. \* UNGUENTUM BASILICUM FLA-  
VUM, *Pharm. Edin.*

11. \* UNGUENTUM e LAPIDE CALA-  
MINARI, *Pharm. Edin.*

12. \* UNGUENTUM CEREUM.

REC. Olei Olivarum *lib. i.*  
Ceræ flavæ *unc. iv. M. s. a.*

13. \* UNGUENTUM e PRÆCIPITATO  
RUBRO.

REC. Unguenti basilic. flav. *lib. i.*  
Mercurii præcipitati rubri *drachm. v.*  
Misce s. a. 41. \* UN-



## 14. \* UNGUENTUM MERCURIALE.

REC. Hydrargyri *lib.* i.  
 Sevi ovilli, vel bovilli, *lib.* i.  
 Axungiæ porcinae *lib.* iii.  
 Misce simul terendo in mortario ut fiat un-  
 guentum cæruleum, s. a.

## 15. UNGUENTUM SATURNINUM.

REC. Unguenti cerei *lib.* i.  
 Sacchari faturni *unc.* i. M. s. a.

## 16. \* UNGUENTUM SULPHURATUM.

REC. Sulphuris triti *lib.* i.  
 Axungiæ porcinae *lib.* ii. M. s. a.

F I N I S.

## Local Pharmacopœias

Early in 1787 Dr. John Morgan proposed to the College of Physicians of Philadelphia the compilation and publication of a pharmacopœia for Pennsylvania, and in 1788, before enough of the thirteen states had yet ratified the Federal Constitution to make it effective, the College appointed a committee to take up the subject of issuing some work which could serve as a national standard (W. S. W. Ruschenburger.) Nothing further was done until the Massachusetts Medical Society appointed a committee to draft a pharmacopœia adapted to the wants of their section of the country, the committee consisting of two physicians of Boston, Dr. James Jackson and Dr. John C. Warren, who collaborated, and the work was issued early in 1808, as "The Pharmacopœia of the Massachusetts Medical Society."

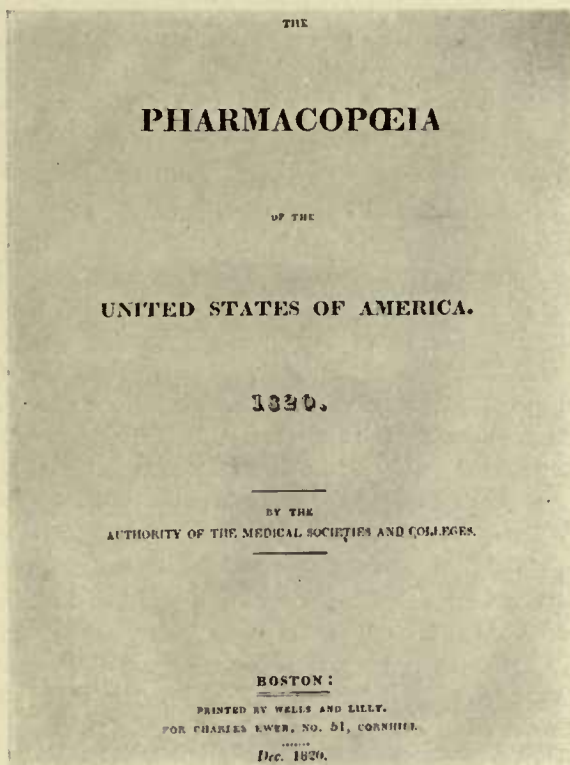
Here the subject rested until 1815, when the Physicians and Surgeons of the New York Hospital appointed Dr. Samuel Latham Mitchill and Dr. Valentine Seaman to prepare a pharmacopœia for that institution; it was issued in 1816.

## The First U. S. Pharmacopœia

The national pharmacopœia, however, was still unborn. In 1817, Dr. Lyman Spalding submitted to the Medical Society of the County of New York a proposal for a national work to be prepared and published by the medical societies and schools of the United States. These should send delegates to four conventions—

in the New England States to Boston, in the Middle States to Philadelphia, in the Southern States to Charleston, S. C., in the Western States to Lexington, Ky., the seat of Transylvania University. These conventions, making drafts of a pharmacopœia, should submit these drafts to a national convention, which would meet in Washington in January, 1820.

In the Middle States, the lead was taken by the College of Physicians of Philadelphia whose interest in the undertaking preceded that of New York and Boston and, as subsequent events abundantly proved, concerned itself far more than any other institution in the "improvement, progress and ultimate establishment" of the



TITLE PAGE OF U. S. PHARMACOPŒIA, FIRST EDITION  
(Size of book, 5 x 8½ inches; reading page, 3½ x 6 inches)

Pharmacopœia as the recognized national standard. ("Mémorial of Franklin Bache," George B. Wood.) Delegates from colleges and societies in New York, Pennsylvania, New Jersey, Maryland, Delaware and the city of Washington met in the chamber of the College of Physicians in Philadelphia on June 1, 1819. Ten delegates were named to meet in Washington the following year.

At the appointed time the delegates from the districts gathered in Washington, though little co-operation came from the South and West. Dr. Samuel L. Mitchill, of New York, presided over the convention, which adopted a draft for the work. It was to appear under the editorship of a committee of which Dr. Spalding was chairman, and was to be revised and republished every ten years.

At last the dream was realized. Bearing the title "The Pharmacopœia of the United States of America," it was published in Boston in December, 1820. ("A Retrospect of the Development of American Pharmacy," by Frederick Hoffman, pp. 14-6; "A Sketch of Dr. Lyman Spalding," *Amer. Jour. Phar.*, June, 1919.)

The book was being issued about the time the new college of pharmacy was being instituted in Philadelphia. Eliakim Littell, the well-known Philadelphia bookseller, who later founded Littell's Living Age, was taking advance subscriptions for the work at \$2 a volume. (*Poulson's Advertiser*, March 19, 1821.) As soon as it appeared the Philadelphia College of Pharmacy was ready with wholesome criticism. A committee pointed out errors which had crept into the book. They properly held that in the revisions which were contemplated the apothecaries and druggists of the country should be conferred with. Both professions, medicine and pharmacy, should each have a hand in a work in which they were equally interested.

### Development of the U. S. Pharmacopœia

As the time for the revision of 1830 drew near, the College of Physicians of Philadelphia, appointed a committee to prepare and submit a draft to the Convention when it should meet in Washington. Dr. Thomas T. Hewson, President of the College, Joseph Hartshorne, Dr. George B. Wood and Dr. Franklin Bache were members. They held more than one hundred meetings at Hewson's house. ("Memoir of Thomas T. Hewson," Franklin Bache.) Both Wood and Bache gave themselves unsparingly to the service. So many alterations were found to be necessary, that the Pharmacopœia of 1820 was almost entirely rewritten, in some instances two or three times in Wood's own hand. (Henry Kraemer, *Amer. Jour. Phar.*, Sept., 1916.) The labors of the committee covered a period of nine months with absolutely no recompense "other than the consciousness of duty performed and public benefit conferred." ("Memoir of Franklin Bache," George B. Wood.)

Wood and Bache were delegates from the College of Physicians of Philadelphia to the Convention in Washington. Few attended the meetings which were held in a room in the capital—only eight, all told, were present, but an organization was effected, the Philadelphia report was adopted, and it was referred to a number of physicians in different parts of the country for suggestions and changes preparatory to its publication. Still the apothecary had no hand in giving form to the work, except as Wood, who was a professor in the Philadelphia College of Pharmacy, and Bache, who soon would be, might be able to put the stamp of the pharmacist upon it. They deplored the want of such counsel and assistance. "Any one who considers for a moment the nature and purpose of a pharmacopœia," said Wood—"that all its formulas are for the guidance of the apothecary and that he, much better than the physician, as a general rule, understands their principles and modes of execution, must see at a glance, if free from prejudice, how unjust and at the same time impolite was this exclusiveness." (*Ibid.*)

But as yet the pharmacists of the country were without organization, and few in their ranks were educated men. In their improvement, Philadelphia was leading the way and even now, in 1830, before finally going to press with the work, through Wood's influence, the manuscript was submitted to a committee of the



Philadelphia College of Pharmacy which examined it, returned it with their endorsement, subject to a number of valuable suggestions which were adopted.

The resultant work was published after delay in April, 1831, by John Grigg, of Philadelphia. It immediately won that reputation for scientific accuracy, which many men in repeated revisions since that time have contributed their knowledge and time to maintain, and established a national authority for drugs. It became a standard "morally as obligatory" upon both professions, to use the words of Wood, "as if it had been brought forth under the sanction of law." (*Ibid.*)

### The First U. S. Dispensatory

Wood and Bache now gave themselves to an even greater task, the preparation of an elaborate commentary on the Pharmacopœia, to be called the "Dispensatory of the United States of America." With works of this kind, too, the scientific literature of the country was but illy supplied. Dr. John Redman Coxe of the University of Pennsylvania had prepared and issued such a book in 1807. It was generally used for several years and passed through six editions, the last in 1831. Dr. James Thacher published a Dispensatory in Boston which was reissued four times.

British works, from which ours in this country were chiefly compiled, were little more than re-edited copies of a book "certainly of acknowledged merit but little adapted to the present state" of medical and pharmaceutical knowledge. The book referred to was Lewis's Dispensatory, first published in the middle of the eighteenth century, which formed the groundwork alike of Duncan's Edinburgh Dispensatory and Thomson's London Dispensatory.

Without underestimating the value of the earlier American treatises, or the British works from which they were developed, Wood and Bache perceived that the pharmacy of continental Europe was ground which had been almost untouched, while much information in relation to the natural history, commerce and management of our own drugs had lain ungathered in the possession of individuals or scattered in separate treatises and periodicals not generally known or read. There was "no general explanation" of the processes of the Pharmacopœia "though required in justice both to that work and the public," and the hope of supplying these deficiencies the authors considered a "sufficient justification" of the undertaking. (Preface of first edition of U. S. Dispensatory, 1833, vi.)

Wood and Bache met at the home of Daniel B. Smith one evening in October, 1830, before the Pharmacopœia of 1830 had yet been published, and agreed upon a plan for the work they had in mind. Bache would contribute the articles on mineral substances and those resulting from purely chemical processes, Wood would deal with the vegetable materia medica, while Smith was to take charge of the pharmaceutical part of the work. But Smith, after writing a few articles, found that he could not proceed with as much as had been assigned to him because of his other engagements, and he withdrew, whereupon Wood took over the additional duty of preparing the articles which lay within the field of pharmacy. His share thus became two thirds of the work and Bache's one third. In all when it was completed, as it was in less than two years, it was published from the press of Grigg and Elliott

in Philadelphia in 1833. A second edition was called for before a twelve month had passed. The work instantly gained and held the confidence of the medical and pharmaceutical professions. Many came to know the Pharmacopœia only through the Dispensatory, the master work only through the commentary; it became the Codex of American Pharmacy. In a period of ten years the work ran into its fifth revised edition (1843). Its size was increased to admit of the introduction of matter necessary to make it a complete compendium of existing information which it was designed to be, and it became the first of powers "to dispel the ignorance, apathy and indifferences that depressed one of the most extensive and necessary departments of medical science." (*Amer. Jour. Phar.*, 1843, 170-71.) "It would be impossible," said another writer in alluding to this work, "to estimate its influence in educating and informing the mass of those concerned in the sale, preparation and administration of medicines." (*Ibid.*, 1864, 276.)

During fifty years the work was revised to pass through no less than fourteen editions. Their names linked upon the title page, one as "Professor of Materia Medica and Pharmacy in the Philadelphia College of Pharmacy," the other as "Professor of Chemistry in the Philadelphia College of Pharmacy," was a patent of nobility, wherever the book went. In no other way could the College have been elevated so rapidly to its high position as a scientific institution.

### Physical Development of the College

In the meanwhile, the College was growing slowly—but it was growing. As Joseph P. Remington has stated (*Amer. Jour. Phar.*, 1893, 113):

"The College in the first few years of its existence was unable to erect a building, but it was compelled to rent a suitable place in which to deliver the lectures. The Hall of the German Society, on Seventh Street above Chestnut, was rented, and here for seven years the lectures were delivered. But in 1829, on May 19, it became necessary, owing to the German Society needing the rooms occupied by the College, to appoint a Committee to endeavor to secure a permanent situation for the College. The following quotations from the minutes of the College show clearly and succinctly how the first building devoted to pharmaceutical instruction erected in America came into being.

"On November 21, 1831, the Committee appointed to select a site for a building reported 'that two sites for the purpose can be obtained, one situated on the southwest corner of Marble and Tenth Street (Marble Street: running east and west between Chestnut Street and Market), containing on Tenth a front of 38 feet, and running in depth 60 feet to a 6-foot wide alley, thus presenting a front of three sides; the price asked for this site is \$8,000. The whole extent of the lot is 96 feet on Tenth Street, running back 92 feet, the asking price being \$20,000.' The financial condition of the College at that time is indicated by the following conclusions of the Committee: 'As a matter of speculation, it would be preferable to purchase the whole lot, but in the opinion of your Committee it is too heavy a concern to enter into.'

"The second is situated on the south side of Zane Street, adjoining Six's sugar-house, by which it is bounded on the west, at the east, by a 10-foot wide alley, and on the south by a vacant lot, which is to continue always open, thus presenting three fronts, which is desirable on account of light. The lot is 30 feet on Zane Street (now Filbert Street) running to a depth of 46 feet.'

"The Committee were authorized to offer Abraham Miller \$225 per annum for the lot, on ground rent, redeemable in 20 years for the sum of \$4,500. The Committee were also authorized to obtain subscribers to a loan at 6 per cent interest for the purpose of erecting a building on the lot.



"On December 13, 1831, Abraham Miller informed the Committee of his acceptance of the above offer for the lot.

"On April 23, 1832, the Building Committee were directed to erect a building on the Zane Street Lot, as soon as subscriptions to the amount of \$6,000 were obtained.\*

"The Building Committee reported on June 24, 1833: 'Subscriptions to the College loan having been obtained to the amount of \$6,300 the Committee proceeded at once with the work.'



ZANE STREET BUILDING OF THE COLLEGE—1832-1868  
Wherein the American Pharmaceutical Association was organized in 1852

"The following description of the old College building, as it appeared in the eyes of the Committee, may be interesting: 'The dimensions of the College are 30 feet 9 inches front, by 46 feet in depth, and four stories high, the first and second stories being sufficiently lofty for lecture rooms, with seats rising as they recede from the speaker's desk. In order to admit light over the most elevated seats, the front windows are larger than usual, and handsomely finished with head-pieces of the best white marble; those of the second story being circular tops. The front or main doorway is finished with an elevated white marble entabla-

\* Edward Parrish in his "Historical Memoirs of the Philadelphia College of Pharmacy," 1869 (unpublished portion), states that "the College was first domiciled in its Filbert (Zane) Street building on 11th month, 27th, 1832" (EDITOR).



ture, supported by fluted Doric columns of the same material, the eastern side and back part of the building being open and unobstructed. The Committee availed themselves of this important advantage in location by placing windows so as to admit abundant light and free circulation of air through every part of the building. The College is 57 feet high, and is surmounted by a battlement cornice of considerable width, which gives a commanding appearance; and your Committee have no hesitation in saying that the whole edifice is excelled by few, if any, of equal dimensions in our city, whether in design and beauty of structure, or in its adaptation to the purposes for which it was erected.' The cost of the building was \$8,323.74."

### Development of the American Journal of Pharmacy

The Journal of the Philadelphia College of Pharmacy, beginning in 1825, continued under the editorship of Dr. R. Eglesfeld Griffith, assisted by a Publishing Committee consisting of Daniel B. Smith, Charles Ellis, Joseph Scattergood and George B. Wood, until 1835, when in recognition of its really national character its name was changed to the *American Journal of Pharmacy*. Dr. Griffith for the most of the time that he had been the editor of the journal, after the decease of Benjamin Ellis, was a professor in the Philadelphia School of Medicine. Though he published nearly ninety articles in the journal he had never lectured in the College. But now, upon the resignation of Dr. Wood, in 1835, he became professor of materia medica and pharmacy, a place which he held, however, for but a year, since in September, 1836, he resigned to accept a chair in the University of Maryland.

Important as was the influence of the Journal, exerted in the spread of scientific knowledge on pharmaceutical subjects and in advancing the interests of the College, its publication was carried on with difficulty. Appeals were made to the pride of the profession, from time to time, without much response. "The Journal," said Dr. Griffith in 1832, was "the only publication of the kind in the United States." It was "devoted exclusively to the furtherance of the pharmaceutic art," on which account "we trust," said the editor, "that it will continue to receive such support as will enable the committee to increase its usefulness." But as such a result could be accomplished only by "an extended patronage," subscribers were reminded that "on a promptness in transmitting their annual payments the existence of the Journal depends." It was "only by unceasing exertions on the part of the committee" that they were enabled "to fulfill their engagements." "Let it not be said," the editor concluded, that "the pharmacutists of this country felt too great an apathy and so little zeal in their profession as to permit the only journal devoted to the objects of their pursuits to languish and die." (Preface, Vol. III, 1832, iii-iv.)

### Philadelphia—The Mecca of American Pharmacy

Just as Philadelphia occupied a position of leadership in the country with reference to medicine, law and many other subjects; just as it was a center for the import and export business, and the manufacturing and jobbing trades in many lines of merchandise, so did the city hold a controlling position in the drug trade. The medical schools brought students to Philadelphia; when they graduated and were ready for practice there were always some to remain in the community. Not a few of them increased the city's distinction as a medical center.

Likewise the Philadelphia College of Pharmacy played its part in recruiting the pharmaceutical profession. It was a factor, probably, in attracting such a man as Elias Durand, a Frenchman, a *pharmacien* of the Grand Army of Napoleon. After Bonaparte's final abdication and imprisonment at St. Helena, Durand emigrated to America. He spent some years in Baltimore, but in 1825 he came to Philadelphia and leased the house at the southwest corner of Sixth and Chestnut Streets. Here he established a fine drug store. With French glassware, and drugs and chemicals—imported from France, which still led the world in all that appertained to pharmacy, and novel apparatus for making and vending cooling water charged with carbonic acid gas, his shop became a favorite resort for many of the leading physicians of the city and the surrounding country. They found the proprietor to be a man of unusual information. His botanical talents gave him knowledge of the medicinal value of plants. He corresponded with learned men of other countries and frequently contributed his observations to the College, of which he was a valued member, and later an officer (1831-1845).



DRUG STORE OF ELIAS DURAND, S. W. CORNER SIXTH AND CHESTNUT STREETS



Durand devised many new preparations which met the favor of physicians and came into general use. He exercised great care in the instruction of his apprentices in all the intricacies of the art of pharmacy and developed a business which involved the manufacture as well as the sale of a large variety of popular remedies. A frequent visitor at "Durand's Drug Store" was Dr. Samuel Jackson, formerly of the Philadelphia College of Pharmacy, but now a member of the Faculty of the University of Pennsylvania. A number of preparations which he was in the habit of prescribing for his patients came to bear his name, among Jackson's Pectoral Syrup which Durand made and which had a wide popularity. ("Elias Durand," Wm. Procter, Jr., *Amer. Jour. Phar.*, 1873, 508.)

Another notable store was that of Daniel B. Smith at the northeast corner of Sixth and Arch Streets. When the College was founded, Smith was a partner of John Biddle with whom he had studied pharmacy. In 1828 at Mr. Biddle's death, he found a new partner in William Hodgson, Jr., a young English Quaker who had been apprenticed to John Bell and Co., the leading pharmacists of London. Hodgson having just arrived in this country, his knowledge of what was being done in the best circles in England, together with Smith's widely acknowledged learning, made their shop a rendezvous, like Durand's, for physicians. The Quakers in particular who resided in such numbers in this part of the city relied upon the two respected members of their Society who kept the store for their medical supplies. Through Hodgson, as well as Smith, the clerks were instructed in all that appertained to the preparation of medicines. All were encouraged to attend the lectures in the College, and from Smith and Hodgson's counters came such men as Thomas H. Powers, Ambrose Smith, William J. Jenks, Albert S. Letchworth, Charles Bullock, Edmund A. Crenshaw and many others who became an honor to the profession.

### Early Pharmaceutical History

William J. Jenks, some years ago, set down his recollections of the Smith and Hodgson store, as follows:

"In the early history of this store it was customary to make all the preparations used, official and others, chemicals as well as pharmaceuticals. All the minor chemicals were made in the laboratory attached to the store, and Thomas H. Powers, Ambrose Smith, Albert Letchworth and others, as they advanced, were instructed in this important branch of the business.

"Drugs were powdered largely by hand in mortars suited for the purpose, large marble and iron ones being used. Tinctures were made in the old way by maceration and expression. Fluid extracts had no existence. Moulded suppositories and capsules were unknown and all pills were made in the primitive manner by rolling out and drying previous to sale. Sugar and gelatin coating did not come into use until about 1845, and tablets, as now made, did not exist. Mercurial ointment was made in small quantities by trituration. Plasters were made and spread on sheepskin with a plaster-iron as ordered by the physician; ready-spread plasters made their appearance about 1838.

"About 1838 or 1839 the process of displacement was introduced into this country. It met with much opposition by the druggists of the city generally, but Ambrose Smith, who was a progressive man, took up the subject for investigation and mastered it, so that most of the tinctures in use were made by this process. In a few years after this the name of the process was changed to percolation.



"Smith and Hodgson were among the first to manufacture mineral water (as it was then called), and their store was rendered very popular on this account. They had a number of copper tanks lined with tin to hold the water, and an apparatus for generating the carbonic acid gas from marble dust and sulphuric acid; this being necessary, as there were no establishments for making mineral water. Syrups were made from the fruit by expression in a handpress.

"Smith and Hodgson combined a wholesale department with their retail business, and the "back store" was used for putting up orders for many city druggists and quite a large country trade. They imported many English drugs, chemicals and pharmaceutical preparations in use at that time by Philadelphia physicians, and philosophical and chemical apparatus for scientific institutions.

"Some time after the Philadelphia College of Pharmacy was instituted, a committee was appointed for the purpose of introducing modified formulas for the various patent medicines, so called, which had come from England, and Daniel B. Smith was active in the matter. The committee adopted formulas for British Oil, Dalby's Carminative, Bateman's Drops, Godfrey's Cordial, Turlington's Balsam, Anderson's Scots Pills and others. The wrappers for them were changed in many particulars, and were printed at first under the auspices of the committee and sold to druggists for the use in putting up these medicines. Bottles similar to those in which the English preparations were sold were made by Dr. T. W. Dyott at the Dyottville Glass Works in Kensington. Smith and Hodgson bottled large quantities of these preparations for country trade as but few of the proprietary remedies which we have now were then known.

"Great care was taken to have the prescription work attended to with correctness and promptitude. No conversation was allowed between clerks and customers while preparing prescriptions, and a printed sign was placed on one of the panels back of the counter with this inscription: 'Please do not converse unnecessarily with those engaged in compounding prescriptions.' This regulation was enforced in England and brought over by Mr. Hodgson. It was highly approved by the many physicians who daily visited the store.

"Young men in this store were instructed in the manufacture of the minor chemicals used, such as citrate of potassa, the iodides of lead and mercury, iodide of iron, bromide of potassa, etc., etc. The pure acids were also made.

"The College did not have a professor in that branch and in consequence all pharmaceutical instruction had to be given in the various stores of the city."

The successors of the Marshall store, Ellis and Morris, who purchased this honored century-old stand from the daughter Elizabeth Marshall in 1825, also played a prominent part in the development of the apothecary store in Philadelphia. A laboratory, an ice house and a warehouse signaled their entry into the manufacturing and wholesale drug business, in connection with their prescription and other retail trade. Charles Ellis and Isaac P. Morris were partners for about five years at 56, now 214, Chestnut Street. At the end of this time the firm became Charles Ellis and Company. Like Smith and Hodgson's and Durand's, the store continued to be one of the best practical schools for the education of apprentices. All of its young men were sent to hear the lectures in the College at the firm's expense, so that they might reap the benefits of the instruction of Wood, Bache and the teachers who succeeded these two eminent men.

The laboratory, a detached building in Vidall Court, east of the store, earlier a school room and public hall, was equipped with jacketed copper pans, stills, a press and open furnaces. There was a steam boiler in the cellar and drying rooms on the second floor. One of the specialties of the firm was spread adhesive plasters. These were made in quantities in the open air, the cloth being drawn out by hand



DRUG STORE OF BULLOCK AND CRENSHAW; PREVIOUS TO 1849 OF SMITH AND HODGSON; N. E. CORNER SIXTH AND ARCH STREETS

down Vidall Court to Second Street, all hands supporting it with canes and broom handles until the whole "spread" was no more than 60 or 75 yards, and it was then cut into lengths of five yards and taken into the store. Isaac P. Morris, who had iron works at Richmond, now a part of Cramp's immense yards and shops, constructed a machine to facilitate the operation. After this, the spread plaster was reeled on drums and 1,500 or 2,000 yards could be made at one time. The firm gained a reputation for its solid extracts, then in general use, and like Smith and Hodgson, carried on a large trade in the old English patent medicines, which were mixed according to the College committee's formulas, bottled and sent to all parts of the country. Filling vials with laudanum, castor oil, paregoric and other remedies wanted by every grocery and dry goods store, which required little skill, occupied the attention of the younger apprentices.

Carl Zeitler, who for a short period (1823-1824) was a partner of George D. Rosengarten under the firm name of Zeitler and Rosengarten, was employed for many years in the Ellis laboratory and increased the reputation of their products. He remained with this firm until 1850.

The laboratory was then removed to Sixth and Morris Streets where steam power was introduced to stir extracts and to grind drugs. The old Marshall store property on Chestnut Street was sold and the business removed to 724 Market Street. ("The Story of a Very Old Philadelphia Drug Store," Evan Tyson Ellis, *Amer. Jour. Phar.*, 1903, 57).

Robert Shoemaker in 1880 gave to the members of the College some of his reminiscences of service in a well-known shop "up town"—S. W. Corner Second and Green Streets—fifty years before. ("The Apothecary's Apprentice," Robert Shoemaker, *Amer. Jour. Phar.*, 1880, 65).



As an apprentice he entered the store at six o'clock in the morning, the hour of opening it, winter and summer, the year round. It was lighted by sperm oil lamps hung from the ceiling. There were no large panes of glass for the windows of that day. The "show" was made by putting a bottle behind each small pane; 24 bottles were placed therefore at each window to advertise the wares which were dispensed inside. The labor of the apprentices consisted largely of powdering drugs. "But,"



DRUG STORE OF ROBERT SHOEMAKER

S. W. corner Second and Green Streets, in which glycerin was first commercially made in this country by Robert Shoemaker in 1848, and occupied as follows: Robert Shoemaker, 1847-1857; Zeigler and Smith, 1857-1865; Valentine H. Smith and Company, 1865-1900; Valentine H. Smith and Company, Incorporated, 1900.

said Mr. Shoemaker, "there was one drug we did not powder, not because it was difficult of reduction, but because my good preceptor saw fit to patronize (with this one article) a worthy old character named John Price, who, in a frame shanty on Callowhill Street, had what he called a drug mill. In this building he had erected some crude machinery which was set in motion by a mule. The sole attendant, the proprietor, received such easily powdered drugs as were confided to him through an 8 by 10 aperture from an outside vestibule. None were allowed a nearer approach than this to the wonderfully constructed powdering apparatus within. Of rhubarb we would have returned, *in due time*, about two thirds in powder—the remaining one third in a separate package labeled 'crumbs.' In a well-remembered



old iron mortar, firmly seated on a stone post descending through the cellar to the earth, other things were powdered—*ipecac*, *gamboge*, *sanguinaria* and *cantharides* (this last moistened with alcohol), arise in my mind (and nostrils, too), as among the particularly obnoxious articles I was obliged to reduce to a fine powder. Those old boxed silk sieves were provokingly fine!"



ROBERT SHOEMAKER

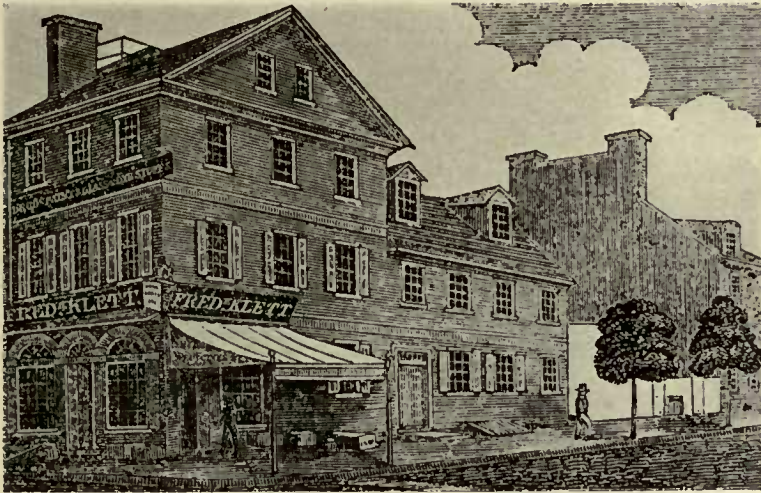
Robert Shoemaker (1817-1897). Born in Shoemakertown, Pa., of Richard M. and Sarah Shoemaker. Early education in Friends' Schools. Apprenticed (1831) to William Scattergood at southwest corner of Second and Green Streets, purchasing store in 1837, and remaining in the retail business for twenty years. Sold store in 1856, and established (with his brother) the wholesale drug business of Robert Shoemaker and Co., at northeast corner of Fourth and Race Streets. He manufactured many drug products and is believed to have been the first to manufacture glycerin in the United States (1848). Became member of the College in 1843, trustee in 1845, second vice president in 1869, and first vice president in 1885. Became honorary member of the Alumni Association of the College (1891) and was made honorary master in pharmacy by his alma mater (1894). Was one of the founders of the Philadelphia Drug Exchange (1861), and its president (1867-1870); and later an honorary member. He was active, also, in many business enterprises and in public school education.

"Once in a fortnight all the bottles in the shop, together with the windows, were to be washed. But, lest Satan might have a chance to 'find some mischief for idle hands to do,' Mr. Shoemaker, continued, "a large marble mortar of two or

three gallons capacity, firmly fixed in the open top of a keg with a pestle of wood, having a long handle, passing through a support at the top, was stationed in one corner of the store, and in said mortar were always to be found the ingredients for either mercurial ointment or blue mass, and that old seat by the side of that mortar was never empty, except when more important duties claimed our attention. What does the modern student of pharmacy know about the luxury of *killing* mercury! Rub! Rub! Rub! day after day, and yet the labor continued. Thankful may the modern apprentice be that this work is now done by machinery.”

“In the summer of 1832 we had,” Mr. Shoemaker continued, “the first and most awful visitation of Asiatic cholera Philadelphia has ever experienced. Then it was that apothecaries had as much as they could well do, night and day. Many will remember the camphor bags and Burgundy pitch plasters, the first worn on the bosom, suspended by a string around the neck, and the latter, spread by hand on lamb skin, placed over the abdomen.”

From his experience, Mr. Shoemaker successfully developed a process for making plasters other than by hand and became a large manufacturer of this article.



DRUG STORE OF FREDERICK KLETT, SECOND AND CALLOWHILL STREETS

Frederick Klett (1795-1859). Original member of the College and member until his decease. Commenced business in 1818 at Second and Callowhill Streets and continued in the same location until his retirement in 1855. Was American Consul for the Kingdom of Wurtemberg, Germany (1845-1859). An active and enterprising man, much respected during his long business career.

Another old drug store was that of George Glentworth, opened in 1812, at the northeast corner of Sassafraz (now Race) and Chester Streets (between Eighth and Ninth Streets). He was one of the founders of the College, and his certificate of membership in the Philadelphia College of Apothecaries is in the possession of the College, being probably the only one of its kind extant. The Glentworth family

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conducted this store for over ninety-two years without making any material alterations or change in its appearance; the fixtures and furnishings were then given to the College.



FIXTURES OF DRUG STORE OF GEORGE GLENTWORTH, N. E. CORNER RACE AND CHESTER STREETS, NOW IN COLLEGE MUSEUM

*(The portrait in the illustration is that of George Glentworth)*

If the apothecary's trade had come to be confined to drugs in central situations in large cities, this was not so in outlying districts and the smaller towns. In Lancaster, Pa., an advertisement of a stock of various medicines and drugs ends with references to—

DYE STUFFS  
PAINTS  
DENTISTS' AND SURGEONS'  
INSTRUMENTS  
SHOP FURNITURE  
SPICES  
PERFUMERY  
ASTRAL AND BRASS HANGING LAMPS

Glass Lamps, Lamp Glasses, Lamp Wick, Tapers, Sperm Oil, etc.

Physicians, Storekeepers, Dyers and others can be supplied with every article in the line on the most accommodating terms.

JOHN F. LONG

A few doors south of John Michael's tavern, and near the Court House, North Queen Street. (*Lancaster Examiner*, May 27, 1830.)



In Philadelphia, in 1826, an announcement in *Poulson's Advertiser* furnishes testimony of the same kind :

"For sale the Drug and Apothecary store at the southwest corner of Fourth and Race Streets with mineral water fixtures in excellent order. At a moderate expense it affords an opportunity to any one wishing to embark in this line of business, the advertiser going into another pursuit. The store has secured the confidence of several physicians of standing in the city and country. The various articles of the stock have been uniformly selected with the greatest care and attention. A small additional capital might be advantageously employed in the paint, oil and glass business in connection with the above it being an excellent situation for it." (Issue of August 5, 1826.)



DRUG STORE OF FREDERICK BROWN, N. E. CORNER FIFTH AND CHESTNUT STREETS

Frederick Brown (1796-1864). Apprenticed to Charles Marshall. Commenced business at Fifth and Chestnut Streets (1822). As a pharmacist, he enjoyed a high reputation; as a business man he was eminently successful. He was one of the founders of the College, and a member of the committee which drafted its constitution; also, a member of the first board of trustees. He was active in banking and the work of benevolent institutions, but his tendencies never assumed a scientific direction. His eldest son, Frederick Brown, Jr., was a graduate of the College (class of 1861) and succeeded to the business, and later, devoted his attention exclusively to the manufacture of Brown's Jamaica Ginger.

The importers and wholesalers dealt in drugs and paints indiscriminately as appears from the advertisements of two large Philadelphia firms in 1826:

DRUGS, PAINTS AND DYESTUFFS

20 cases and drums Turkey Opium	10 bbls. Ipecac Root
15 cases Canton Nutmegs	20 bbls. Pow'd Cream Tartar
12 cases Oil Cinnamon and Aniseed	50 bbls. Gum Senegal
45 cases Ref'd Camphor	10 bbls. Gum Arabic
60 cases Crude Camphor	100 bbls. Red Saunders
75 cases Roll Brimstone	150 bbls. Camwood
25 cases Ref'd Borax	50 bags Sago
65 cases Gum Shellac	90 boxes Windsor and Castile Soap
30 cases Gum Copal, scraped	30 casks Flor. Sulphur
50 cases India Rhubarb	20 casks Span. Brown
12 cases Cantharides	10 casks Cream Tart. Crystals
80 cases China Vermilion	20 casks Cream and bbls. Madder
15 cases Eng. Magnesia	15 bales Virg. Snake Root
30 cases Pow'd Rhubarb	10 bales Orange Peel
30 cases Pow'd Jalap	10 bales Alex. Senna
50 cases Pow'd Bark	75 kegs Lond. Ref'd Salt Petre
150 bbls. White Lead	150 carboys Ol. Vit.
30 bbls. Red Lead	25 carboys Aqua Fortis
50 bbls. Venet. Red	12 carboys Muriat. Acid
50 bbls. Lampblack	
100 bbls. and 50 casks Copperas	

With a general and extensive assortment. For sale low, by

W. LEHMAN & A. S. & E. ROBERTS

At their Drug, Paint and Dye Stuff Warehouse

No. 76 South Second Street

(*Poulson's Advertiser*, August 8, 1826.)

GREEN SHELLAC, OPIUM, ETC.

20 cases Orange Shellac, 8 do. Gum Copal, 3 do. Turkey Opium. Leading and for sale by

E. & C. YARNALL & COMPANY

No. 30 Market Street

Who have in store

2,000 lbs. refined Camphor	6 cases Oil of Aniseed
600 lbs. Honduras Sarsaparilla	3 cases Oil of Cassia
50 chests Rhubarb Root	10 bbls. Castor Oil
15 cases Liquorice Paste	6 tierces Olive Oil
10 bales fresh Liquorice Root	30 bbls. ground Camwood

Genuine Socotrine Aloes

Genuine Red Bark

Genuine gum Kino

Alexandria Senna

Together with a large and well assorted stock of Drugs, Medicines, Paints and Dyestuffs which will be Sold on the best terms.

(*Poulson's Advertiser*, August 9, 1826.)

On the other hand an advertisement of an apothecary store, the oldest in the city, Marshall's, discloses a rather careful specialization in the business of supplying its customers with medicinal drugs :

MARSHALL'S  
DRUG AND CHEMICAL STORE  
No. 56 Chestnut Street

The subscribers having severally conducted the above Establishment for a number of years for *E. Marshall* and recently became the purchasers have just received from London and offer for Sale the following articles :

Morphia	Genuine Turkey Rhubarb
Emetine, Iodine	Extract Hyosciam. and Belladon.
Mass. Hydrarg.	Assorted Glass Pungents
Solut. Acet. Morphia	Preston's Smelling Salts
Solut. Citrat Morphia	German Corn Plaster
Pulv. Fol. Sabinæ	Issue Plasters
Hydriodat. Potass.	Issue Peas
Hydriodat. Sodæ	
Tinct. Colchici	
Extract. Quassia	

And have also on hand—Red Bark, a superior article in quill and powder, Pink and Blue Saucers, Henry's Aromatic Vinegar, Hill's and Cundell's Balsam of Honey, Church's Cough Drops, Genuine Hooper and Anderson's Pills, Evans' Crown Lancets, fine Bermuda and Jamaica Arrow Root, etc.

ELLIS & MORRIS—  
(Successors to Marshall's)  
50-56 Chestnut Street

(*Poulson's Advertiser*, May 18, 1826.)

To what a point manufacturing had advanced, may be gleaned from the advertisements of some of the firms which already had plants for making drugs and chemicals. It is known that sulphate of quinine was produced commercially in Philadelphia in 1823, only three years after its discovery by Pelletier and Caventou. Both Farr and Kunzi, and Zeitler and Rosengarten were making quinine sulphate in that year and selling it, and it was being used extensively in the treatment of the fevers then very prevalent in the city. (J. W. England, *Amer. Jour. Phar.*, Sept., 1921.)

The Wetherills had perfected processes for the manufacture of a variety of paints and drugs as their advertisements disclose. For example this one :

TO DRUGGISTS, MERCHANTS, DYERS AND MANUFACTURERS

Samuel P. Wetherill & Co., No. 65 North Front Street, Druggists, Chemists and Colour Merchants, Refiners of Camphor, Brimstone, Borax, Salt Petre, &c., are now engaged in



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manufacturing the following articles on an extensive scale the quality of which will be warranted and sales made in quantity at reduced prices, vis.:

### *Oil of Vitriol, Highly Concentrated*

Total.

White Lead, Red do.	Corrosive Sublimate
Litharge	Blue Vitriol
Orange Mineral	Spirit of Hartshorn
Patent Yellow	Carbonate of Soda
Chromic Yellow	Calomel
Chromic Green	Sulphate of Quinine
Sugar of Lead	Sulph. Carb. Potash
White Vitriol	Alcohol
Tartaric Acid	Spts. Nitre Dulcis
Sup. Carb. of Soda	Sulphuric Aether
Rochelle Salt	Aqua Fortis
Lunar Caustic	Muriatic Acid
Common Caustic	Window Glass of all sizes, from
Red Precipitate	6 by 8 to 24 by 30
White Precipitate	
Nitrate of Ammonia	
Water of do.	

*(Poulson's Advertiser, Aug. 18, 1826.)*

Similar evidence of manufacturing activity in the city is found in the advertisements of John Elliott, one of the founders of the College:

CHEMICALS—The Subscriber offers for sale the following articles of his own manufacture and warranted quality at the lowest market prices:

Acid Acetic	Chromic Green
“ Citric	“ Red
“ Muriatic	“ Yellow
“ Nitric	Hoffman's Liq. Anodyne
“ Tartaric	Red Precipitate
Alcohol	White Precipitate
Ammoniated Alcohol	Rochelle Salt
Aqua Ammonia	Bicarbonate of Soda
Aqua Fortis Dup.	Sulphuric Ether
Bichromate of Potassa	Spt. Nitrous do.
Calomel	Tartar Emetic
Lunar Caustic	Turpeth Mineral
Corrosive Sublimate	Ethiops do.
Chromic Yellow and	Seidlitz Salts
Prussian Blue in Paste	Sulphate of Zinc, &c.

JOHN ELLIOTT

No. 60 South Front Street

*(Poulson's Advertiser, May, 1830.)*

In this connection, an old drug label used by Henry Troth and Co., who were in business from 1815-42, and here reproduced “gives an idea of the peculiar style of advertising common to popularize preparations put upon the market. It is printed from a copper plate engraved by Samuel Tiller, one of the best engravers of Philadelphia, and portrays a lady and gentleman in the custom of the period admiring the natural beauty of a cascade, the white foam from the tumbling stream suggestive

of the effect which may be expected to follow the mix which is to be drunk immediately, according to the directions attached. ("A Retrospect of Pharmacy," Samuel Troth, *Amer. Jour. Pharm.*, 1905, 423.)



THE TROTH DRUG STORE

630 (old number, 224) Market Street, Henry Troth and Co. (1832-1842), Samuel F. Troth and Co. (1842-1853), William P. Troth and Co. (1853-1860). (From photograph, 1898, in memoir of "Henry Troth," by Samuel Troth.) "Originally, the main window of the building was in the center (first floor), with a door on each side" (Mary and Sarah J. Troth). (First at 222 (old number) Market Street, from 1815-1832.)

In this connection, the following illustration, taken from a work on "Materia Medica," published by George W. Carpenter, in 1834, which had a wide circulation among physicians, will be of especial interest. Mr. Carpenter, it may be added, was born in 1802 and learned the "drug and apothecary business" in the Marshall drug store. He early developed a taste for natural history, especially mineralogy,

**CARPENTERS CHEMICAL WAREHOUSE**  
**PHILADELPHIA**

<p><b>POPULAR</b></p> <p><b>Quinine</b> Carpenter's compound Best out of Europe For malarial fevers and all other fevers</p> <p><b>Piperine</b> Superior to all Prepared in the Pharmacy of the University of Paris For the treatment of the disease known as the <b>Jodine</b> Carpenter's compound For the treatment of the disease known as the <b>Cocaine</b> Carpenter's compound For the treatment of the disease known as the <b>Bromine</b> Carpenter's compound For the treatment of the disease known as the <b>Prussic Acid</b></p>	 <p style="text-align: center;"><b>GEORGE W. CARPENTERS CHEMICAL WAREHOUSE</b></p>	<p><b>MEDICINES</b></p> <p><b>Morphine</b> Carpenter's compound For the treatment of the disease known as the <b>Eurine</b> Carpenter's compound For the treatment of the disease known as the <b>Hydrochloric Acid</b> Carpenter's compound For the treatment of the disease known as the <b>Cinchona</b> Carpenter's compound For the treatment of the disease known as the <b>Saline</b> Carpenter's compound For the treatment of the disease known as the <b>Chemicals</b></p>
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*N. W. Market Street the first house below  
the north east corner of Market & Eighth Street*  
An assortment of Medical Books,  
Carpenter's Essays on the Materia Medica comprising a full account of all  
the New & Popular medicines their doses uses mode of administration &c.

and became an associate of the Academy of Natural Sciences. In 1828 he went into business for himself, and with unusual success. He was an early and strong supporter of railroads and helped to organize the Pennsylvania Railroad, of which he was a director for many years. W. E. Henszey became his partner in 1842, the firm becoming Carpenter and Henszey. He died in 1860.

### Percolation

One of the outstanding pharmaceutical events of this period was the development of the process of percolation, or displacement, for extracting the soluble principles of vegetable drugs. The first attempts to percolate powdered drugs were made by Count Rea (1815), and by M. Robiquet, but these were crude and unsatisfactory. "It was reserved, however, for the Boullays of Paris, in 1833, to apply the ideas of Real and Robiquet to drugs and medicinal substances in general, and to them belongs the credit of first demonstrating the value of the process of percolation in its pharmaceutical applications. The researches of the Boullays at once



attracted the attention of American pharmacists and the labors of Duhamel, Procter, Grahame, Squibb and others during the last century and the adoption of the process in the Pharmacopœias of 1840, 1850, 1860, 1870, 1890 and in the 8th and 9th Revisions, show the character of the growth in favor of percolation. In Great Britain, France and Germany the process is well known, and is practiced to some extent, but maceration still holds in these countries the chief place as a means of extracting the soluble principles of drugs." (Joseph P. Remington.) The greatest development of percolation has taken place, therefore, in this country.



ISRAEL J. GRAHAME

Israel J. Grahame (1819-1899). Born in Baltimore, son of George Grahame, an active member of the Hicksite branch of the Society of Friends. Received early education in public schools. Served apprenticeship with one of the leading pharmacists of Baltimore. Became professor of pharmacy in the Maryland College of Pharmacy (1856). Subsequently engaged in the drug business and later came to Philadelphia and opened a drug store at Twelfth and Filbert Streets. After conducting the business for a number of years he retired. He made a number of original investigations of pharmaceutical preparations and his studies on percolation as embodied in his paper on "The Process of Percolation or Displacement," read before the American Pharmaceutical Association and published in its Proceedings for 1858, was especially noteworthy; in this he formulated with remarkable precision the general principles of the process, specifying many details that are now universally followed. He was one of the earliest members of the American Pharmaceutical Association and became a member of the College in 1856, continuing as such until his demise.

## CHAPTER IV

## ETHICAL STANDARDS AND NATIONAL ASSOCIATIONS

The resignation of Dr. George B. Wood in 1835, that he might join the Faculty of Medicine of the University of Pennsylvania, brought to the chair of materia medica and pharmacy in the College, as has been noted, Dr. R. Eglesfeld Griffith, the efficient editor of the Journal, though he remained in the place but a single year, being succeeded in 1836 by Dr. Joseph Carson, who held the position for fourteen years, or until 1850. When Bache passed to the Jefferson Medical College in 1841, the chair of chemistry, which he had been occupying, was filled by William R. Fisher, who, like Griffith, occupied his post for only one year, when in 1842 he was succeeded by Dr. Robert Bridges.

**Griffith**

Dr. R. Eglesfeld Griffith was a namesake of Robert Eglesfeld, founder of Queen's College, Oxford. His father owned a beautiful estate called "Eglesfeld" on the banks of the Schuylkill, now included within the limits of Fairmount Park.

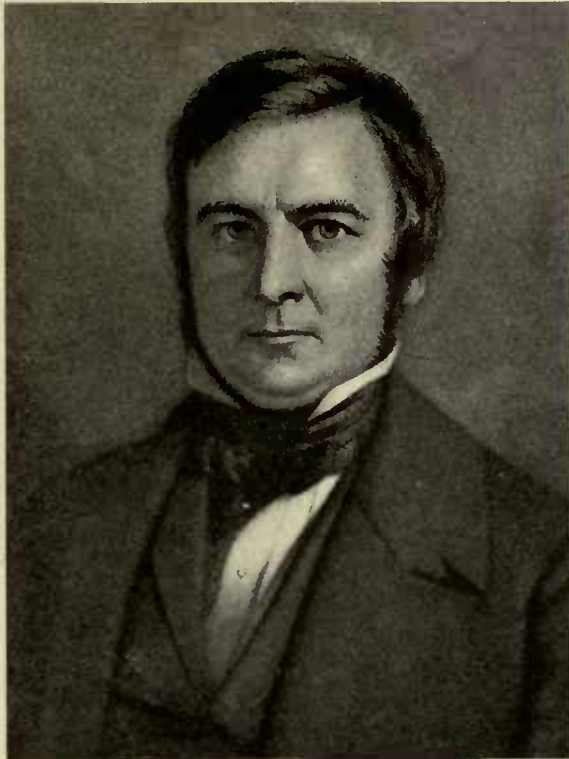


ROBERT EGLESFELD GRIFFITH

Interested in various branches of science, an officer for many years of the Academy of Natural Sciences, he was a pioneer in American pharmacognosy. He was an indefatigable student with a mind that was a veritable storehouse of knowledge. But after delivering a single course of lectures he felt impelled, against the wishes and advice of many of his friends, to accept a call to the University of Maryland. From that institution he passed to the University of Virginia, where ill health compelled him to suspend his duties, and he went for a time to the West Indies to regain it, returning at length to Philadelphia, though not to resume active connection with the College.

### Carson

His successor in the chair, Dr. Joseph Carson, followed Griffith in the editorship of the Journal. In the next years this eminent teacher and scientific writer put his indelible impress upon the work of the school. He was of Scotch Irish



JOSEPH CARSON

stock and was born in Philadelphia in 1808. He took his A.B. from the University of Pennsylvania in 1826, then entering the drug store of Edward Lowber. Here he gained an interest in the study of the subjects upon which rested his principal distinction as a scientist in later life. Selecting the profession of medicine, he found a preceptor in the eminent Philadelphia physician, Dr. Thomas T. Hewson,



who had a well known private medical school, and who had had a part in the proceedings attending the preparation of the Pharmacopœia of 1820,\* and had worked side by side with Wood and Bache upon the revision of 1830. It was in that year that Carson graduated as a doctor of medicine at the University. After a year abroad as a ship's surgeon he began practice in Philadelphia, and now, in 1836, at twenty eight years of age, accepted the chair of materia medica and pharmacy in the College, a position to which four men, Samuel Jackson, Benjamin Ellis, George B. Wood and Robert Eglesfeld Griffith, had already lent distinction and honor.

### Fisher

William R. Fisher, who followed Bache in 1841 with courses on chemistry, was the first graduate of the school of pharmacy to reach one of its professorships. He had gone to Baltimore, where he held a chair in the University of Maryland. His



WILLIAM R. FISHER

enlivening communications to the College and his scholarly papers in the *Journal* gave him a place in the respect and the affections of his friends in Philadelphia.

\* Under date of June 26, 1821, it is recorded in the archives of the College that "The Committee appointed to examine the Pharmacopœia of the United States published by the authority of the medical societies and colleges, reported recommending a continuance of the Committee to institute a further examination of the work with a view to correct the errors it contained."

He was a glowing, impassioned lecturer. His ideals for the scientist and for mankind made him a teacher who exerted a noble influence upon all who came into his class rooms. ("Historical Memoirs of Phila. Coll. of Phar.," Edward Parrish.) His resignation, to take up a religious calling, to which he felt himself strongly drawn, was soon followed by death.

### Bridges

Dr. Robert Bridges, a modest and unpretending man, succeeded Fisher in 1842, and faithfully kept at his post for thirty-seven years, or until 1879. He came of an English family which had settled in Philadelphia about 1740. His father was an inconspicuous business man of the city; his mother was a daughter of William



ROBERT BRIDGES

Cliffton, of Southwark, a Quaker blacksmith who attained some distinction in the literary annals of Philadelphia as a composer of verse. First a student at the University of Pennsylvania, he passed to Dickinson College from which he was graduated in 1824. Returning to Philadelphia, he became a pupil of Dr. Thomas T. Hewson with whom he remained for nearly four years, graduating from the Medical Department of the University of Pennsylvania in 1828. In this manner he met Dr. Franklin Bache who was a lecturer on chemistry in Hewson's school and who made Bridges his assistant. In this capacity he continued to serve Bache in the Franklin Institute, in the Philadelphia College of Pharmacy and at the Jeffer-

son Medical College. He had been a candidate to succeed Bache at the Philadelphia College of Pharmacy and was defeated by a majority of two votes by Fisher, but in 1842, upon Fisher's resignation, he was elected to the place, serving Bache at the same time as a private assistant at the Jefferson Medical College. Concurrently for fifteen years, he also assisted Professor George B. Wood at the University of Pennsylvania. (*Amer. Jour. Phar.*, May, 1884.)

### U. S. Pharmacopœia of 1840

Philadelphia had now come to be "the metropolis of pharmaceutical as well as medical science in America." (*Amer. Jour. Phar.*, July, 1846, 154.) As the time drew near for the Convention to meet in Washington for another revision of the Pharmacopœia, our scientists were ready to take the large part in the work which had earned them the country's gratitude in 1830. Again the College of Physicians of Philadelphia, led through a committee of its members—those three devoted friends of the undertaking in 1830—Thomas T. Hewson, George B. Wood and Franklin Bache. They began their labors as early as May, 1839, and in recognition of the need of the practical advice of pharmacists they procured the assistance of two of the most accomplished in the city, and very probably in the country, William Hodgson, Jr., and William Procter, Jr.—one of them, Hodgson, as we have seen, trained with John Bell at the leading chemist's shop in London (*Amer. Jour. Phar.*, Sept., 1859, 488), and now for some years the partner of Daniel B. Smith—the other, Procter, a graduate of the College and a retail druggist who, by his reading and research, was rapidly advancing himself to a leading position in the pharmaceutical world. Three times a week for months, the Philadelphia committee met and conferred concerning their work so that they would have their draft ready for the Convention which was to meet in Washington the first Monday in January, 1840. The College of Physicians would be represented by Wood, Bache and Henry Bond. Wood having subsequently been requested to serve as a delegate from the University of Pennsylvania, Dr. Joseph Carson, at the time Bache's associate in the Philadelphia College of Pharmacy, was named to act in Wood's stead for the College of Physicians.

When January came and the Convention of 1840 met, there were only twenty persons in attendance. One half of these were from Baltimore or Washington. Philadelphia's complement was five (Jefferson Medical College sent Dr. Robley Dunglison), so that the rest of the country was but meagerly represented. New York had no delegates in the Convention, and New England only one, from Rhode Island. It was fairly concluded that in the state of national communications January was an unsuitable season of the year for travel, and hereafter the convention would be held in May. It was resolved, also, that, in the future, incorporated colleges of pharmacy should be entitled to representation on the same basis as medical societies and colleges. The only draft of changes submitted was that one which was the result of the labors of the Philadelphia committee, largely, as we know, the personal contribution of Wood and Bache. The material was referred to a committee of revision and publication which was composed of Wood, chairman, Bache and Dunglison, of Philadelphia, and four men from other parts of the country. Three of the number would constitute a quorum for the transaction of business.



The committee was in no mind to wait until 1850 for the co-operation of the pharmacists, and at once, in February, soon after the delegates had returned from Washington, Dr. Wood addressed Daniel B. Smith, as the president of the Philadelphia College of Pharmacy, asking for "any suggestions in relation to amendments, additions or omissions." He ventured to hope that "the interest which the pharmaceutical as well as the medical profession cannot but feel in this object will induce the College to lend the valuable aid of their practical experience and skill" in the revision of the book. In similar terms he addressed the colleges of pharmacy in Boston and New York.

A committee of five of the Philadelphia College of Pharmacy, composed of William R. Fisher, Henry Troth, Elias Durand, William W. Moore, and Charles Ellis, was appointed to take the subject under consideration. They soon reported favorably. Allusion to the fact that the pharmacists had been overlooked when the invitations to participate in the convention had been sent out, led to a statement that "no sentiment of injured pride" should keep them now from the performance of their duty as "good citizens" in a work "so important to the health and well-being of our neighbors and of society." The committee desired a complete revision—"exhibiting the science of the age and representing the progress of American pharmacy and medicine—twin sisters, whose growth and improvement from childhood to maturity, has been attended with the vigor of youth and the bloom of health, which, heightened by the influences of united interests and pursuits, must fail entirely, or sensibly decay, in both, should rudeness sever, or neglect destroy, the bond of sympathy by which they are bound together."

Pharm

The report was adopted and a "Committee of Revision" of the College was appointed, consisting of William R. Fisher, Charles Ellis, Elias Durand, William W. Moore, Thomas H. Powers and John C. Allen. At its organization in April, 1840, William Procter, Jr., was appointed secretary. The sessions continued for several months. Formulas from members of the College were received. An immense fund of valuable information derived from practical sources was collected. The committee's report comprised two quarto manuscript volumes. So important and comprehensive were the changes recommended by the industrious Philadelphians who "presented a complete revised copy of the Pharmacopœia, elaborated with great ability and industry" (U. S. P. IX, X), that, after it was received, the final draft of the work was in large degree rewritten. (M. I. Wilbert in *Amer. Jour. Phar.*, June, 1902, 266, and G. M. Beringer, *ibid.*; Aug., 1909, 390, *cf. ibid.*, April, 1840, 75-87.) The book was published early in 1842. In this revision, the Latin version was omitted. The process of displacement on percolation was introduced for the first time.

It is commonly said that prior to 1850 pharmacists did not have that part in the revisions to which their great interests in the subject entitled them. It was a "National Medical Convention" and nominally all the delegates were representatives of medical schools and associations. But when it is understood that the Pharmacopœia of 1830, the first to gain a position as a standard, was almost wholly the work of Wood and Bache, professors, the entire Faculty, indeed, of the Philadelphia College of Pharmacy; that the revision of 1840 was also in large measure the work of these two men, that at this time Joseph Carson, the professor of materia

medica and pharmacy in the College in succession to Wood, was a delegate to the Convention, that two highly qualified Philadelphia pharmacists were advisers to the committee of the College of Physicians of Philadelphia, that the draft before publication was extensively revised by a committee representing the Philadelphia College of Pharmacy, it can be said with no kind of truth that there was discrimination, either apparent or real, against the pharmacist. The revisions of 1830 and 1840 were prepared in Philadelphia by men who knew pharmacy, for pharmacists, by the Philadelphia College of Pharmacy, expressing itself through its teachers, the most eminent men whom its history had produced, assisted by some of the ablest of the practicing pharmacists of the city.

### U. S. Pharmacopœias of 1850 to 1880

The College appreciating its increased responsibilities with reference to the revision of 1850, very early gave itself to its tasks. In March, 1847, a committee, of which Daniel B. Smith, William Procter, Jr., Robert Bridges, Joseph Carson, Edward Parrish, Dillwyn Parrish, Charles Ellis, Charles Bullock and Joseph C. Turnpenny, among others, were members, was appointed to revise the Pharmacopœia and report on "such changes and amendments as they may think proper" for submission to the College. It performed its duties, its draft was completed and put in the hands of the delegates of the College to the Washington Convention of May, 1850, who were Daniel B. Smith, Charles Ellis and William Procter, Jr.

Again the representation at the Convention, except from the Middle and Northern states, was small. But the meeting was especially noticeable for the participation of the pharmaceutical delegates—the three from Philadelphia and two representatives of the College of Pharmacy of the City of New York. Dr. George B. Wood was elected president of the Convention. The various drafts which were presented by the different bodies and associations were referred to a committee of nine members—ten, including President Wood, who was added by a vote of the Convention—for final revision and publication. William Procter, Jr., represented the Philadelphia College of Pharmacy. The other members of the committee from this city were Wood, Bache and Carson. The meetings again were held in Philadelphia where the book was finally revised and published in 1851.

A New York pharmacist sat on the committee with Procter, so that there were two to speak directly and authoritatively for pharmacy, and from this time forward the part taken by the pharmaceutical profession became more and more prominent at every decennial revision, until in 1880 its representatives outnumbered the medical men on the committee.

### Instruction in Theoretical and Practical Pharmacy

It had been borne in upon many that the instruction of the College was somewhat too scientific, too theoretical, for the practical uses of the man whose career was to be had in a drug store. A course which would bring chemistry and the materia medica into closer relationship with the work of compounding and dispensing medicine was much needed, and it was proposed, therefore, that a new



chair be established. The College considered this subject in March, 1846, when a committee including Daniel B. Smith, William Procter, Jr., Augustine J. L. Duhamel, Edward Parrish, Samuel F. Troth and Charles Ellis was appointed to consider the propriety of creating a professorship of theoretical and practical pharmacy. The occupant would give especial attention to the actual processes of manipulation in the shop, transmitting to the pupil, in so far as he might, the knowledge and skill which were gained during a period behind the counter and in the "back room" under the guidance of the "master" pharmacist.

In May, 1846, a special meeting of the College was called, President Daniel B. Smith in the chair, to hear the views of the committee. When the school had been started, so ran the report, there were few, if any, apothecaries who were prepared "to assume the office of teachers," and recourse was had to the better trained medical profession. Conditions by this time had changed. Now the question arose "whether by the lectures in our school and by other means, tending to create a greater taste for scientific attainment among those who practice our profession, so much advancement had been made as to warrant the appointment of a practical apothecary to teach in a scientific manner what has, hitherto, in America and England, been the confused and unsystematized art of pharmacy." There were men coming to the school, men graduated from it, indeed, without knowledge qualifying them for the practice of pharmacy. Apprentices in wholesale stores were without preceptors, many "brought up in retail establishments" were without proper instruction in the art, since apothecaries, "as at present existing," were in too many cases "mere pretenders" and unfitted to communicate useful information. Students coming from such sources, therefore, would manifest "gross ignorance in regard to pharmacy, though they might have acquired a considerable knowledge of materia medica and general chemistry by attendance upon the lectures on these subjects. The committee reached and stated the conclusion that "if a course of lectures on pharmacy were added to those already delivered, in which the most recent and approved methods of manipulation were taught and the best kinds of apparatus exhibited, and, if these were followed by a thorough and detailed application of them in the preparation of medicines, in many instances repeating the operations before the class, and in all cases exhibiting the preparation in its most perfect condition, that the student would be able to correct the knowledge derived at home, and the pharmacy of the city, so far as the graduates of our school are concerned, would be rendered more perfect and homogeneous in its character than at present."

One could look in vain "amongst the medical literature of the English language for a single work devoted exclusively and systematically to this branch of knowledge." It was necessary to turn to the French and German writers for anything on the subject, and these works were rarely available for our pharmacists and not adapted to our national circumstances. A professor of pharmacy, if one should be elected would enter "a field of labor scarcely less extensive than that of either of his colleagues in the school," and one which he would have "to traverse in the double capacity of teacher and learner."

The report of the committee was adopted by a unanimous vote and in September, 1846, the Board of Trustees elected William Procter, Jr., to the new professorship of pharmacy. (*Amer. Jour. Phar.*, 1848, 147.)



### Procter

William Procter, Jr., like so many of the founders and officers of the College, was a Quaker. He was born in Baltimore in 1817, and now, upon coming to a chair in the College was but twenty-nine years old. He arrived in the city as a boy of fourteen and was apprenticed to Henry M. Zollickoffer, an apothecary with a store at Sixth and Pine Streets, who was numbered among the sixty-eight who had instituted the College in 1821. While working in Zollickoffer's shop, young Procter attended the lectures of the College and in 1837 received his diploma as a graduate in pharmacy. He continued his studies diligently. In 1840 he was elected to membership in the College and began to write for the Journal. In 1844 he opened a shop of his own at Ninth and Lombard Streets, in the old district of Moyamensing, a most unattractive part of the city, where he owned and directed the management of a store for many years.



WILLIAM PROCTER, JR.

The new course on pharmacy which had been authorized by the College was not begun until October, 1847, and on this occasion Procter's introductory address was a statement clearly indicating his understanding of the scope of the new field which he had been chosen to occupy as a teacher, and more than this, it contained a moral call to pharmacy to qualify and educate itself for its responsible relationship with the community. No higher ideals, not even those of Daniel B. Smith,

had yet come into the profession or were more clearly uttered for its guidance. (*Amer. Jour. of Phar.*, Nov., 1847, 241.)

The misgivings of students as to the value of the new course were soon banished. That they could profit from such instruction they all soon knew and Procter's success was assured. He had assisted Professor Carson in editing the *Journal* for two or three years, before becoming a member of the Faculty of the College, and after 1850, when Professor Carson proceeded to the University of Pennsylvania, he became the editor, a place which he held to the honor and advantage of the publication for a period of twenty years, during which time a reference to the index will disclose the fact that he contributed to the *Journal* 550 items over his own name exclusive of abstracts and editorials. By his learning and zeal, he made himself one of the most powerful of influences in the country for the extension of pharmaceutical learning and the development of the pharmaceutical art into a profession. ("Memoir of Wm. Procter, Jr.," *Amer. Jour. Phar.*, Nov., 1874.)

### Nostrum Traffic

The College immediately upon its institution had denounced nostrums. Formulas had been presented for the use of those who wished to manufacture the old English "patent medicines." New American remedies were appearing in increasing numbers. These were advertised by circular and pamphlet. Their names, with accounts of their marvelous cures, filled the newspapers. Not a journal, except one weekly literary publication in Philadelphia, had enough moral force to exclude from its advertising columns the announcements of the charlatans who had panaceas for sale. In the West, beyond the Alleghenies, quackery was "unblushingly presuming" (*Amer. Jour. Phar.*, Oct., 1851, 39), and its growth in the East, supported by that market, filled responsible physicians and honest pharmacists with professional resentment as well as with real solicitude for the health and lives of the people.

Dr. T. O. Edwards presented a report to Congress in February, 1849, recommending that the patent laws be changed to prevent their covering compound medicines. "For years," said he, "a vast system of medical empiricism, sustained by popular credulity and the sanction of government," had prevailed in the United States, "to the serious detriment of the public health and morals." The *American Journal of Pharmacy*, supported the movement and consistently, throughout a long period of years, in eloquent phrase and condemned the evil which, it was noted with sorrow, extended even to "educated, scientific, skilful and high-principled druggists," who, by offering for sale the concoctions of these "cunning nostrum mongers," made themselves a party to the mischief. (*Ibid.*, July, 1849, 287-8.)

The profession of pharmacy was "completely prostrate" before the patent medicine faker, said Edward Parrish. The apothecary who was dependent upon public patronage scarcely could, if he would, "act a manly and independent part." The quack's interest in pharmacy consisted in reducing every drug store to an agency for the sale of patent medicines or a store for general merchandising. In this man was seen the pharmacist's "natural enemy." The public was to draw its ideas of medicine from the newspaper which he had bribed into propagating his

favorite theories. All the mysteries of pathology and therapeutics vanished before his magic compound. No need of a materia medica beyond the ingredients found in his bottle. No need of a physician to direct, or an apothecary to prepare, a medicine for the disease which he could dispel with his patent dose. (*Ibid.*, May, 1854, 211-4.)

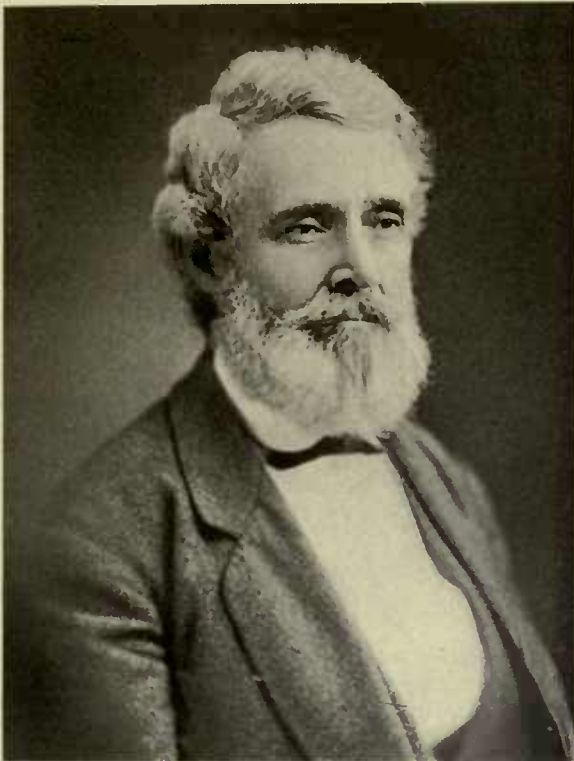
The New York College of Pharmacy was not behind Philadelphia in its denunciation of this traffic. The manufacturer and distributor of these secret medicines, said its president, George D. Coggeshall (an 1828 graduate of the Philadelphia College of Pharmacy), to the young men of one of the graduating classes of that school, was "at once the reproach of medicine and the bane of society." It was a public duty of any who had at his hand the honest means of alleviating suffering to put it at the disposal of humanity. To keep secret any useful discovery in medicine for the selfish purpose of gain was "unworthy of anyone below the honorable standard of character that every physician and pharmacist should scrupulously maintain, while the tampering with medicines by ignorant persons and the manufacture of worthless trash under its name," Mr. Coggeshall continued, were "grades of depravity with which no compromise should ever be made."

Quackery had had "a monstrous growth." It protruded itself into "all classes and circles of society." It was to be met with "at the corners of the streets and in our dwellings, mixes with our daily news, buying up the easily purchaseable public press, which subsists in a great measure upon it." Men who could write nothing better, hired themselves to prepare "puffs of nostrums they know nothing about." (*Amer. Jour. Phar.*, May, 1854, 201-7.) It was noted that, as a literary relaxation, "young gentlemen clerks" in dry goods stores in Philadelphia were fabricating certificates of cure by certain medicines which purported to come from clergymen. (*Ibid.*, July, 1849, 287-8.) Great names were "dragged into base connection with pills, mixtures, lotions, plasters, etc.," to give currency to the panaceas of the day. If the continued presence since the Dark Ages downward of such a system—"so monstrous, so impudent in falsehood" (so spoke the President of the New York College of Pharmacy) had not "rendered it familiar, if habit had not blunted our sense of its depravity, if it could now be presented in all its deformity before a civilized community for the first time, it would be regarded with wonder at its audacity, with execration at its reckless tampering with the best temporal interests of humanity." (*Ibid.*, May, 1854, 201-7.)

"The circumstances of a sparsely settled country where physicians and apothecaries are thinly scattered, by throwing the people on their own resources," said the editor of the *American Journal of Pharmacy*, "has been one of the most powerful causes of the origin and growth of that almost universal disposition to seek the aid of this class of medicines, which boldly promise to supersede the necessity of both physician and apothecary, until now the whole community is tainted, from the most educated members of the legal and clerical professions down through the mercantile, manufacturing and agricultural classes to the isolated dweller of the distant prairies of the West . . . Quacks know the influence which the names of druggists and pharmacutists lend in their favor, and hence they seek them for agents and extensively circulate their lists of agencies. . . . It is against this seductive influence that we are to be induced to exert ourselves; it is with this double-headed



monster, enrobed in such deceitful and enticing garments as to disarm our sense of insecurity, that we are to do battle, if we hope to elevate our profession to the position it should occupy in the scale of useful scientific arts." (*Ibid.*, May, 1853, 282-3.)



GEORGE D. COGGESHALL

George D. Coggeshall (1807-1891). Graduated from Philadelphia College of Pharmacy (1828). Career an eventful one in pharmacy. Active in the organization of the New York College of Pharmacy, faithfully serving it in various official capacities, including the presidency. Delegate to the convention of colleges of pharmacy in 1851, and also, to the National Pharmaceutical Convention in 1852, serving as recording secretary. Elected first vice-president of the American Pharmaceutical Association in 1853. Upon his demise (1891), George W. Kennedy wrote of him: "His life presents a useful example—earnest labor in youth and early and mid-manhood followed by an old age ripe with the fruits of earlier efforts."

### Code of Ethics of 1848

Here was a call for more courage for the contest by union, by education, by the exertion of a high minded and sustained influence upon public opinion which would bring to order those whose misbehavior weighed upon the conscience of so many leaders of this new profession. Already example had been salutary. The force of bodies like the colleges of pharmacy, embracing in their membership the

leading figures of the trade, was obviously large. Might not more be done? With this object in view it was suggested by the Philadelphia College of Pharmacy that a public statement of the standards of professional conduct should be prepared, and on March 31, 1848, such a statement was adopted by the College and promulgated in the following Code of Ethics:

"Pharmacy being a profession which demands knowledge, skill and integrity on the part of those engaged in it, and being associated with the medical profession in the responsible duties of preserving the public health, and dispensing the useful though often dangerous agents adapted to the cure of disease, its members should be united on some general principles to be observed in their several relations to each other, to the medical profession, and to the public.

"The Philadelphia College of Pharmacy being a permanent, incorporated institution, embracing amongst its members a large number of respectable and well-educated apothecaries, has erected a standard of scientific attainments, which there is a growing disposition on the part of candidates for the profession to reach; and being desirous that, in relation to professional conduct and probity, there should be a corresponding disposition to advance, its members have agreed upon the following principles for the government of their conduct:

"1st. The College of Physicians of Philadelphia having declared that any connection with, or monied interest in, apothecaries' stores, on the part of physicians, should be discountenanced; we in like manner consider an apothecary being engaged in furthering the interests of any particular physician, to the prejudice of other reputable members of the medical profession, or allowing any physician a percentage or commission on his prescriptions, as unjust toward that profession and injurious to the public.

"2d. As the diagnosis and treatment of disease belong to the province of a distinct profession, and as pharmaceutical education does not qualify the graduate for these responsible offices we should, where it is practicable, refer applicants for medical aid to a regular physician.

"3d. As the practice of pharmacy can only become uniform by an open and candid intercourse being kept up between apothecaries, which will lead them to discountenance the use of secret formulas, and promote the general use and knowledge of good practice, and, as this College considers that any discovery which is useful in alleviating human suffering, or in restoring the diseased to health, should be made public for the good of humanity and the general advancement of the healing art, no member of this College should originate or prepare a medicine, the composition of which is concealed from other members, or from regular physicians.

"Whilst the College does not at present feel authorized to require its members to abandon the sale of secret or quack medicines, they earnestly recommend the propriety of discouraging their employment, when called upon for an opinion as to their merits.

"4th. The apothecary should be remunerated by the public for his knowledge and skill, and in his charges should be regulated by the time consumed in preparation, as well as by the value of the article sold: although location and other circumstances necessarily affect the rate of charges at different establishments, no apothecary should intentionally undersell his neighbors with a view to their injury.

"5th. As medical men occasionally commit errors in the phraseology of their prescriptions, which may or may not involve ill consequences to the patient if dispensed, and be injurious to the character of the practitioner, it is held to be the duty of the apothecary, in such cases, to have the corrections made, if possible, without the knowledge of the patient, so that the physician may be screened from censure. When the errors are of such a character as not to be apparent, without the knowledge of circumstances beyond the reach of the apothecary, we hold him to be blameless in case of ill consequences, the prescription being his guarantee, the original of which should always be retained by the apothecary.

"6th. Apothecaries are likewise liable to commit errors in compounding prescriptions: first, from the imperfect handwriting of the physician; secondly, owing to the various synonyms of drugs in use, and their imperfect abbreviations; thirdly, from the confusion which ever in the best regulated establishments may sometimes occur, arising from press of business: and fourthly, from deficient knowledge or ability of one or more of the assistants in the shop, or of the proprietor. We hold that in the first three instances named it is the duty of the physician to stand between the apothecary and the patient, as far as possible, and in the last that he should be governed by the circumstances of the case—drawing a distinction between an error made by a younger assistant accidentally engaged, and a case of culpable ignorance or carelessness in the superior.

"7th. As the apothecary should be able to distinguish between good and bad drugs, in most cases, and as the substitution of a weak or inert drug for an active one may, negatively, be productive of serious consequences, we hold that the intentional sale of impure drugs or medicines, from motives of competition, or desire of gain, when pure articles of the same kind may be obtained, is highly culpable, and that it is the duty of every honest apothecary or druggist to expose all such fraudulent acts as may come to his knowledge. But in reference to those drugs which cannot be obtained in a state of purity we should, as occasion offers, keep physicians informed of their quality, that they may be governed accordingly.

"8th. As there are many powerful substances that rank as poisons, which are constantly kept by apothecaries, and prescribed by physicians, and which are only safe in their hands, as arsenious acid, vegetable alkaloids, ergot, cantharides, etc.—we hold that the apothecary is not justified in vending these powerful agents indiscriminately to persons unqualified to administer them, and that a prescription should always be required, except in those cases when the poisons are intended for the destruction of animals or vermin—and in these instances only with the guarantee of a responsible person. And we hold that when there is good reason to believe that the purchaser is habitually using opiates or stimulants to excess, every conscientious apothecary should discourage such practice.

"9th. No apprentice to the business of apothecary should be taken for a less term than four years, unless he has already served a portion of that time in an establishment of good character. Apprentices should invariably be entered as matriculants in the school of pharmacy, and commence attendance on its lectures at least two years before the expiration of their term of apprenticeship; and as the progress of our profession in the scale of scientific attainment must depend mainly upon those who are yet to enter it—it is recommended that those applicants who have had the advantage of good preliminary education, including the Latin language, should be preferred." (*Amcr. Jour. Phar.*, April, 1848.)

Copies of the Code of Ethics of the College were sent to the College of Physicians of Philadelphia and to other medical societies for their consideration with the view to joint action, and in 1849 the by laws of the Philadelphia College of Pharmacy were so amended as to specify that new members should be received into the College only if they conformed in their professional conduct with this declaration of principles.

As Charles H. LaWall has stated (*Journ. A. Ph. A.*, November, 1921), "If the Quaker apothecaries had done nothing else of moment, this code would remain as a monument to the lofty principles which actuated these men, who were not simply theorists, but who carried into their daily work the idealism they held up as a pattern to their professional brothers."

In 1900 this code of ethics was somewhat modified to meet the modern conditions of pharmaceutical practice, but the underlying principles, which were fundamentally sound and worthy of perpetuation, were retained unchanged.



### Ethical Standards

That pharmacy should be a profession, and being this, that it should make the rules and regulations for its own government without the interference of legislatures was the ideal of most of the writers and speakers who concerned themselves with this topic. The determination of the qualifications for entering upon the business of dispensing drugs, their adulteration, the sale of poisons and the whole conduct of the apothecary in the community were still controlled by public opinion only. A few state laws there were, but these were so little heeded that they could be held to be inoperative. In an increasing number of cases death ensued upon the carelessness and ignorance of dealers. Such conditions were arousing public feeling.

The moral authority which came from the colleges, the establishment of ethical standards to govern professional conduct, the education in schools of apprentices who would have greater knowledge of the business, were not sufficient safeguards. The benefits arising from this activity were large, but in a considerable measure they already had been reaped. A good deal of complimentary speech had been indulged in on this subject. But there was conviction in the minds of many men that the protection of the law should be invoked after all.

Procter spoke with as much authority as any for pharmacy. In the address with which he introduced his new course in the College, he directed attention to the increased "moral responsibility" resting on the apothecaries in the United States as compared with those of most other civilized countries "where government enacts rules for their guidance." In Germany and France pharmacy was "a child of the state." Apothecaries in Germany were officers of the government. In France the difficulty of obtaining a diploma, without which none could conduct a drug store, was so great as to bar all but really learned men. None wished so to impede the trade in this country. But some form of governmental action now seemed not so far away. The liberty which Americans valued so much, Procter observed, as so advantageous in the common intercourse of men, is unfortunate in reference to medicine, which as no guarantee of qualification is required by law of its practitioners, is thrown open to any individual who chooses to adopt the title of doctor or apothecary, be he ever so ignorant. "Men who were unsuccessful, who were unfitted, indeed, to succeed," in the hope of a golden reward, prostituted that knowledge which they "never should have acquired" to the invention of nostrums and of methods of forcing them into public notice.

"When we look abroad in the land," Procter continued, "and witness the working of the complex systems of quackery which, like the miasma of an infected region, hovers over every city and penetrates every village leading thousands astray by hollow promises and lying certificates of cure, whilst legitimate means are neglected, or overlooked, we cannot but desire that the strong arm of the law might reach forth and banish them from amongst us." (*Amer. Jour. Phar.*, Nov., 1847, 241.)

### Evolution of Drug Import Law

If the law were to be invoked and lessons were to be taken from Europe a good starting point would be formed in the import drug trade. From the beginning, the College had been engaged in doing what it could to restrict the traffic in adul-

terated and spurious drugs. In 1847 it memorialized Congress on the subject of a law which should properly deal with this subject. (*Ibid.*, Vol. 14, 142.) Here was an abuse of long standing: lately conditions had become so flagrantly outrageous as not to be borne. Since inferior and deteriorated drugs were under the ban of the government in European countries these, of necessity, if they were to find a market at all, must be shipped to the United States, and to this country they came without let or hindrance of any kind.

All sense of responsibility on the part of some importers and brokers in New York seemed to have been lost. Dr. Edwards in a report to the House of Representatives in Washington in June, 1848, said that the business of shipping adulterated and cheap drugs to this country had grown to be frightfully enormous. "The United States had become the grand mart and receptacle of all the refuse merchandise of that description, not only from the European warehouses, but from the whole Eastern world." New York was the principal receiving center—three-fourths of all that was imported was entered at that port. Recently out of several shipments of rhubarb not one pound was fit, or even safe for medicinal use; it was worm eaten, decayed by age, or the refuse which was left after an extract had been taken from it. It was invoiced at from five to fourteen cents a pound while the price of good root was from 35 cents to \$2.50 a pound. Peruvian bark so generally used for making quinine preparations for use in fevers came in similar qualities, adulterated with willow bark, chalk and plaster of paris, to be sent to auction for purchase by unprincipled drug dealers, who in turn carried it to the drug mills to be ground and powdered, and sold as a good article. Thousands of pounds of this trash were being received at New York, invoiced at from two to seven cents a pound, while a fair price for it, when it was of a good quality, was from thirty to forty cents a pound. In the West the sick were taking it by the teaspoonful, although in a pure state a few grains would suffice.

Opium came in from Smyrna not infrequently deprived of two thirds of its active principle abstracted for the manufacture of morphine. Adulterated with Spanish liquorice paste mixed with some bitter extract, the fraud was not easy to detect. Often before being worked over for sale in our markets, it was a decaying mass infested with living worms. In a year not a single pound of genuine scammony had passed the New York custom house. All that was received was mixed with a worthless vegetable extract and clay. Blue mass when pure contained  $33\frac{1}{3}$  per cent of mercury; often when it was imported it was mixed with clay and other indigestible earthy matter, and contained as little as 7 per cent of mercury.

So it was with calomel, iodine and, indeed, throughout the list of drugs, chemicals and preparations. Dr. Bailey, since 1846, examiner of drugs in New York, to determine if they were fairly invoiced, though without power to pass upon their quality, said that more than one-half of all that reached that city were "so much adulterated or otherwise deteriorated as to render them not only worthless as medicine but often dangerous." It was, said Dr. Edwards, a "reckless and murderous trifling with human life for the sake of filthy lucre." "Every feeling of humanity," said he, "as well as regard to justice towards those who are entrusted with the lives of the people," demanded the passage of a law calculated to put a stop to such conditions. (*Amer. Jour. of Phar.*, July, 1848, 203.)



### Enactment of Drug Import Law

The law entitled "an act to prevent the importation of adulterated and spurious drugs and medicines," was proposed amid a good deal of opposition on the part of the drug dealers of New York who were profiting by the nefarious business. Such legislation was in violation of "freedom of trade." But the opposition did not avail. Congress promptly passed the measure and it was approved by President Polk on June 26, 1848. By its provisions, examiners were to be appointed to serve at six American ports—New York, Boston, Philadelphia, Baltimore, Charleston and New Orleans, and they would have the power to exclude drugs found to be "so far adulterated or in any manner deteriorated as to render them inferior in strength and purity to the standard established by the United States, Edinburgh, London, French and German pharmacopœias and dispensaries, and thereby improper, unsafe and dangerous to be used for medicinal purposes." (U. S. Statutes at Large. Vol. IX, 237-9.)

The inspecting officers were chosen and the work began. Dr. Bailey was the appointee for New York. In July, 1848, he rejected 6,650 pounds of rhubarb root from Canton and 931 pounds of opium from Marseilles. Before the end of the year, many tons of jalap, rhubarb, cinchona, gamboge, senna, yellow bark, myrrh and other drugs and medicines fell under his ban. (*A. J. P.*, April, 1849, 159)

### Organization of the American Pharmaceutical Association

The time had now come for the formation of a national pharmaceutical association. In the Federal drug import law was found the impulse to effect this desirable action. Five colleges of pharmacy had been organized. New York had closely followed Philadelphia, with the New York College of Pharmacy founded in 1829. Baltimore established the Maryland College of Pharmacy in 1841. Cincinnati, the principal city of the West, formed a college in 1849. The apothecaries of Boston and the surrounding territory organized an association under the name of the Massachusetts College of Pharmacy in 1826, which commenced its educational work in 1850. All of these institutions were functioning more or less actively in their several communities in the interest of higher ethical standards. In some degree they were voices in the wilderness, but they were heard. It was clear enough that some men were at hand with ideals to which others would find it to their honor to conform.

The New York College of Pharmacy which was situated at the seat of the trade in imported drugs, had been particularly active in the agitation which had led to the passage of the law of 1848, and many of the members were dissatisfied with the phrasing of that law and the manner in which it was being enforced. There was need of standards for the government of the examiners. "Cheating in medicine is a great moral and ought to be a legal felony, compared with which the counterfeiting of bank notes and coin are venial offences," said the New York College.

With the object of forwarding this movement, the several incorporated bodies were invited to send delegates to a convention to be held in New York on October 15, 1851. In this meeting Baltimore and Cincinnati, though they had promised to participate, had no representatives. All the delegates in attendance were drawn from New York, Philadelphia and Boston. They were organized by calling Charles



Ellis, of Philadelphia, to the chair, whereupon Dr. C. B. Guthrie, of New York, was chosen president and Alfred B. Taylor, of Philadelphia, secretary of the convention. The working of the drug import law was brought under review and its defects discussed. The convention found that the act was "ample" in its general provisions, which made the various pharmacopœias and dispensaries of this country and Europe the basis for the examination, but it urged that "positive standards" be fixed for "a few prominent articles," unless these were to be employed in manufacturing chemical preparations used in medicine, and then only upon sufficient bonds being given that they were to be devoted solely to such use. It was proposed that tests be established for the guidance of the examiners in the cases of certain drugs as follows:

Opium should be passed only if it contained 8% of pure morphia.

Aleppo Cake Scammony, only if it contained 40% of true scammony resin.

Virgin Scammony, only if it contained 65% of true scammony resin.

Elaterium, only if it contained 25% of elaterin.

Iodine, only if it contained no more than 3% of water and should be free from other impurities.

Gum resins used in medicine, such as Assafoetida and Ammoniac, only if they contained no more than 15% of extraneous matter.

Moreover, all false cinchona barks from South America, i. e., those which contained none of the cinchona alkaloids, and all rhubarb of European origin should be rejected.

The examiner in each port should collect and deposit in his office a cabinet of specimens of drugs, chemicals, etc., to be used in comparison in the course of his work of inspection. The "greatest carefulness should be exercised by the appointing power in the selection of the examiners." In furtherance of this object, the colleges of pharmacy declared that "if solicited," they would "cheerfully render their assistance," an offer which met with no appreciation at Washington. While Robert J. Walker, as Secretary of the Treasury, had displayed an enlightened and honorable interest in the subject, his successor William M. Meredith, amid and in spite of general protests, proceeded in a manner too often characteristic of our American politics, to dismiss the efficient incumbent of the office of examiner in Philadelphia, who enjoyed the "confidence and respect of the importers, druggists and physicians" (*Amer. Jour. Phar.*, July, 1850, 280), and put an entirely incompetent man in his place as a reward for political service. Shortly, similar proceedings disgraced the administration at Washington and imperiled the drug market with reference to the examiners in Baltimore and Boston.

This subject disposed of, the convention passed to matters of permanent bearing upon the progress of the profession, under the leadership of the delegates of the Philadelphia College of Pharmacy, who, from the first, had had in view the formation of a national association for more general objects. (Edward Parrish, *Amer. Jour. Phar.*, July, 1854, 290.) Accordingly it was resolved that for the "advancement of the true interests of the great body of pharmaceutical practitioners in all sections of our country," for the creation of "a code of ethics calculated to elevate the standard and improve the practice of their art," for the establishment and support of schools of pharmacy, united action was required. "Much good,"

it was declared, "would result from a more extended intercourse between the pharmacutists of the several sections of the Union, by which their customs and practice may be assimilated." To forward this end, a convention made up of three delegates from each incorporated and unincorporated college and pharmaceutical society in the country was called to assemble in Philadelphia in October, 1852, "when all the important questions bearing on the profession may be considered and measures adopted for the organization of a national association to meet every year."

The Board of Trustees of the College put the hall on Zane Street at the disposal of the delegates, and a committee, of which William Procter, Jr., was the chairman, proceeded with the preliminary arrangements. A general invitation was extended to the trade to send its representatives. In towns and cities where no associations were yet formed, apothecaries were urged to choose one or more of their number to attend the convention in Philadelphia on October 6, 1852.

The hour of meeting was four o'clock in the afternoon, to admit of "our New York and Baltimore friends leaving home in the morning." The five colleges in Philadelphia, New York, Boston, Baltimore and Cincinnati, and the New Richmond Pharmaceutical Society, were represented. A number of men who were not officially accredited to the Convention were invited to occupy seats and to take part in the proceedings. Daniel B. Smith was chosen to preside over the sessions. There were three vice-presidents drawn from Baltimore, Boston and Cincinnati, respectively. George D. Coggeshall, of New York, was elected recording secretary, and William Procter, Jr., corresponding secretary. A constitution was presented and adopted. The new body was called the American Pharmaceutical Association.

The convention was not numerously attended because of the novelty of the project and the difficulties attending travel from place to place. But several subjects were discussed and referred to committees, among them the drug import law, the sale of poisons, the secret medicine business and pharmaceutical education. Without the wish to impose their views upon the profession generally which might, it was hoped, be drawn into the new association, the leaders of the movement in Philadelphia and New York, who predominated were content to submit for discussion questions about which their own opinions were long made up. Definite action would be reserved for future meetings after the views of the country should be ascertained. A "Code of Ethics," but of not so clear a moral tone as that which guided the members of the Philadelphia College of Pharmacy, was adopted and subscribed to by the delegates. The convention adjourned to meet in Boston in 1853.

### A. Ph. A. Conventions

To the Boston convention a larger number came. The representation of each college and pharmaceutical society had been increased from three to five delegates. Philadelphia sent Daniel B. Smith, Charles Ellis, William Procter, Jr., Charles Bullock and Edward Parrish, five of its most enlightened pharmacists, and the interval of a year for reflection yielded reports of committees upon which action expressive of the views of the country could be based.

The committee on the inspection of drugs disagreed with the findings of the convention which had met in New York two years before as to the establishment



of standards for the examiners, practically concluding that what was more needed than an amendment of the law, was its interpretation and enforcement by honest and competent officers. The report of the committees on the sale of poisons disclosed the fact that, in strange contrast with conditions long prevailing on the continent of Europe, there was almost no legislation on the subject in this country. Poisons were used freely everywhere for the destruction of insects and vermin—in the West to kill wolves and other wild animals, which surrounded the settlers' cabins and ravaged their herds and flocks. Cases of the fatal misapplication of arsenic, corrosive sublimate, prussic acid, strychnine, etc., were not unusual. Just lately, Ohio had passed a law regulating the sale of arsenic and other poisons. In that state, the dealer must register his sales in a book kept for that purpose unless they were made upon a physician's prescription. He should place the word "Poison" on the wrapper of each package given out and furnish none to minors. To change the color of arsenic and render it less likely to be confused with harmless powders, it should be mixed with soot or indigo when it was sold in less than one pound lots. The committee did not recommend recourse to the stringent measures which had been adopted in Europe. It was desired, however, that the trade be confined to druggists and apothecaries who should be compelled by law to keep an accurate record of their sales, and that all packages should be distinctly marked "Poison." The Association, supporting its committee, urged the enactment of such laws in the several states. The unrestricted sale of opium was reserved for future study.

The trade in quack medicines was the subject of much argument. Difficulties attended the assault upon such a stronghold. Dr. Charles B. Guthrie would have had the Association recommend the states to enact laws requiring every person engaged in the manufacture and sale of any patent or secret remedy to file with the proper state authorities "a full and complete formula" for such remedy. To this proposal there was much opposition. Delegates deprecated an appeal to force; the same result could be better reached by education. It was "mainly by the sale of quack medicines that many druggists subsist." Edward Parrish, who was as clear as any in his views and statements on the subject, would not set up standards to which the rank and file could not conform. He would extend a welcome to all. He would take them in and reform them afterward. He would trust "to the force of sound principle and the contagion of good example" to spread through the ranks until "a higher and better standard of practice" should be attained. (*Amer. Jour. Phar.*, July, 1854, 290-91.) Finally, these resolutions were passed:

"Resolved, that the American Pharmaceutical Association believes that the use of secret or quack medicines is wrong in principle and is in practice attended with injurious effects to both the profession and the public at large, and believes it to be the duty of every conscientious druggist to discourage their use.

"Resolved, that this Association earnestly recommends to our pharmaceutical brethren to discourage by every honorable means the use of these nostrums; to refrain from recommending them to their customers; not to use any means of bringing them into public notice; not to manufacture or to have manufactured any medicine the composition of which is not made public; and to use every opportunity of exposing their use and the false means which are employed to induce their consumption."

The convention adjourned to meet in Cincinnati in July, 1854. This was a doubtful experiment. But "the brethren of the Atlantic cities" were urged "to get



into the cars some pleasant morning" and "be wafted over the Alleghenics and down the Ohio" to the Queen City of the West. After their meeting on the banks of the "beautiful river," they could return home by Niagara Falls and the Hudson. As a matter of fact few did attend the meeting, but the sentimental effect of a convention in the "West" was not lost upon the country; thus was the Association brought to bear the appearance of being truly national in character.

In 1855, the Association again met in New York; in 1856, in Baltimore; in 1857, again in Philadelphia; in 1858, in the Hall of the Smithsonian Institution in Washington, and in succeeding years, it has met in all sections of the country.

It is interesting to note, also, that the Jubilee Session of the Association of 1902 was held in the College, as it was in the Philadelphia College of Pharmacy (Zane Street Building) that the organization meeting of the Association was held in 1852 and Daniel B. Smith elected its first president.

### Smith and Ellis

It may be stated, also, that during the occupancy of the Zane Street Building by the College, the presidents were Daniel B. Smith (1829 to 1854), and Charles Ellis (1854 to 1869), the former remarkable for his versatility and executive ability, and the latter for his almost parental care of the institution and never ceasing labor for its advancement, especially of the *American Journal of Pharmacy*.



CHARLES ELLIS

### Sugar Coated Pills

Like the process of percolation the sugar coating of pills was discovered in France, but was developed in America by the labors of Warner, Bullock, Wiegand and others. Probably, the first sugar coated pills "that acquired much repute in this country were those imported from France and made by Garnier Lamoreau and Co., some fifty-five or sixty years ago, and were very beautiful specimens of the confectioner's skill; but many physicians of high standing and excellent judgment ignored them entirely, as the result of their experience induced them to think the process of sugar coating 'baked' them so thoroughly that they were nearly insoluble." ("Sugar Coated Pills," Thomas S. Wiegand, *Amer. Jour. Pharm.*, 1902, 33.)

### William R. Warner

William Richard Warner (1836-1901). Born in Caroline County, Maryland. Early education in country school and Eastern Academy. Entered as a lad in the employ of Chamberlain and Anderson, druggists of Easton, Md. Became deeply interested in natural science and contributed a number of scientific papers to the local press. Entered the Philadelphia



WILLIAM R. WARNER

College of Pharmacy and graduated in 1856. Opened store at Second and Girard Avenue. Gradually engaged in manufacturing. Was the first manufacturer of sugar coated pills in this country (1857), manufacturing them extensively. Upon this subject William R. Warner, Jr., writes: "My father conceived the idea of sugar coating pills when a lad in the drug store at

Easton, Md., and accomplished the feat though somewhat crudely. I am inclined to believe that he perfected his process of covering pills with sugar shortly after 1856, probably the next year; he made them and sold them to Bullock and Crenshaw in bulk and they put them up and marketed them as their own, such as is now done by druggists under "buyers name." My father was not known by the profession as the real maker of sugar coated pills at that time. Later (1866), he purchased a wholesale drug business at 154 North Third Street, at about the same time the contract he had with Bullock and Crenshaw expired. Then it was that he began to manufacture as William R. Warner and Co., marketing his goods under his own name and the label of William R. Warner and Co." Removed (1876) to 1228 Market Street and extended his line of manufacturing, both for foreign and domestic markets. Built (1891) and occupied the "Warner Hall" at Broad and Wallace Streets. Joined the College in 1858 and continued as a member until his demise. Took a keen interest in the progress of scientific pharmacy and contributed a number of articles to the *American Journal of Pharmacy* and other periodicals. Later, the details of his rapidly growing business engrossed his thoughts, and here he exhibited the same energy and avidity in mastering the problems of commerce and manufacture, and achieved unusual business success. After his demise the business was continued by William R. Warner, Jr. (graduate of the class of 1881) until 1908, when it was sold to Geo. A. Pfeiffer and Brother and moved to New York, but is continued under the name of William R. Warner and Company.



## CHAPTER V

## FROM ZANE STREET TO NORTH TENTH STREET

In 1854 upon the retirement of Daniel B. Smith, after he had completed a quarter of a century in the office, Charles Ellis was elected to the presidency of the College. He was to hold the post for fifteen years, or until 1869—his death followed in 1874 (*Amer. Jour. Phar.*, March, 1875), when he was succeeded by Dillwyn Parrish. When Professor Carson resigned the chair of materia medica in 1850, to succeed Professor Wood at the University of Pennsylvania, the place was



ROBERT P. THOMAS

given to Robert P. Thomas, who remained in the position until his death in 1864, to be succeeded by Edward Parrish, who occupied the place until 1867, when he exchanged places with John M. Maisch, who had been professor of pharmacy (1866-1867). Maisch now passed to the chair of materia medica, to which was joined for the first time the subject of botany, thus affording the incumbent a wider field of action. At Parrish's death in 1872, the chair of pharmacy was again occupied by Procter, for a brief period, to be succeeded by Joseph P. Remington in 1874.

### Thomas

Robert P. Thomas was a distinguished figure in the history of American pharmacognosy. Only one other man in the United States at the time was held to be his equal as a lecturer on materia medica, and that was Dr. George B. Wood. (*Amer. Jour. Phar.*, 1864, 191-277.) Like so many who had played their parts in the development of the school, he was a member of the Society of Friends. At sixteen he entered the counting room of a shipping house, but his interest drew him to natural history. He made his way forward toilsomely at much personal sacrifice until he was enabled to enter and complete his course in the medical school of the University. There he received his medical degree, in 1847, and three years later came to the College, where by his industry and zeal he made a deep impression.

From the Faculty of the school had come the Pharmacopœia of 1830 and the College continued to be a leading factor in the revisions of that work. Wood and Bache, while in its service, published the United States Dispensatory. Benjamin Ellis had issued a "Medical Formulary," and Robert Eglesfeld Griffith a "Universal Formulary," both standard compilations of their day. Thomas revised these works and kept them abreast of the times. His editorial labors in bringing these books, so useful to pharmacists, into conformity with the progress of pharmaceutical science, added to his own as well as to the reputation of the College. Suddenly, within forty-eight hours of the conclusion of one of his lectures, he died of a fever at the age of forty-three.

### Parrish

Edward Parrish who followed him, the seventh incumbent of the chair of materia medica, and the only one as yet who had not come to the place through a medical school, had been a figure of note in the College for many years. He was a son of the eminent Philadelphia physician, Dr. Joseph Parrish. Graduating at the College in the class of 1842, after a course of training in the shop of his brother Dillwyn at the southwest corner of Eighth and Arch Streets, in 1843 he opened a drug store of his own at the northwest corner of Ninth and Chestnut Streets in the shadow of the University of Pennsylvania. Here, in contact with the professors of that school, he became impressed with the belief that the students who came to Philadelphia from all parts of the country to study medicine, were going out as practitioners of medicine without a knowledge of pharmacy; and to many of them, who would locate in country villages and small towns where there were no apothecaries, the want of such knowledge would be a great loss to themselves and disadvantageous to the communities in which they would settle for practice. Therefore, in the autumn of 1849, he issued a prospectus addressed to medical students particularly, and, in rooms in the rear of his store at Ninth and Chestnut Streets, opened what he called a "School of Practical Pharmacy." When, in a few years, he sold this store to enter partnership with his brother Dillwyn at Eighth and Arch Streets, he moved his school to those premises, where it rapidly grew in reputation.

A ready speaker, of genial manners, his courses were very popular, and in 1857 he could say that in the eight years past he had given instruction in pharmacy to 299 medical students, drawn from nearly every state of the Union and

from British America. He wrote a book called an "Introduction to Practical Pharmacy," the first edition of which appeared in 1855, and his prominence as a teacher and a writer and as an executive officer, which was clearly evidenced later in his raising the funds for and in acting as the first president of Swarthmore College,



EDWARD PARRISH

at length brought him into the Faculty of the Philadelphia College of Pharmacy. He had been a candidate for Professor Carson's place in 1850, but as he had not had a training in medicine, then believed to be requisite in one who should hold the chair of materia medica, he was not chosen. (*Amer. Jour. Phar.*, May, 1873, 225.)

### Maisch

John M. Maisch was a different type of man. Neither Quaker nor Philadelphian, he was distinctly unlike those who had previously taught, barring Gerard Troost, the Hollander, whose service in the College had covered only one year. Maisch was born in Germany in 1831 and came to this country as a very young man. Like Carl Schurz, he had been imprisoned for his political activities during the Revolution of 1848. Like Schurz, also, he had escaped from his confinement and like him and many other Liberals, who later attained distinction in American life, he left his native land to escape the repressions which would ensue upon the failure of that popular uprising. He arrived in Baltimore practically penniless; his



vicarious employments led him from that city to Washington, then in 1853 to Philadelphia, a year or so later to New York, and in 1856 back to Philadelphia, where he was a clerk in a drug store and an instructor in Parrish's School of Practical Pharmacy. In 1861 he returned to New York, being for a time professor of materia medica and pharmacy in the College of Pharmacy of that city, and working at the same time in the laboratory of Edward R. Squibb. Two years later he was once



JOHN M. MAISCH

more in Philadelphia. The Civil War was then at its height and he organized and, until peace, directed a United States Army Laboratory, in which position he effected important financial savings to the Government. When peace came, being without employment, he opened a little retail drug store on Ridge Avenue, which he conducted for a time, after which he joined the Faculty of the Philadelphia College of Pharmacy, to which he brought the strength of his vigorous mind, his unquestioned capacity as a teacher and the rich store of learning he possessed concerning materia medica, especially from the pharmaceutical viewpoint. In 1871 when the *American Journal of Pharmacy* became a monthly—it had been a quarterly until 1853 and since then a bi-monthly—he succeeded Procter as editor, a post which he held for twenty-two years. As a thinker, writer, teacher, investigator, he carried on the principles and traditions of the College and made pharmaceutical history. He had the accurate and painstaking love of detail characteristic of the German scholar. His learning

won general recognition, in token of which he was made a member in a large number of learned societies abroad. Many a young man was inspired to greater endeavor by contact with his powerful mind. His book on "Organic Materia Medica," and his innumerable writings, attested to his unusual industry in research. (*Amer. Jour. Phar.*, Jan., 1894, and Aug., 1897.)

### College Development

Under such leadership the College prospered. Each year a considerable number of young men were graduated to take their places in the ranks of pharmacy in all parts of the United States. The multiplication of schools, an ideal which was kept before the country by the American Journal of Pharmacy and by the American Pharmaceutical Association, after it was organized, led to the establishment of schools in other cities. Thither students went from their own neighborhoods, though the Philadelphia school, with a notable history and a reputation well maintained, in a center which was widely held in high esteem as the Mecca for pharmaceutical education, yielded nothing to its competitors.

Soon after the accession of Thomas to the Faculty the number of students largely increased. His instruction, Edward Parrish declared to be "unsurpassed in interest and in utility by any similar course delivered in the College." ("Historical Memoirs of the Phila. Coll. Phar.," Edward Parrish, *Amer. Jour. Phar.*, 1869, 17.) The number of graduates in 1868 were 51. There had been an average number annually for the nineteen years preceding the election of Procter to the new chair of pharmacy in 1846 of only  $5\frac{1}{2}$ , while in the nineteen years which followed the average number receiving the diploma annually was 21. Very many more had heard the lectures. In the first twelve years in the school's history, out of more than 400 matriculants only twenty-eight had graduated. Up to and including 1869, the total number of graduates had been 701, while the number of registered attendants upon the lectures approached 3,000.

This condition was due to the fact that many students in the city's medical school, while they did not wish to complete the courses and receive a diploma were glad to avail themselves of the opportunity of hearing the lectures upon pharmacy for the same reason that many had attended Parrish's Practical School, since all who did not intend to practice in the larger cities would find it necessary in all probability to compound and dispense their own medicines.

The condition was due, also, to the fact that during the first half century of the College there were no pharmacy laws, and no prerequisite pharmacy laws until 1905, and graduation was not compulsory until recently or even in many cases regarded as essential. It is interesting to note that during the first one hundred years of the College, probably 20,000 students attended all or a part of the courses, and of these only 7,500 were graduated.

The Alumni Association of the Philadelphia College of Pharmacy was organized in 1864. This organization soon made itself a force to keep the graduates of the College, especially those residing in distance places, in close touch with the activities of the College. As time went on, its influence increased, and it became an exceedingly important factor in the development of the College.

The membership of the College at the time of its institution was 68 and in

five years time increased to 98; it was about 125 in 1868 when the time had come to leave the Hall on Zane Street, where it had been since 1832. The classes had greatly increased. The school had outgrown the premises, despite the alterations which the Board of Trustees had made from time to time. Thirty-five years had passed before the College was enabled to free itself from the financial burdens it had assumed in reference to the property. Small as such a debt seems to us, at this day, the resources of the institution were so limited that it could not be discharged except by the contribution of loans by the holders and the collection of funds from friends of the institution. It was truly a day of modest beginnings.

### Larger Quarters Needed

At the annual meeting of the College in the spring of 1867, a committee was appointed to co-operate with a committee of the Board of Trustees to select a new site and make the necessary arrangements preliminary to a removal to larger quarters. Several pieces of ground were inspected,—on Penn Square, on Race Street near Fifteenth Street, and elsewhere. The Race Street lot was on the point of being acquired when, Edward Parrish, while walking one day on Arch Street, entered into conversation on the subject with a young real estate dealer, who called his attention to a site on Tenth Street above Cherry Street. The purchase of this property was authorized on December 10, 1867, and the hall on Zane Street was sold on January 7, 1868, to J. B. Lippincott for \$15,000, to be used for stereotyping rooms in connection with his publishing house located nearby.

A final meeting of the College was held in the hall on March 30, 1868, when the secretary was directed to make the following entry on the minutes: "The members of the College are reminded that the present is the last meeting of the College within the walls of the present building, where for many years they have so pleasantly conferred together. On separating and bidding adieu to the present locality, they hope that their next regular assembly will be under pleasant auspices in a building better adapted to the growing necessities of the College and that each member will feel a renewed interest in the Philadelphia College of Pharmacy."

The plot on North Tenth Street was of irregular size. At one point it was 86 feet deep, at another 132 feet. It embraced the house and lot of No. 145 North Tenth Street to full depth with the lots only in the rear of Nos. 139, 141 and 143 North Tenth Street. The larger part of the area had been the graveyard of the First Dutch Reformed Church. The first interment had been made there in 1809, but the ground was found to be unsuitable for burying purposes on account of the wet and clayey character of the soil, and it was abandoned, though some families continued to make use of the enclosure until 1857, when, from the records, it appeared that 614 persons in all had been buried there. A few months before the College took possession of the plot, most of the bodies had been removed, although in the course of the excavations for the foundations of the new building, several skeletons were exhumed by the laborers.

Adjoining to the south on Cherry Street, occupying a part of the space formerly included in the burying ground, stood the Aimwell School, a Quaker charity founded and supported by Ann Parrish, a sister of Dr. Joseph Parrish, and an aunt therefore of Edward Parrish. She had begun her benevolent work with



some neglected children collected in the neighborhood of her father's house at the corner of Second Street and Pewter Platter Alley (above Market Street), and as the undertaking grew, she with other Quaker women who had joined her, were enabled to purchase in 1825 this site on Cherry Street for the erection of a building for their uses. Here, this characteristic little Philadelphia institution, "the pioneer free school" of the city, was leading its existence most successfully at the time the College determined to settle at its side.

The neighborhood was still the daily moving ground of the well-to-do and influential part of the population of Philadelphia. Hereabouts dwelt many comfortable if not affluent Quaker householders. They had filled Arch Street and had pressed northward to Cherry Street and farther into Northern Liberties and Spring



DILLWYN PARRISH

Garden, where around their meeting houses at Fourth and Green Streets, and Sixth and Noble Streets, they dwelt in the neat red brick houses which were typical of the city. Families of other religious faiths, seeking quiet respectability, found their homes here, also, and to the Quaker heads of the College it seemed meet that it should be located in such surroundings.

The chairman and treasurer of the general committee was Dillwyn Parrish, the well known Quaker pharmacist at Eighth and Arch Streets, soon to succeed Charles Ellis as President of the College. The building committee was made up of

Thomas S. Wiegand, Chairman, Dr. Robert Bridges, Charles Bullock, James T. Shinn and Charles Shivers.

The lowest bidder (an architect drew the plans), was Henry B. Cook, his price being \$25,385.27 for an edifice set on the back of the lot for the use of the College and a new house on the narrow front of No. 145 North Tenth Street.

### Erection of the New Building in 1868

Ground was broken for the building on April 22, 1868, and the corner stone laid in June, a deposit being made in it of "a glass-stoppered bottle containing various printed documents and papers connected with the College and a copy of the *Public Ledger*." The work was to be completed before September, a desired eventuality, not only because of the opening of the new school year in October, but also on account of the approach of the meeting date on September 8, of the American Pharmaceutical Association, now come to number more than 700 members, which was again to convene in Philadelphia.

But after the foundations were built the city required an increase in the thickness of the walls, which increased the cost of the brick work \$2,249.21 and made the total cost of the building \$34,650. Furthermore, when the first of September arrived the walls were still unplastered. The meetings of the American Pharmaceutical Association, with which an exhibition of drugs, apparatus and other articles connected with the profession was combined, proceeded with the workmen clattering over the heads of the delegates, while the first lectures to 186 matriculants were delivered amid scenes unfavorable to the transmission and acquisition of learning. The hall was opened with appropriate ceremonies on October 7, 1868, although the building was not finished until December.

"No attempt," as Professor Remington has said, was made "to secure architectural beauty." (*Amer. Jour. Phar.*, March, 1893, 116.) The building afforded twice as many square feet of floor space as were found in the Zane Street building. The new hall was only three stories in height, while the old had been four stories, thus reducing the labor of ascent on the part of lecturers and students. In it were found a laboratory with sky lights, an assembly room which would also accommodate the library, professors' rooms, and on the second and third stories, two large lecture auditoriums, each measuring 50 by 43 feet, with seats so arranged and elevated as to command an unobstructed view of the specimens, diagrams and other illustrations used by the lecturers. These rooms, said Professor Parrish at the time when the hall was opened for use, would conveniently seat all the students of the school "for many years to come."

Moreover, the building was so placed in the lot, with open space on all its sides, that it could not be darkened, it was believed, by surrounding structures, and, since it was situated back from the street the rooms were "remarkably quiet." (Edward Parrish, *Amer. Jour. Phar.*, 1869, 97.) The total cost of the improvement (\$34,650) was met by the proceeds of the sale of the Zane Street property to Mr. Lippincott, and by a private subscription, headed by Powers and Weightman for \$1,000, and completed by the retail druggists of the city who were personally canvassed by Professor Procter and other friends of the College. (*Amer. Jour. Phar.*, Oct., 1900, 488.)

### Courses of Instruction

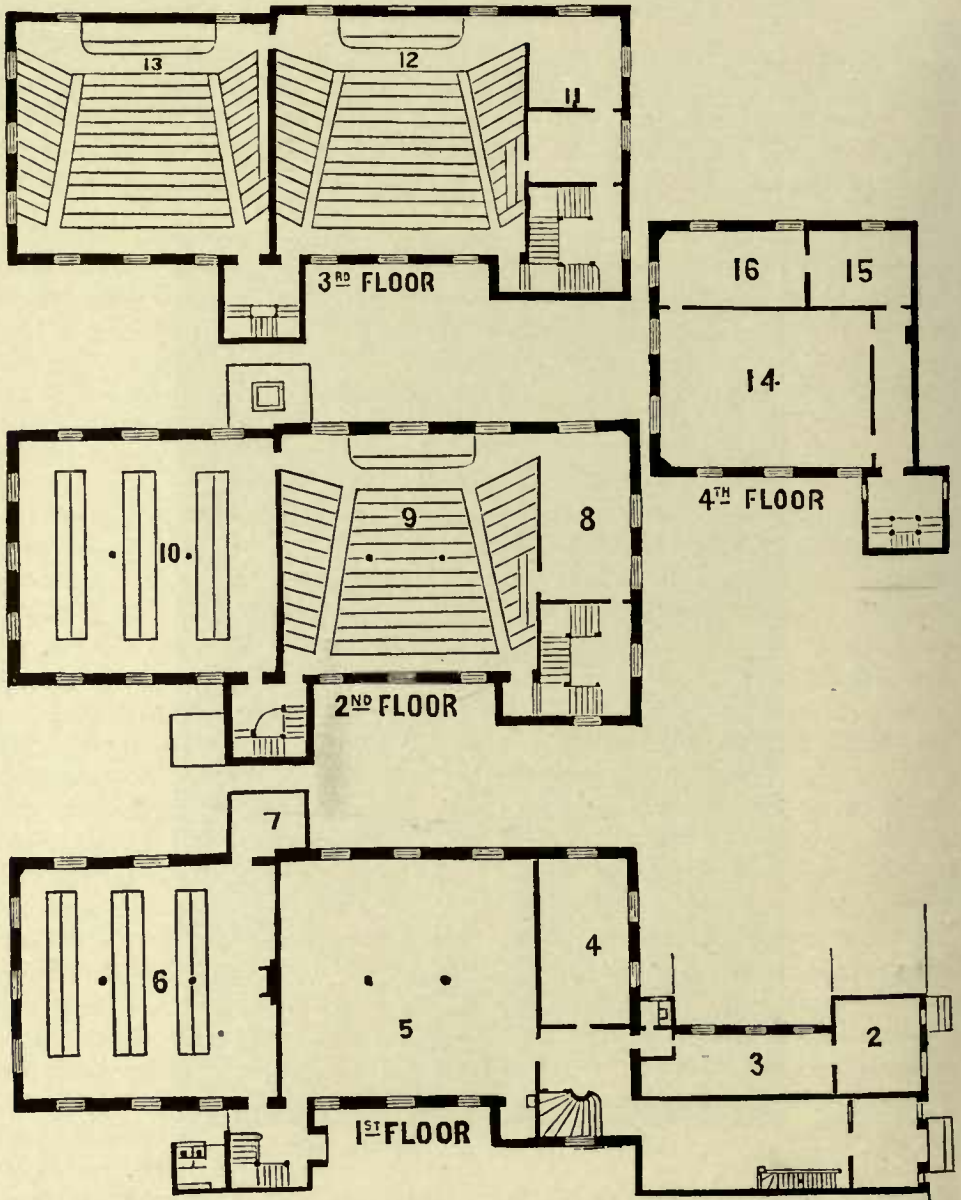
The courses of instruction were still given only in the evening—on Monday, Wednesday and Friday evenings, from about October, until the end of February. The school, as from the first day, was set to answer the needs of apothecaries' apprentices; the matriculation fee was but \$2 to be paid to the secretary of the Board of Trustees, Alfred B. Taylor, at his drug store at 1015 Chestnut Street.



TENTH STREET BUILDINGS OF THE COLLEGE—1868-1892

The fee for each course of lectures to be paid to the professors in charge was \$10. The graduation fee was \$5. Diplomas were given only to persons of "good moral character" of the age of at least twenty-one years. They must have attended two courses of each of the lectures delivered in the College, or one course in the College and "one course in some other reputable college of pharmacy" or medical school in which the same branches might be taught. They also must have "served out an apprenticeship of at least four years with a person or persons qualified to conduct the drug or apothecary business." After the candidate passed an examination before the professors, following the presentation of a satisfactory "original





GROUND PLAN OF TENTH STREET BUILDINGS—1868-1892

dissertation or thesis upon some subject of the materia medica, pharmacy, chemistry or one of the branches of science immediately connected therewith, which shall be written with neatness and accuracy," the Board of Trustees awarded him a diploma. After a commencement held in Musical Fund Hall, Locust Street above Eighth, or some other public hall esteemed suitable for the exercises, on which occasion an address filled with good counsel was delivered, the graduate was sent on his way rejoicing into the ranks of practicing pharmacists.

Practical laboratory instruction in the new hall was made possible by the collection of funds for such use by the alumni of the College, the laboratory being put under the direction of Professor Maisch, and kept open from nine in the morning until one in the afternoon every week day during the lecture season. The instruction comprehended pharmaceutical and chemical manipulations, and analysis. The fee for one month's daily practice was \$15, for two months \$25, for all of the five months of the season \$55. The pharmaceutical meetings of the College, now successfully in progress for some time, organized for scientific discussion apart from the transactions of the business of the corporation, were thrown open to students, and in this way too their opportunities for the acquisition of practical knowledge were materially extended.

### Evolution of Pharmacy Laws

Proponents of the movements for pharmaceutical reforms still were relying in large measure upon the power of education and salutary example. Untouched by the State, except when the common law stepped in to deal with them for harming the community by their ignorance or carelessness, as it would deal with "other offenders against the well-being of society," it was a field which invited the idealist to new sermons and much active endeavor. The formation of a national association had given fresh courage to those who believed in the potency of united action. Now, said Professor Procter, local associations for "mutual improvement" should be formed everywhere. Before "the continued voice" of a gathering representing the trade in all parts of the country, evils would disappear. "Quackery, whether professional or vulgar, would quail, would shrink into the hands of men quackish by nature, and the profession, washed of its contamination, could, with clean hands and clear accents, raise their voices against it, with an effect on all but the hopelessly ignorant that would cripple the most fruitful sources of its present success." (*Amer. Jour. Phar.*, 1852, 87-8.)

Quakers have been long and notably indisposed to recommend the use of pains and penalties as aids to moral order. Their rather well-known opposition to the changes which have so large a part in the counsel as well as the practice of others operated to prevent the College from becoming the foremost leader in the necessary for the guidance and control of a service brought into such close connection with the common weal as the drug business.

But at last, with the passage of the Federal drug import law of 1848, a beginning had been made, and there were many at hand ready to pass the other problems incident to the management of this important business to the various states. If Congress could protect the people from foreign impositions, said Dr. Bailey, the examiner who was active in rejecting spurious and inferior drugs at New York, the states of the Union could and would separately "protect themselves from domestic evils" by enacting "stringent laws" in reference to the "purchase and sale of medicines for home consumption similar to those which have been most effectively in operation throughout Europe." (*Ibid.*, July, 1848, 222.) It was now incumbent on the several states," said Dr. Edwards who had done yeoman service in securing the passage of the Federal law, "to render penal by special statute the conduct that

endangers the life and health of the citizens." (*Ibid.*, 1849, p. 164.) The influence of the New York College of Pharmacy was clearly in favor of legal regulation and strong voices arose throughout the country demanding legal interposition for the restraint of those manufacturers and dealers who were bringing so much discredit upon a business which many, for so long, had been endeavoring to raise to a professional plane. It was remarked with plain truth that "in country villages, East as well as West, the principal dealers in drugs and medicines were country storekeepers who knew as much about bark, rhubarb and opium as they did about algebra and conic sections." (*Amer. Jour. Phar.*, July, 1848, 350.)

"How is it in this country where the people professedly rule and where legislation is so fashionable," said Professor Procter boldly in his valedictory address to the graduating class of the College of 1852, "that nothing has been accomplished? The power of public opinion is with us the only force that can be enlisted with hope of success in effecting many reforms that lie within the legitimate limits of legislative action. Each individual as one of the sovereign people feels his rights must be respected; the quack and the pretender assume this ground and are ever ready to oppose measures for the public good that conflict with their pecuniary interest, by raising the cry of monopoly, by proclaiming the doctrine of non-interference with competition and by appealing to the political sensibilities of the legislators through their function as voters of the commonwealth. If one-half the power conceded to the Board of Health by universal consent and manifested through quarantine and other regulations was invested in a properly qualified pharmaceutico-medical board, authorized to carry out the provisions of a wholesome law, which law should define the qualifications of those to whom the practice of pharmacy is entrusted, should require an annual inspection of the stock of apothecaries in the manner of the Germans, and should check the torrent of quackery by requiring every inventor of a secret remedy to take out a patent for his nostrum, and deposit a certified copy of the recipe used in making it among the official records, so that all may know what they are served with under the name of infallible specifics—I say if this was accomplished, the pharmaceutists of our country would soon rise in character and education and the stigma of a base and degrading charlatanism be lessened, if not removed."

The New York Legislature in 1839 had enacted a law requiring that all practicing pharmacists in New York City should be graduates of the College of Pharmacy of the City of New York, or be in possession of a diploma from some other regularly constituted college of pharmacy or medicine, or should have "passed an examination of the censors of the medical society" of one of the counties of the state, furnishing such censors with "a certificate of his qualifications for the business of an apothecary," which should be shown to and registered by the secretary of the New York College of Pharmacy. (Session Laws of New York for 1839, 57-8.) But no attention was paid to the requirement. Georgia had a law dating from 1825 for licensing apothecaries as well as physicians. Both those intending to practice "physic and surgery," and to "vend or expose to sale any drugs or medicines" should appear before a State Board of Physicians for examination. (Session Laws of Georgia, 1825, 125-8.) This law was similarly inoperative. It was not until the American Pharmaceutical Association concerned itself about the



matter, in an earnest way, beginning in 1866 with a comprehensive report on the legal aspects of the general problem, that effective measures came to be adopted.

Local pharmaceutical organizations were now at hand in all the principal cities of the country, ready to hold-up the hands of the national association, and to urge upon the various state legislatures salutary policies. Many bills appeared, but they were defeated, as in New Hampshire, New Jersey, Massachusetts, Ohio, Michigan and Illinois—everywhere, indeed, except in Rhode Island, where there was a statute dating from 1870, which was amended in 1871. Elsewhere, at the time Philadelphia took effective action on the subject, there were only local laws, and these applied to but two cities—Baltimore since 1870 and New York since 1871.

### Local Pharmacy Laws

The College was alert and prompt in giving its support to a draft of a law for the regulation of the practice of pharmacy in Philadelphia. It was commended to the attention of the legislature at Harrisburg at a meeting of the druggists of the city held on December 19, 1871. The provisions of the proposed measure were made to apply only to Philadelphia, because of a conviction that more at the time could not be accomplished. The bill made its way through both houses, and came to the Governor John W. Geary, who vetoed it, on the ground, as he said, that it was a special law for one city, instead of for the whole state, and that it was designed for the particular benefit of the Philadelphia College of Pharmacy, which assumed, he alleged, that the graduates of no other school had the necessary knowledge to compound and sell drugs.

Governor Geary was replied to. It was a law applying to the city of Philadelphia only, he was told, because of the practical impossibility of making it relate to the whole state. In country districts physicians were compelled to dispense medicines themselves, which they carried to their patients in their saddle bags, while the proprietary remedies were sold by every country storekeeper. The representatives in the Legislature from parts of the state living under these conditions, would not impose upon their constituencies legal provisions which were held to be adapted only to a large city. As for the bill benefiting the Philadelphia College of Pharmacy nothing was said on the point, except that the institution was to be authorized to nominate ten persons from among the skilled and competent pharmacists of the city out of which the Mayor of the city was to choose an examining board of three men.

Immediately, another bill so modified, it was believed, as to meet the objections of Governor Geary, was prepared and approved by the pharmacists of the city. Upon being passed by the legislature it was signed by Governor Geary on April 4, 1872.

The law began with a preamble—"Whereas the safety of the public is endangered by want of care in the sale of poisons, whether to be used as such for legitimate purposes or employed as medicines and dispensed on the prescription of physicians; and whereas, the power of physicians to overcome disease depends greatly on their ability to obtain good and unadulterated drugs and skilfully prepared medicines; and whereas the class of persons to which the preparation and sale of drugs,

medicines and poisons properly belong, known as apothecaries, chemists, and druggists or pharmacists, should possess a practical knowledge of the business and science of pharmacy in all its relations" it was enacted:

"1. That hereafter in the City of Philadelphia no one could engage in the business of compounding and dispensing medicines on the prescriptions of physicians or sell at retail any drugs, chemicals, poisons or medicines without a written certificate declaring him to be 'duly competent and qualified to do so,' obtained from 'The Pharmaceutical Examining Board' composed of five persons, appointed by the Mayor in the City of Philadelphia for a term of three years. All retail apothecaries must register with this board within thirty days, pay a fee of \$5, submit to an examination and receive, after satisfying the examiners, a certificate of competency. Exceptions were made for graduates of competent schools of pharmacy and for those who were already engaged in the business at the date of the passage of the law. It would not be retroactive. Suitable penalties were provided to be imposed upon those who should act without complying with the terms of the law.

"2. Druggists should not employ assistants in the compounding of medicines unless they should be graduates in pharmacy, or unless they have served an apprenticeship of at least two years in a store where medicines are compounded and dispensed, or have taken at least one full course of lectures on chemistry, materia medica and pharmacy. No proprietor of a store should leave it in charge of any but a 'qualified assistant,' i. e., a graduate in pharmacy or a person holding a certificate from the Examining Board.

"3. Penalties were provided for the adulteration of drugs.

"4. Provisions specifically excepted from the scope of the law physicians who compounded and administered their own medicines and dealers in proprietary remedies."

The editor of the *American Journal of Pharmacy* regarded this as the "best pharmaceutical law which had yet been passed in the United States, inferior only to the one which Governor Geary had vetoed on February 19."

True the nomination of candidates had been taken away from the College and vested in the Mayor of Philadelphia, who could not be expected to know about such a subject, but this officer, at the time William S. Stokley, immediately requested the College to name ten persons from whom to make his selections. This was done at once and five of the number—James N. Marks, Charles L. Eberle, James T. Shinn, Edward Parrish and Robert England were appointed on April 24, 1872, without partisan influence, and were soon installed for the performance of their new and important duties in an office at 723 Arch Street, where registration began on May 20, 1872. The first examination of clerks for certificates of competency was held in the June following.

During the first year the board held fifty meetings. It received 504 applications for registration, 492 being approved: 250 clerks appeared for examination; 185 of the applicants were granted certificates while 65 were rejected as incompetent to be left in charge of a store. Ten persons, not graduates in pharmacy, who wished to open retail drug stores subsequent to the date of the passage of the law presented themselves for examination; five were rejected as not possessing the requisite qualification. The Board complained that the fees were barely sufficient to meet its expenses, and too little could be done in conducting prosecutions. Yet in time, it said the act must "confine responsible business to properly educated pharmacists, and materially lessen the risk of accident." (*Amer. Jour. Phar.*, February, 1873, 84.)

In the same year, 1872, the Baltimore pharmacy act of 1870 was repealed and a better one enacted in its place, a new and better law was passed by the New York State Legislature for New York City, and a law came into force in San Francisco. Thus, in 1872, there were legal provisions affecting the practice of pharmacy only for Rhode Island and for four cities—New York, Philadelphia, Baltimore and San Francisco. (*Ibid.*, June, 1872, 283.) But a beginning had been made. Bills were now pending in many legislatures. Other states and cities soon would follow the pioneers, developing the system of control, until, in a short while, few could comprehend how the policy of "freedom of trade," as it had been called, with reference to a business of this kind, ever could have met with public acquiescence and professional endorsement.

### Robert England

Robert England (1825-1896). Born in Philadelphia. Son of William and Hannah England. Forbears Swedes who settled in Swedesboro, N. J., in 1682. Early education in public school. Apprenticed to J. W. Simes, Eighteenth and Market Streets. Graduated from



ROBERT ENGLAND

College (1846). In drug business at Tenth and Christian Streets, then at Tenth and Catharine Streets, for half a century. Elected member of College (1859), and later trustee (1874-1896), and served on many important committees. Member and treasurer of the Pharmaceutical Examining Board of Philadelphia (1872-1887). Active in many civic bodies and



Methodist Episcopal Church; also in Masonic order. Ever loyal and devoted to his Alma Mater, rendering her singularly useful service. The annual meeting of the College of March 30, 1896, upon the announcement of his death, deferred business and adjourned "as an expression of profound sorrow and as a tribute of respect."

### Fiftieth Anniversary of the College

The Philadelphia College of Pharmacy completed fifty years of its history on February 23, 1871. The occasion was celebrated; William C. Bakes, James T. Shinn and Thomas S. Wiegand were appointed members of a committee to take the necessary measures for a suitable commemoration of the event. A large number of guests were invited to the hall of the College for the evening of the Semi-centennial Anniversary. Prominent among these were Professor Joseph Leidy and Dr. R. E. Rogers of the University of Pennsylvania, Professor Samuel D. Gross of Jefferson Medical College, and a number of scientific men from Baltimore, New York and other cities. Set about the room on tables were "a number of objects interesting for their antiquity," contrasted with a display of "the best chemicals" of the day from the laboratory of Rosengarten and Sons.

President Dillwyn Parrish, after calling the meeting to order, asked the venerable Peter Williamson to take the chair in recognition of the fact that he had been present at and acted as secretary of the body of druggists and apothecaries who had instituted the College in Carpenter's Hall on February 23, 1821.

Charles Bullock, secretary of the College, read the minutes of the first meeting of the College.

James T. Shinn read an historical "Memoir of the College," prepared by Samuel F. Troth, who was unable to be present.

Addresses were made by Dr. R. E. Rogers, Professor Joseph Leidy, Professor S. D. Gross, Professor Edward Parrish, and Thomas S. Wiegand, who presented Professor William Procter, Jr., with a gold watch as a testimonial of gratitude to him for his untiring labor in connection with the *American Journal of Pharmacy*, Professor J. Faris Moore, of Baltimore, and others. The meeting then adjourned to the lower hall "where an ample collation was provided for the company," and "So passed the Fiftieth Anniversary of our College; may the second witness even greater evidences of the progress and usefulness of our Alma Mater." (*Amer. Jour. Phar.*, March, 1871, 130-4.)

### Elixirs and Tablets

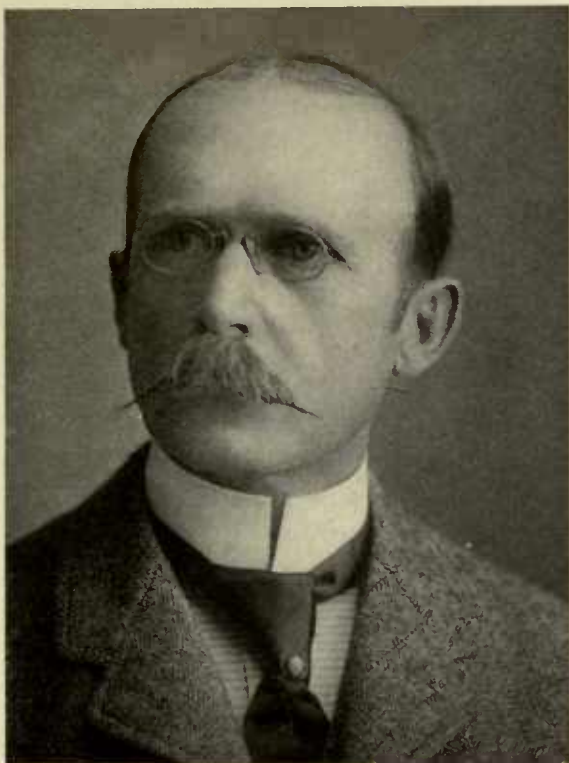
The sixties and seventies marked the beginning of the commercial manufacture of elixirs and tablets. As to the modern elixir, which is essentially of American origin, King's American Dispensatory (1898, 685) states that:

"In 1859 Alfred B. Taylor, of Philadelphia, published in the *American Journal of Pharmacy* a formula for a sweetened 'Elixir of Calisaya.' The Druggist's Circular of the same year states that no previous formula had been published. Immediately manufacturers of pharmaceutical preparations threw lines of sweetened elixirs on the market. These were really cordials. In 1870 to 1874, the elixir mania was at its height. In 1871, Prof. J. Faris Moore, M.D., representing the American Pharmaceutical Association on 'Unofficial Preparations,' included formulæ for several of these popular mixtures. In 1872, Prof. C. Lewis Diehl read a paper on the elixir subject before the Louisville College of Pharmacy, which

was published generally. The agitation on elixirs was continued in the American Pharmaceutical Association, but not, however, until a few had received recognition in the U. S. P. The American Elixir is a cordial made of sugar, spirit, flavor and drugs. It is not as disagreeable as the European Elixir (which is free from sugar), and in that regard may be entitled to preference."

While it is true that elixirs have their limitations as therapeutic agents, they have, also, important possibilities of usefulness, and elixirs are manufactured in America today in enormous quantities. Among the more important elixirs have been those of the digestive ferments, in the development of the manufacture of which, together with the manufacture of ferment products generally, Benjamin T. Fairchild (and his brother Samuel W. Fairchild), has been most prominent, manufacturing preparations of unusual therapeutic excellence.

The tablet is of English origin, but it has had its greatest development in this country.



*Photo by Davis and Sanford.*

**BENJAMIN T. FAIRCHILD**

Benjamin Thomas Fairchild, son of Thomas B. Fairchild and Susan Fairchild. Graduated from the Philadelphia College of Pharmacy in 1872, subject of thesis being "Suppositoriæ Assafœtidæ." Organized manufacturing pharmaceutical house of Fairchild Bros., with his brother Samuel W. Fairchild in 1879, and subsequently the corporation of Fairchild Bros. and Foster. Member of the College and Board of Trustees. Member of American Pharmaceutical Association. Member of Council of New York University.

As Lyman F. Kebler has stated (*Journ. A. Ph. A.*, 1914, 822): "There is no question that the moulding of medicaments was in vogue many years before William Brockedon was granted English Patent No. 9977, December 8, 1843, under the title of 'Shaping Pills, Lozenges and Black Lead by Pressure in Dies,' and it is equally certain that this invention was the beginning of a great industry. . . . Compressed tablets were commercially imported into this country in 1854, by E. Milhau, of New York, and Brockedon's goods were imported by Frederick Brown about 1860. . . . The manufacture of 'compressed pills' (tablets) in the United States was apparently begun by Jacob Dunton, a wholesale druggist in Philadelphia. He was graduated from the Philadelphia College of Pharmacy in 1855." Dunton's first



JACOB DUNTON

experiments were made in 1863-1864. His first machine was built in 1864, but his products were not marketed until the fall of 1869. He secured a process-patent for the preparation of materials to be used in the manufacture of tablets in 1875, and a patent for a machine for compressing tablets in 1876. Dunton was followed by John Wyeth and Brother, who constructed (1872) a rotary tablet machine, and originated compressed hypodermic tablets, compressed tablet triturates, and compressed medicinal lozenges. "Prior to 1877," states John Wyeth and Brother, Inc., "the formulas that were sold in tablet form were very few. They consisted of simple chemicals principally, such as potassium chlorate, ammonium chloride, etc., and after 1877, combinations followed. After 1880, tablets having become quite popular, others entered into the manufacture of them, and various machines were invented and improved and are known as single and multiple die machines with shoe-feeding devices; also different styles of rotary machines have been made since then." John Wyeth, the then president of the Wyeth Company, was a graduate of the Philadelphia College of Pharmacy, class of 1854.



Since then, the compressed tablet industry has developed by leaps and bounds and the making of tablets has become universal. From 1869 to 1876, Dunton made only between two million and three million tablets; today the laboratories of this country compress millions of tablets daily.

Kebler states, also, that:

“Tablet making in Germany seems to have had its beginning in 1872 when Rosenthal of Erlangen described his tablet compressor, and the tablet became a recognized form of medication in Germany, but the home industry did not seem to keep pace with that of other countries, as is shown by the fact that English goods made such an impression upon the German public that manufacturers in Germany resorted to the scheme of using English labels to promote the sale of their goods. The tablet industry, like the coal tar industry, had its origin in England. Germany having absorbed the greater part of the coal-tar industry, was reaching out for the tablet business, but not with very satisfactory results. Conditions in Germany were apparently not propitious for the best expansion of the industry, but at any rate, the center of activity was transferred to the United States, which country has held the supremacy for the last quarter of the century.”



With reference to the moulded tablet triturate, Kebler states that:

“Dr. Robert M. Fuller, of Schenectady, N. Y., is undoubtedly the originator (in 1861) of tablet triturates (moulded tablets), and the moving spirit in placing the industry on a substantial basis. . . . Compressed tablets and tablet triturates, from which all other varieties originated, have had different lines of evolution. In point of time, however, the improvements proceeded almost simultaneously. Tablet triturates are either compressed or moulded. Their upper and lower surfaces are flat. In the case of compressed tablets, the upper and lower surfaces may be convex or flat. The three workers who stand out in the early history of the industry are Brockedon, Dunton and Fuller.”

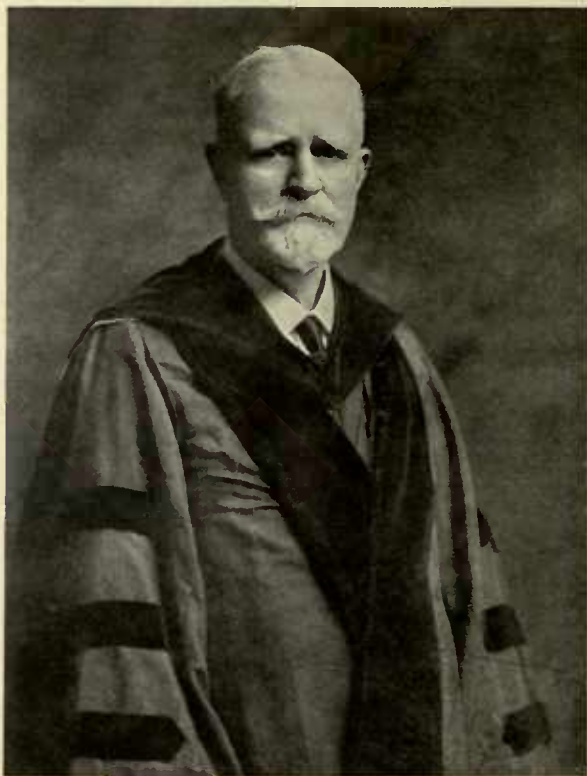
In this connection, it is interesting to add the following information from Horatio N. Fraser, of New York :

"Shortly after I became the manager of the drug and dispensing department of Caswell, Hazard & Co., of New York, in 1876, Dr. Fuller sent for me and told me of his idea of tablet triturates which he had been working on for years.

"Dr. Fuller was neither a manufacturer nor a business man; he was left a comfortable fortune by his father and while he carefully conserved what he had, he did not care for a larger income. At the time he conceived the idea of tablet triturates he lived on 42nd Street, New York City. When he retired from his practice and hospital work he went back to the old homestead in Schenectady. His idea of the tablet triturate was to unite the allopathic and homeopathic professions.

"When I first met Dr. Fuller, in 1876, and he explained his idea, it lacked the addition of those parts which were necessary for its completion in a form to put it before the profession and trade.

"As soon as he showed me what he had done, it occurred to me that here was the chance which would make a name and income for the successful development of the tablet triturate. The process at first was slow, but after a time rapid, with the result noted by Kebler."



*Photo by Curtis Bell.*

HORATIO N. FRASER

To Horatio N. Fraser, a graduate of the Philadelphia College of Pharmacy, class of 1872, and a member of the present Board of Trustees, belongs the credit, therefore, of first manufacturing tablet triturates in such a manner as to make their manufacture commercially practicable and to spread their use among physicians and pharmacists, and in this way another new industry was founded.

## CHAPTER VI

## PROGRESS AND ACHIEVEMENTS OF THE PAST FIFTY YEARS

The completion of a half century in the existence of the College in 1871 brought it to the verge of a new era—when the school, which at first had been only an incident of its life, was to become its dominating interest. The College now became the school. Its growth was the pride of the corporate body expressing itself through its Board of Trustees. Other interests with which the associated apothecaries had started out were gradually and in large degree transferred to other agencies. The pre-eminent service to the community left for the College to perform, was the development of its courses of instruction, the improvement of its pedagogical standards, the extension of its opportunities to an increasing number of students; and in all these directions, its duty to the city, the state, to other states and to foreign countries, which had sent their young men hither to be fitted for the ranks of the pharmaceutical profession, had been discharged faithfully and with growing distinction.

**Remington**

The dominant figure in the College in the second half of the century, which it has recently completed, was Joseph P. Remington. He was, for much of this time, the foremost figure of American Pharmacy. The year 1871 found him an assistant in the school, a speaker often heard in the meetings of the College and a frequent contributor to the pages of the Journal. His activities continued almost until his death on the New Year's Day of 1918, so that his work was practically coterminous with the fifty-year period now under review.

Remington was born in 1847. He was of Quaker ancestry, of that people who have had so intimately to do with the history of the College and with pharmacy generally in Philadelphia. As a boy he had come of forebears who were physicians and apothecaries and he was yet but sixteen when he entered the store of Charles Ellis, at the time the president of the College, as an apprentice. When in this excellent shop, with a history which carried it back in direct line to the famous old "Marshall Drug Store," young Remington attended the lectures of Thomas, Parrish, Procter and Bridges in the College and received the degree of graduate in pharmacy in 1866.

At the beginning of the following year, he entered the service of Dr. Edward R. Squibb, of Brooklyn, being for nearly three years in the closest contact with that eminent manufacturing pharmacist, in his laboratories and in his home, with daily opportunities for advancement in scientific knowledge and technical skill. Returning to Philadelphia, he was for a time in the employ of Powers and Weightman, but in 1872 he determined to open a retail apothecary shop at the northeast corner of Thirteenth and Walnut Streets, where he continued in business for thirteen years. Already, in 1871, he was assisting Parrish as a teacher in pharmacy in the College. Upon the death of Parrish in 1872, he retained this position under Procter, who had returned to the chair, and at Procter's death in 1874, he was



elected to the professorship which these men had so much honored by occupying. ("Memoir of Professor Joseph Price Remington," C. H. LaWall, *Amer. Jour. Phar.*, 1918, 65.)

Like Procter and Parrish, Remington was largely self-taught, because there were no schools for the acquisition of this branch of learning. Procter had been the first to raise pharmacy in this country to a subject for a special teaching chair. Parrish had made the need of practical pharmaceutical education the reason for the establishment of his well-known School of Practical Pharmacy at Ninth and Chestnut Streets, and later at Eighth and Arch Streets, and had still later, brought his



JOSEPH P. REMINGTON

abilities to bear upon the working-out of this pedagogical problem of the College. Both had conducted retail drug stores while they taught, so too did Remington, and carried their practical experience into the class room for the advantage of youths looking forward to a similar career.

It soon became apparent that Remington possessed executive ability of an unusually high order. This was shown by his progress into a leading position in the direction of the school, and in the progress made by the school after he came to this position of leadership. With an impressive and courtly presence, a geniality in his address and conversation, and a fluent and an easy manner on the platform and in debate, he soon attracted notice to himself and won universal respect.

## Sadtler

The next most significant change in the Faculty followed upon the retirement of Bridges in 1879 as professor of chemistry, the chair held successively by Troost, Wood, Bache and Fisher. By his unselfish and kindly ways, his loyalty to duty, the simplicity of his life, his painstaking and faithful teachings, Bridges had earned the respect of all who knew him. He was beloved by his students; during his long term of service he had lectured to more than 5,000. "Without being ready in debate, or at all eloquent in speech, he was an admirable and efficient teacher, as thou-

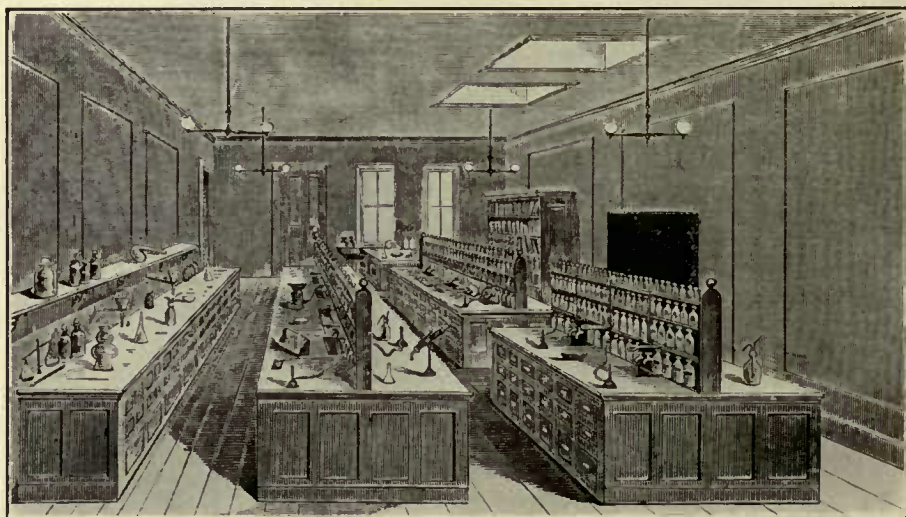


SAMUEL P. SADTLER

sands of his pupils will testify. They will teach his lessons and thus long continue and expand the beneficent influence of his instruction and example." (W. S. W. Ruschenberger, *Amer. Jour. Phar.*, May, 1884.) His health was impaired and the prospect of increased labor which impended induced him to ask Professor Samuel P. Sadtler, of the University of Pennsylvania, to assist him in the conduct of his course in 1878. Sadtler did so, and the following year was elected to the chair, to occupy it for thirty-seven years, as long as it had been held by Bridges, who now became professor emeritus, which was his rank at the time of his death in 1882. (*Amer. Jour. Phar.*, May, 1884.)

Samuel P. Sadtler was born in Schuylkill County, Pa., in 1847, the same year, therefore, as Remington. His father was a Lutheran minister who served for a

time as President of Muhlenberg College at Allentown. Young Sadtler was a student at Pennsylvania College at Gettysburg when General Lee invaded Pennsylvania and his course was interrupted by the historic clash of arms between the Northern and Southern forces at that place. Resuming his studies he took his degree. Choosing to be a chemist, he for a time attended lectures and worked in the laboratories at Lehigh and Harvard universities, which led him later to Goettingen in Germany, then, because of Woehler's distinction as a teacher, a widely esteemed scientific center. In 1871 he received his doctor of philosophy degree at that university, which had numbered in its student-body Bismarck, who had just completed the victory over Louis Napoleon and had brought the separate German states together into a unified German empire, and such Americans as George Bancroft, Edward Everett, John Lothrop Motley and Henry W. Longfellow. Returning home, Sadtler became professor of chemistry and physics at the college at Gettysburg, from which, in 1874, he came to the University of Pennsylvania as professor of general and organic chemistry, a place which he held for seventeen years, or until 1891. It was 1879, as we have seen, while in the midst of his term of service at the University, that he joined the teaching staff of the Philadelphia College of Pharmacy, occupying the two chairs concurrently. (*Amer. Jour. Phar.*, July, 1816, 289.)



FIRST LABORATORY OF THE COLLEGE—1870

### Improvements in Instruction

In the College various improvements in the methods of imparting instruction had been introduced. Oral examinations had given way to written ones. The first laboratory for practical work in chemistry and pharmacy, established by the Alumni Association, was put in charge of Professor Maisch in October, 1870.

In 1872 the laboratory was turned over to the College by the Alumni Association. In 1876 its two divisions of work were partially segregated. Professor Maisch confined his instruction to the chemical laboratory work, and



Professor Remington gave a course in pharmaceutical manipulations, and in 1878 assumed full charge of the pharmaceutical laboratory or laboratory of operative pharmacy. Among the subjects of the practical exercises he taught were the use of the specific gravity bottle, filtration, percolation, clarification and precipitation. Students were shown how to make spirit of nitrous ether, syrup of ferrous iodide, citrate of iron, suppositories, tinctures, pills, ointments, medicated waters, and other pharmaceutical preparations.

A forward step of great importance was taken in 1878 when the courses of the College were graded. Junior and senior students were separated into classes with six lecture hours per week for each, the same as for the undivided class theretofore. Although doubling the work of the professors, the instruction was vastly increased in value—it grew “in depth, character and extent.” “The effect,” said Professor Remington in reviewing that period of the history of the College, was “immediate and of great benefit.” (*Amer. Jour. Phar.*, Jan., 1885.)

### Women Graduates in Pharmacy

The founding of the College may be regarded as marking the date of the entry of American women into pharmacy, for, as elsewhere stated, probably the first woman pharmacist in this country was Elizabeth Marshall (1768-1836), daughter of the first president of the Philadelphia College of Pharmacy.

But half a century elapsed after the founding of the College before women began to regularly matriculate as students. The first woman to attend instruction was Clara Marshall in 1876; for many years she was dean of the Woman's Medical College of Philadelphia.

The first woman graduate of the College was Susan Hayhurst (1820-1909), who received her degree in 1883, and who later had charge of the pharmaceutical department of the Woman's Hospital of Philadelphia. She was of Quaker parentage. She is said to have been the first regularly graduated woman pharmacist who took up the drug business in a practical way after graduation.

Grace Lee Babb was the second woman graduate (class of 1884); she was for a time assistant demonstrator in chemistry at the Woman's Medical College, and afterward married Dr. Griffith E. Abbot.

From then almost without exception each succeeding class graduated one or more women, as, in keeping with the entrance of women into other branches of industry, more and more women have taken up the study and practice of pharmacy. The women graduates of the College have shown their ability to master the details of this branch of learning as well as their adaptability and suitability to the practice of the pharmaceutical art. Their proficiency has been demonstrated at more than one annual commencement, when they have been awarded the highest, sometimes the greatest number of prizes given by the College, its friends and faculty for excellence in the respective branches taught. Of the many capable women who have graduated, the great majority have made a practical success of the undertakings into which they embarked. They have more than justified the faith of those who

favored the entrance of women into pharmacy. Women graduates of the College have not only gone into the retail and wholesale drug business, but many are serving as pharmacists in hospitals, some have studied and are practicing medicine, others have engaged in teaching in pharmaceutical and medical institutions, still others are serving as clinical technicians, chemists, in manufacturing pharmacy, and in sanitation work. A considerable proportion of them have been actively identified with pharmaceutical association work of local, state and national scope, sometimes filling offices in these organizations. Among these may be mentioned: Mrs.



SUSAN HAYHURST  
First American Woman Graduate in Pharmacy

Carrie Emily Howard, '90; Mrs. M. O. Miner, '90, vice-president of American Pharmaceutical Association in 1895; Jean Gordon, '91, hospital pharmacist in Chicago; Mae Reynolds, '92; Mae Thompson Harders, '93; Clara Sprissler, '93 and Susannah Garrigues Haydock, '93; Florence Yapple, '95, for many years business manager of the *American Journal of Pharmacy*; Sarah Lusan Naly, '95, Chief Pharmacist, Woman's Hospital, Philadelphia; Bertha Leon DeGraffe, '96, later wife of Josiah C. Peacock, '91, a trustee of the College; Katherine Walker Harbord, '00, of Salem, Oregon; Millicent S. Renshaw, '04, later wife of Charles H. LaWall, '93, Professor of Theory and Practice of Pharmacy and Dean of the Faculty.

### Brown

Albert P. Brown, a graduate of the College, a retail druggist of Camden, and prominent in the pharmaceutical ranks of New Jersey, was appointed director of a new optional laboratory course in microscopy established by the Alumni Association in 1882. He continued to be an instructor in this branch until his death in 1892, when he was succeeded by George M. Beringer. In 1894 the College assumed charge of it as the botanical and microscopical laboratory.

### Power

It now became necessary to develop further the practical side of the teaching work in chemistry at the College, and in 1881 the laboratory was put in charge of Frederick Belding Power, a graduate of the Philadelphia College of Pharmacy and of the University of Strasburg, who was given the rank of professor of analytical



FREDERICK B. POWER

chemistry, the first extension in the number of professorships in the school since Procter had been elected to the new chair of pharmacy in 1846. In 1883 Power resigned to take the chair of pharmacy and materia medica in the University of Wisconsin, the beginning of a series of promotions which have led him to a place



of great distinction as a scientist. Upon Power's departure for the West, Trimble, having retired from active connection with the retail drug business, became director of the chemical laboratory and succeeded to the title of professor of analytical chemistry.

### Trimble

Sadtler had brought to the school as his assistant Henry Trimble, a young scientist of Quaker extraction who, after serving an apprenticeship in the drug business, had graduated in 1876 from the Philadelphia College of Pharmacy. For the next two years he was a special student of chemistry at the University of Pennsylvania, covering the time Sadtler was appointed to the chair of chemistry in the



HENRY TRIMBLE

College, and was made the latter's lecture assistant at the University; he was now given a similar position at the College, a connection naturally to his taste by reason of his interest in pharmacy. At the time he and his friend and classmate, C. W. Warrington, took over the retail drug store of their preceptor, Dr. S. Mason McCollin, at Fifth and Callowhill Streets. Trimble succeeded Maisch as the editor of the *American Journal of Pharmacy*; but in 1898 this most promising young scientist, professor of analytical chemistry in the College for fifteen years, succumbed to tuberculosis.

### Erection of Additional Buildings

In the meanwhile, as Joseph P. Remington has pointed out (*Amer. Jour. Phar.*, March, 1893, 116) :

"The Board of Trustees adopted the policy of gradually buying the properties adjoining. In 1874, the properties Nos. 139, 141, 143 North Tenth Street were purchased, which secured to the College the full width of the lots on Tenth Street. In 1880, four properties on Elwyn Street were bought; and, as the laboratories were growing very rapidly, it became necessary, in 1881, to erect a four-story building in the rear on Elwyn Street. The building furnished a chemical laboratory upon the first floor, a pharmaceutical laboratory upon the second floor, a new chemical lecture room upon the third floor, and an alumni room and quiz room upon the fourth floor.

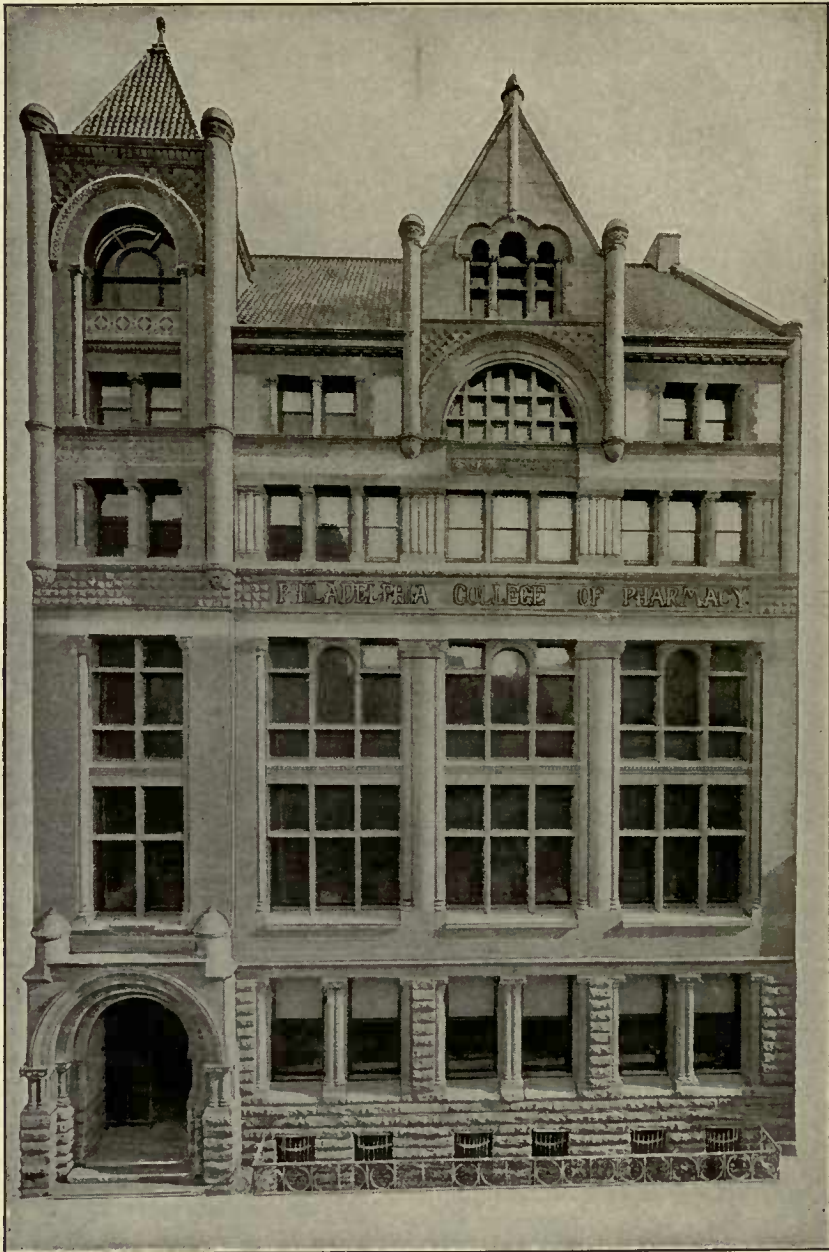
"On May 31, 1889, the Aimwell School property was purchased, and this addition made the total size of the lots required by the College as follows: 70 feet on Tenth Street and 172 feet in depth to Elwyn Street, with the Aimwell School property, which has a frontage on Cherry Street of 54 feet. The necessity of still more room became apparent (the class of 1890 numbering 577); and, after much careful consideration, a Committee was appointed to draw up plans and specifications for a new building on the front, which would adequately house the increasing collections of the museum and library, and also provide increased accommodations for the growing classes. In 1892, the plans and specifications of the Committee were adopted by the College, and the erection of the new front building, which had been talked about so long, was assured.

"In May, 1892, the work began, and it has been continued actively until the present time, February, 1893. The architect selected was John T. Windrim, the builder being Allen B. Rorke. The College Building Committee, which was entrusted with the work of superintending the erection of the buildings, were Howard B. French, Chairman; Charles Bullock, Samuel P. Sadtler, James T. Shinn and Joseph P. Remington."

The ceremonies attendant upon the opening of the new building, which was on February 22, 1893, Washington's Birthday, and practically the seventy-second anniversary of the institution of the College, were of a simple but appropriate character. The work had been so far completed during the summer of 1892, that the courses could proceed in the fall, but the building was not finished until late in the winter. The museum hall on February 22, 1893, was attractively decorated with palms, flowering plants and flags in honor of the occasion. Many members of the College, alumni, representatives of kindred institutions of learning, and guests were present.

Howard B. French, chairman of the building committee, made a brief address of welcome and then introduced Joseph P. Remington, who spoke on the subject of "The New Building of the Philadelphia College of Pharmacy, with a Brief History of the Older Buildings." He said in part, as follows (*Amer. Jour. Phar.*, March, 1893, 117) :

"We have assembled this evening to inspect these buildings and a short description may be of assistance to those who are present. The whole College building, if divided into three nearly equal portions, as they run from Tenth to Elwyn Streets, represent the additions which have been made. The middle portion, which includes the remodeled lecture rooms, is the original building, and it was erected in 1868; the rear building, which includes the laboratories, was built in 1881; and the new front building, just finished, completes the structure. It will be seen that about the same length of time elapsed between the erection of the rear building and the front building, twelve years. The new building is six stories high; the front being built of Seneca red stone and Pompeian brick; large windows are a prominent feature, affording plenty of light for the rooms. The first floor is arranged to give



TENTH STREET BUILDINGS OF THE COLLEGE—1892

accommodations for the library, Actuary's office and Board of Trustees' room. The second and third floors, which are embraced in one large room, are used for the museum and general meeting room. The fourth floor is devoted to providing a room for the Alumni Association and offices for the *American Journal of Pharmacy* and janitor's quarters. The fifth floor will be fitted up with seats and desks for an examination room. The sixth floor is used for storage. The basement is furnished with upright ventilated lockers for the use of the students.



INTERIOR VIEW OF COLLEGE BUILDINGS.

(WITH SOUTHERN WALLS REMOVED.)  
*Basement*.—Students' lockers, Oxy-hydrogen gasometers, Boilers, Engine, Sturtevant system of heating.

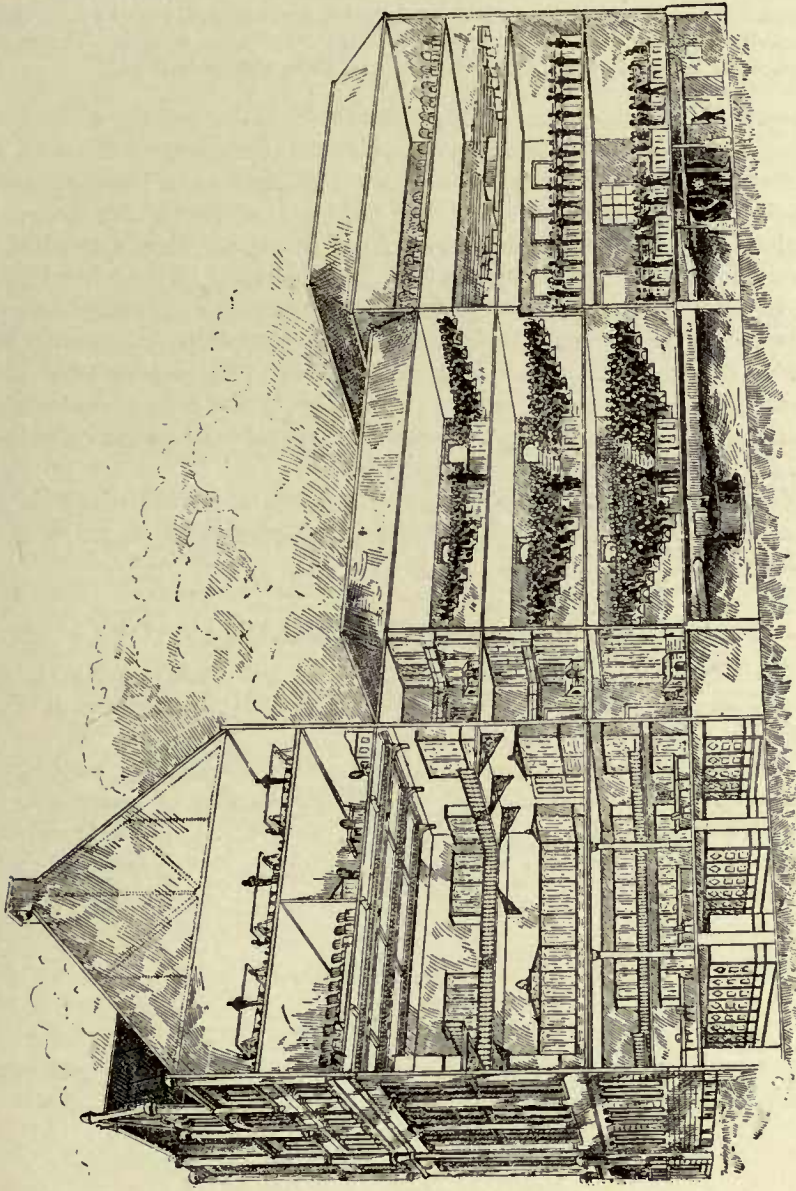
*1st Floor*.—Library, Actuary's office, Prof. Sadler's office, Chemical Lecture Room, Chemical Laboratories.

*2d Floor*.—Museum and Assembly Hall, Prof. Remington's office, Pharmaceutical Lecture Room, Pharmaceutical Laboratories.

*3d Floor*.—Museum Balcony, Prof. Maisch's office, Materia Medica Lecture Room, Assistant Professors' Review and Quiz Room.

*4th Floor*.—Alumni Hall and Meeting Room, American Journal of Pharmacy offices, Janitor's quarters, Microscopical Laboratory.

*5th Floor*.—Examination Room.  
*5th Floor*.—Storage Rooms.



CROSS SECTION OF TENTH STREET BUILDINGS IN 1892

"Each of the lecture rooms has been remodeled, with folding-chairs and table-desks; the seats are arranged in amphitheater-form and they are a great improvement over the old benches. The side yard, which formerly connected the chemical laboratory with the front building, has been converted into an arcade, by enclosing it with a wall and a glass roof. This feature which is believed to be new, furnishes a large, well-heated and lighted space in which the students may congregate before the lectures.

"An additional building to the north of the laboratories provides substantial additions to both chemical and pharmaceutical laboratories; the basement of the new building being used for a boiler room, two large boilers furnish steam for heating the air and driving a large fan, which sends into each room the proper amount of heated air, being conveyed by a shaft from the roof of the building.

"Fire escapes and rapid means of egress from each room, in case of fire, are provided. Every part of the building may be well lighted by daylight, or by both electric light and gas light at night. With these improvements it is believed that the Philadelphia College of Pharmacy has the best equipment for pharmaceutical instruction that is possible. The additions and improvements have progressed as the necessity for them was made clear."

Addresses were made, also, by Dr. Horatio C. Wood, of the University of Pennsylvania, and Jacob H. Redsecker, a well-known pharmacist of Lebanon, Pa.

Mr. French then formally turned over the new building to President Bullock who referred gratefully to the services which had been rendered by Mr. French. He had toiled "persistently and with telling effect" Professor Remington had said earlier in the evening. "Summer and winter, late and early, in health and in sickness," he had had constantly in view the securing of "every advantage that could possibly be gained for the students and members of the College." James T. Shinn, as a member of the building committee, also alluded to the notable labor of Mr. French and embraced the opportunity to present him with a solid silver loving cup in token of appreciation of the zeal and devotion as chairman of the committee in charge of the erection of the new buildings in 1892.

Mr. French expressed his deep appreciation of the gift, after which the audience inspected the buildings and viewed the displays arranged in the different halls. (*Amer. Jour. Phar.*, March, 1893, 113-121; 159-60.)

### Continued Growth of the College

On April 3, 1894, the Martindale Herbarium, a noted and valuable collection of many thousands of plants, was presented to the College by Howard B. French and the Smith, Kline and French Company.

The number of students attending the lectures and graduating, year by year, now underwent a remarkable increase. In 1863 the number of matriculants was 74, and in 1868 was 152; it was 237 in 1872; 370 in 1882, 542 in 1884; and 652 in 1892. The College had become a national institution. Each year nearly all the states of the Union were represented on the student roll, while a goodly number were in attendance from foreign countries. Only one-half of the matriculants were residents of Philadelphia and its immediate vicinity.

### Three Year Courses

The degree of graduate of pharmacy was conferred upon 183 students in 1894, 197 in 1895, and 221 in 1896.



But an important new step was being taken. The standards were to be raised for the classes entering on and after October, 1895. For some time a third year optional course had been offered; this was not compulsory. The time was at hand, said Professor Remington, when two years did not suffice "to adequately present to the mind of the student the vast accumulation of facts which pharmacy and its collateral sciences" had come to embrace. "Not only must more time be taken to absorb the facts, but these, even if perfectly memorized, can never be considered the rise to the value of actual knowledge, unless sufficient time had been given for them to be assimilated and digested." The courses in medicine everywhere were being extended from two to four years; pharmacy owed it to herself "to keep pace with medicine." No other institution engaged in this branch of teaching had taken this radical forward step. In all probability it would have "the effect of cutting down the size of the classes," said Professor Remington. Those, therefore, he remarked "who measure success merely by numbers may have an opportunity of quoting their prophecy that the movement was premature. "But if the size of the class diminishes," he continued, "the College will have the proud satisfaction of knowing that the quality has been improved, and the value of its diploma will be still further enhanced."

Furthermore, it was hoped to confer "a more distinctive and appropriate reward than the title of graduate," which had been written upon the diplomas of the school since the first day, upon those who should "successfully complete the new three year course." The time had come for the College to give an education which should "command respect" and a title which would be "recognized by the public as equivalent to that offered by other professional schools of no higher degree." (Joseph P. Remington in *Amer. Jour. Phar.*, June, 1894, and April and June, 1895.)

Hereafter, graduates, if they had had the "store experience," still necessary as it had been from the beginning, would receive the degree of "Doctor of Pharmacy (P. D.)" Those who had not had this old "apprenticeship" training, who were omitting it because they were intending, perhaps, to study medicine, or enter manufacturing laboratories, for three years attendance upon the courses, would receive the degree of "Pharmaceutical Chemist (P.C.)."

Meanwhile, in September, 1893, the College had lost John M. Maisch, after nearly thirty years of devoted service in the lecture room, the laboratory and the editorial chair of the *American Journal of Pharmacy*. He was to have been present at the important International Congress of Pharmacists which met in Chicago in August, 1893, during the progress of the Columbian Exposition, where Professor Remington was the presiding officer, but Maisch's serious illness prevented. Michael Carteighe, the President of the Pharmaceutical Society of Great Britain, bore to this country the famous Hanbury Gold Medal which had been awarded to Maisch for distinguished services in pharmacognosy but as he could not be present to receive it, Remington was deputized to present it, which he did upon his return to Philadelphia. With his passing, the College and the sciences for which it stands lost a "master mind." (Joseph P. Remington.)

In the annals of pharmacy, said M. I. Wilbert, it would be difficult to find a name "that more nearly represents the ideal of what a pharmacist should strive to be." Better chemists, better botanists there had been in the ranks of pharmacy, but

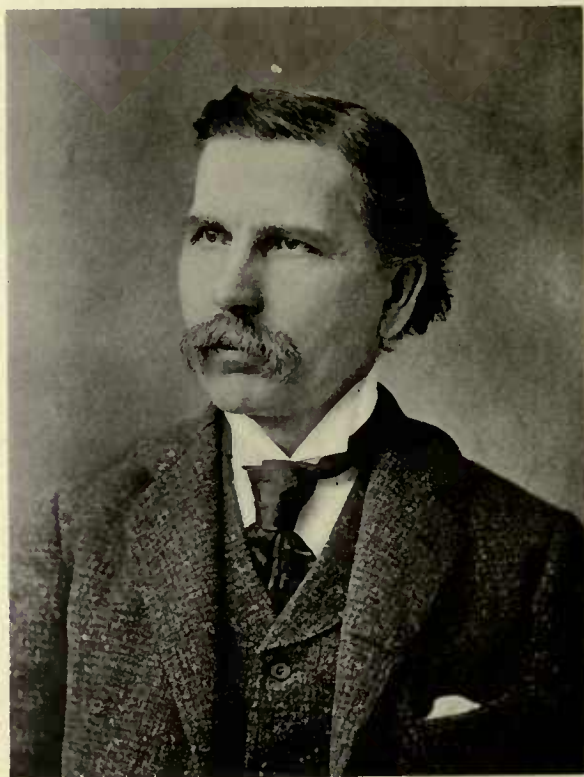


few, indeed, had there been with "a more perfect knowledge of the facts that are needed in connection with a proper understanding of the great variety of substances that come together on the shelves of the pharmacist." (*Amer. Jour. Phar.*, Aug., 1903, 351.)

Remington succeeded Maisch as Dean of the College. And Edson S. Bastin was made professor of materia medica and botany to succeed Maisch.

### **Bastin, Lowe, Kraemer and Moerk**

Edson S. Bastin was a native of Wisconsin. He had had a hard rugged life on a pioneer farm in his youth, which was supplemented by service in the Civil War. Coming back from the battle fields, he graduated at the Chicago University,



EDSON S. BASTIN

and then studied divinity, but soon turned his attention to the natural sciences, which sincerely attracted him. An apothecary for a time in Chicago, his interest and knowledge of botany procured him a place as an instructor on this subject in the University of Chicago of that city. He soon began to lecture on the same subject in the Chicago College of Pharmacy. In 1883 he resigned his post at the University in order that he might give his entire time and attention to the Chicago College of Pharmacy, where he had come to hold the chair of materia medica and botany. Here he established a botanical and microscopical laboratory, issued text

books on botany which gained a wide circulation, and in 1890, transferred his activities to the School of Pharmacy of the Northwestern University, where he again equipped and directed a laboratory for botanical study. He was well and favorably known as a writer, as well as a teacher, when he was called to take Maisch's place in Philadelphia. When he had been asked if he would be willing to establish a laboratory here for practical study—it would be the third to be organized by him—he replied, that he would not be willing to undertake to teach the branches assigned to him in any other way. (Henry Trimble, *Amer. Jour. Phar.*, August, 1897, 385.) In recognition of his distinction, the Board of Trustees tendered him a reception upon his coming to the College in 1893, but he was to serve for only four brief years. His death occurred in 1897.



CLEMENT B. LOWE

In 1897 a further regrouping of the subjects to be taught in the school took place. Botany was separated from the chair of materia medica and the latter, with original title, came to be occupied by Dr. Clement B. Lowe, a graduate of Bucknell University, the Philadelphia College of Pharmacy and Jefferson Medical College, with an extended experience in the drug business in Philadelphia and who for

more than ten years, had been an instructor and quiz master in the College. His advancement was a deserved acknowledgment of worth. Botany was then combined with pharmacognosy for a new chair, to which the Trustees elected Henry Kraemer, a graduate of Girard College, of the Philadelphia College of Pharmacy, the Columbia School of Mines and the University of Marburg in Germany. He



HENRY KRAEMER

also had had practical knowledge of the drug business. For some time he had been holding the chair of botany, pharmacognosy and materia medica in the Northwestern University of Chicago. (*Amer Jour. Phar.*, June, 1897.)

In 1898, upon the demise of Henry Trimble, Henry Kraemer was made the editor of the *American Journal of Pharmacy*, and in 1899 Frank X. Moerk, instructor of chemistry in the College, became professor of analytical chemistry.





FRANK X. MOERK

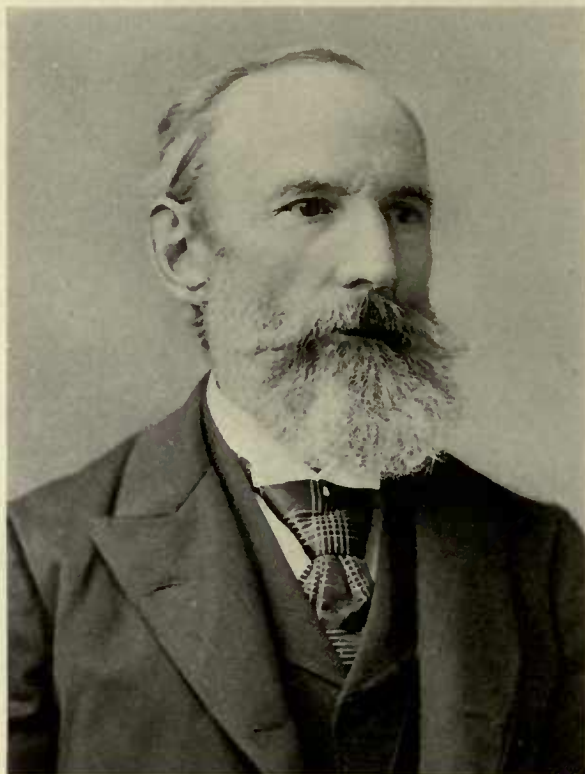
### Seventy-Fifth Anniversary

The College celebrated its Seventy-fifth Anniversary on Wednesday evening April 22, 1896. The museum was converted into a banquet hall. About 150 guests were in attendance.

Addresses followed the dinner, Professor Joseph P. Remington acting as the toast-master. Mayor Charles F. Warwick spoke for "The City of Philadelphia"; President Charles Bullock for "The Dear Old College"; Dr. William Pepper for "The University of Pennsylvania," of which he had so long been provost; Colonel A. K. McClure for "the Press of Philadelphia"; Dr. Horatio C. Wood for "The Medical Profession"; Dean J. W. Holland for "The Jefferson Medical College"; Dr. Edward Brooks, Superintendent of the Philadelphia Public Schools on "Technical Education"; George S. Graham, District Attorney, on "Legislative Subjects"; and Dr. Adolph W. Miller for "The Alumni Association."

**Bullock, Jenks and French**

Charles Ellis was succeeded in the presidency of the College in 1869 by Dillwyn Parrish, who retired in 1885 because of advancing years, and he was succeeded by Charles Bullock, an important and enlightened figure in the drug trade of the city, who, in his name and person, formed a fitting link with the past. He died after fifteen years of splendid service, his administration of the College being marked by much physical and educational progress. In this service he was ably supported by T. Morris Perot, Chairman of the Board of Trustees.

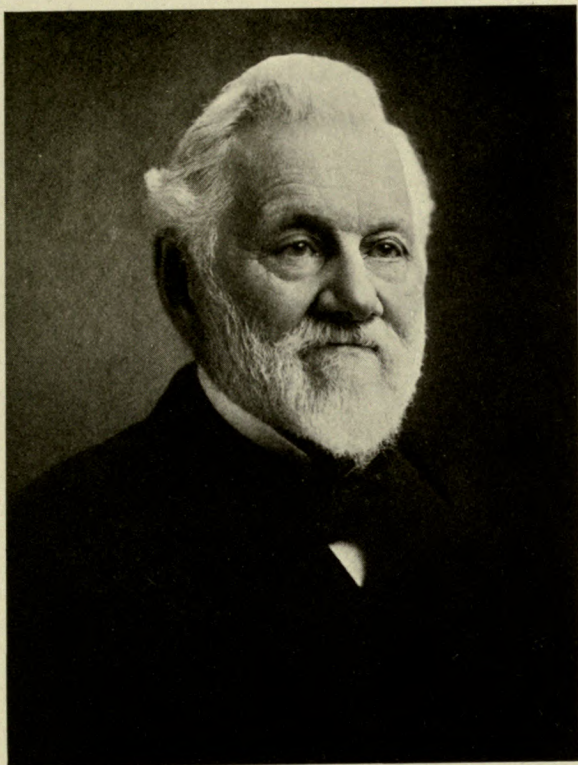


CHARLES BULLOCK

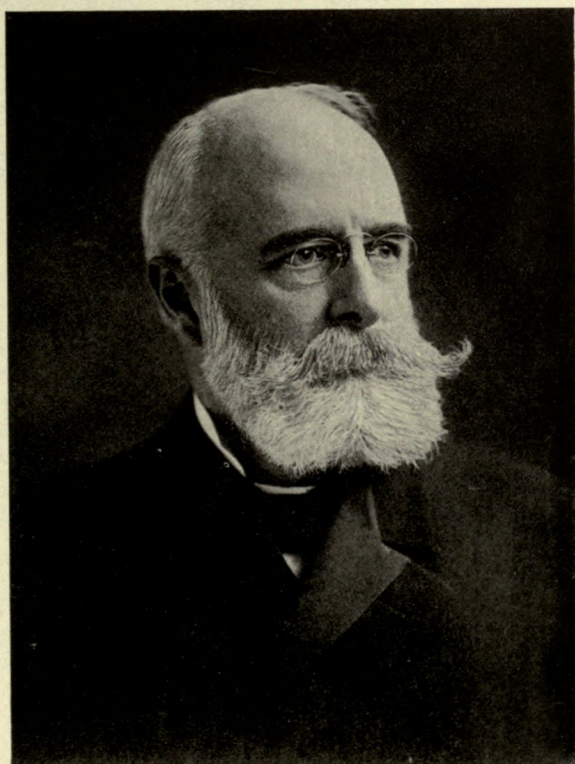
The death of President Bullock resulted in the election of First Vice-President William J. Jenks as President "in recognition of his many years of faithful service," but he resigned almost immediately, stating that he "highly appreciated the honor, but increasing years admonished that the duties of the office could be better performed by a younger person."

Howard B. French was then elected to the presidency. He had long been indefatigable in the service of the College. It was largely through his devotion and industry that the new building had been completed and made ready for use. In addition, his gifts to the library of the College were many and constant reminders of his interest in the institution.





WILLIAM J. JENKS



HOWARD B. FRENCH



**T. Morris Perot**

T. Morris Perot (1828-1902) was born in Philadelphia. Son of Francis and Elizabeth Morris Perot. Ancestors on the Perot branch came from France and settled in New Rochelle, N. Y. (1685), and on the Morris branch, from England, with William Penn in the good ship Welcome (1682). Entered wholesale drug house of Jenks and Ogden, Third Street below Race (1844), then went to Charles Ellis and Co., Chestnut Street above Second, and for a time was foreman of their laboratory. Graduated from the College in 1849, and in 1851 went into



T. MORRIS PEROT

the wholesale drug business on Fourth Street above Market, and later, on Market Street above Sixth; in 1853 he associated with himself Edward H. Ogden, as T. Morris Perot and Co. They retired from business in 1869, and went into business with Mr. Perot's father in the malting establishment founded by Anthony Morris in 1687, the oldest commercial house in the United States. Became a member of the College in 1856. Was elected a trustee of the College in 1856, and chairman of the Board of Trustees (1882-1896, and 1897-1901). Joined the American Pharmaceutical Association in 1857. Actively identified with many public bodies and educational institutions, and rendered most efficient service by his sound business judgment and unusual executive ability. He maintained his interest in the College until his death; Charles Marshall, the first president of the College, was his great grandfather.

**Evolution of State Pharmaceutical Associations**

The movement for organization on the part of pharmacists had begun in cities with Philadelphia leading the way. The incorporated and unincorporated bodies formed the national association in 1852. Now state associations were beginning to

be organized. It was about 1870 that this movement started in some of the Western and Southern states. In 1877 such associations were already in existence in California, Connecticut, Georgia, Kansas, Maine, Michigan, Mississippi, New Hampshire, New Jersey, Rhode Island, South Carolina, Tennessee and Vermont, thirteen in all. The *American Journal of Pharmacy* in Philadelphia urged that the work should proceed in the more populous states. (*Amer. Jour. Phar.* May and June, 1877.)



JOSEPH L. LEMBERGER

Joseph L. Lemberger (1834- ), one of the founders of the Pennsylvania Pharmaceutical Association in 1878 and its treasurer for thirty-three years; born in Myerstown, Lebanon County, Pa. Early education in public school. Apprenticed to Dr. Joseph P. Fitler, Philadelphia. Graduated from the College (1854). Entered retail business in Lebanon (1857). Saw service in Civil War (1862-1863). Was made honorary master in pharmacy by alma mater in 1889, elected a trustee, and second vice-president (1910- ). Elected member of American Pharmaceutical Association (1858), second vice-president (1879), and president (1905). Member of Board of Foreign Missions of the Reformed Church, and of Board of Trustees of State Asylum for Chronic Insane at Wernersville, Pa., (and secretary from 1892) and of the Board of Managers of Pennsylvania Chautauqua. Has contributed many valuable articles to pharmaceutical organizations and periodicals and is an able worker for the upbuilding of his profession.

### Pennsylvania Pharmaceutical Association

This was the signal for action in Pennsylvania. A call for a meeting in Harrisburg on February 26, 1878. Representatives were present from Philadelphia, Lancaster, Reading, Pottsville, Columbia, Chambersburg, Carlisle, Shippensburg and Harrisburg. The meeting was organized by electing its president Charles A. Heinitsh, of Lancaster, a widely known and a universally esteemed pharmacist who had an apothecary shop in Lancaster which had been established in 1782 by his grandfather. Dr. J. A. Miller, of Harrisburg, was chosen secretary, and Joseph L. Lemberger, of Lebanon, treasurer. A constitution was adopted. The aim of the association would be "to unite the educated and reputable pharmacutists of the State, to improve the science and art of pharmacy and restrict the dispensing and sale of medicines to regularly educated druggists and apothecaries." The delegates adjourned to meet in Reading in the following June. (*Amer. Jour. Phar.*, March, 1878.)

Many druggists assembled in Reading at that time; new members were elected. They were welcomed by the Mayor of the City. Plans were laid for obtaining a charter, delegates were named to attend the next meeting of the American Pharmaceutical Association; needed state legislation and some scientific subjects were discussed. (*Ibid.*, July, 1878.) Professor Remington, Professor Maisch, and the Philadelphia College of Pharmacy as a body, gave a strong and intelligent support and guidance to the organization, which has continued to meet year after year, with great advantage to pharmacy in Pennsylvania.

### Progress of Pharmaceutical Legislation

The progress of pharmaceutical legislation in the states, aided by the state associations, was now rapid. Beginning with Rhode Island and a few cities, including Philadelphia, the establishment of a system of registering, examining and granting certificates to pharmacists and their assistants by official boards spread over the country.

### Pharmacy Law of Pennsylvania

A state pharmacy law was passed by the Legislature of Pennsylvania and signed by Governor Beaver in 1887. The work was to proceed on the lines laid down for the City of Philadelphia in 1872.

The board of pharmacy was to consist of five members to be appointed by the governor. They were to register all retail druggists and apothecaries already in business; examine all who should wish hereafter to adopt this responsible pursuit. If they should pass their examination, they would be given certificates attesting to their competency. The rules as to qualified assistants and the adulteration of drugs, were similar to those which had been in force for fifteen years in Philadelphia.

A provision was included in the law concerning the sale of poisons, bringing the State abreast of the practice of pharmacy elsewhere. The seller must register his sales, mark his boxes and vials with appropriate labels, pointing out the dangerous character of the contents, and satisfy himself as to the responsibility of the purchaser and that what was sold would be applied to a proper use. The usual exceptions were made for physicians and dealers in proprietary medicines.



So much was in regular course. But the law contained other provisions which aroused the antipathy of the College and of pharmacists generally. In the first place, the diploma of neither the College in Philadelphia, nor of any other institution engaged in pharmaceutical education, was recognized as an equivalent of or in any way bearing on the certificate of the State Board. A graduate of any "accredited medical college," in the practice of medicine for at least three years subsequent to his graduation, might be registered and receive the certificate of the board as a pharmacist qualified "to conduct and carry on the retail drug or apothecary business."



WILLIAM L. CLIFFE

William L. Cliffe (1865- ), one of the foremost figures of Pennsylvania Pharmacy, especially in matters of legislation and education, received his early education in the public schools and was apprenticed with F. H. Basset, Frankford, Philadelphia (1880). Graduated from the College in 1884, the subject of his thesis being "Iris Versicolor." Opened a retail drug store at Kensington Avenue and Somerset Street (1884). Active in Alumni Association, becoming, successively, corresponding secretary (1891), second vice-president (1892), first vice-president (1893), and president (1894), and treasurer (1896-1900). President of Pennsylvania Pharmaceutical Association (1901-1902), and several years chairman of the committee on legislation; also member of American Pharmaceutical Association (1898) and first vice-president (1901-1902). Member of Pennsylvania Board of Pharmacy (1900-1906). Member of the Board of Trustees of the College (since 1898), and especially active on its committee of instruction, and of education, rendering most valuable service.

cary business as proprietor or manager thereof" and without examination. This was held by the College and other pharmaceutical bodies to be outrageous and the repeal of such unreasonable legislation, which was contrary to the public interest and discriminated in an insolent way against pharmaceutical schools, was demanded at once. (Act of May 24, 1887; *Amer. Jour. Phar.*, June, 1887, July, 1887 and June, 1892.) But through the political influence of the country doctors in the state legislature, nothing came of the agitation until 1905, when the law was amended to require that *every* person applying to the State Board for examination for a certificate to carry on a retail drug business should, after January 1, 1906, be a graduate of "some reputable and properly chartered college of pharmacy."

### Prerequisite Laws and Pharmaceutical Licensure

The so-called "prerequisite laws," which require graduation in pharmacy as a prerequisite to examination and registration by State Boards of Pharmacy as a pharmacist, thus giving to colleges of pharmacy their rightful status as educational institutions and raising the practice of pharmacy to a distinctly higher plane, whatever the standards of the State Boards might otherwise be, were but slowly enacted.

The first State to enact a prerequisite law was New York in 1905, followed by Pennsylvania one year later; the other States remained inactive until 1915, when North Dakota and Washington enacted prerequisite laws. Illinois and Ohio followed in 1917. Up to January 1, 1921, there were prerequisite laws in only seventeen States\* out of forty-eight, though the subject has been under debate in others—in some of these such laws have since been adopted.

Reciprocity in pharmaceutical licensure is in effect between forty-three states and the District of Columbia.\*\* In the advancements of the legal standards of pharmacy, the National Associations of Boards of Pharmacy (organized in 1904) has probably contributed more than any other single agency. In later years, it has had the cooperation of the American Conference of Pharmaceutical Faculties (organized in 1900), which has done much to aid the National Association of

\* The seventeen States, including those mentioned above, in which prerequisite legislation has been enacted up to January 1, 1921, are as follows:

New York	Kentucky	Rhode Island
Pennsylvania	Maryland	South Carolina
Illinois	Minnesota	Virginia
Ohio	New Jersey	Washington
Indiana	North Dakota	Mississippi
Iowa	Oklahoma	

Oregon has a requirement for one year college work, effective 1921, and graduation effective 1922.

The five States which have reported that prerequisite legislation has been passed so far this year are West Virginia, by ruling of the Board, North Carolina, Kansas, Nebraska and Texas. Prerequisite legislation is pending in several other States where legislatures are still in session. Alabama, Michigan, Georgia, and a number of other States where conditions were not favorable this year will seek prerequisite legislation in 1923.

\*\* Active member States between which reciprocity is in force: Alabama, Arizona, Arkansas, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin.

Boards of Pharmacy in the work for the legal betterment of the practice of pharmacy. Pharmaceutical education and legislation must go hand in hand, to the end that the interests of pharmaceutical education may be promoted, pharmaceutical legislation made more effective, and public service improved. ("The Status of Prerequisite Laws and Pharmaceutical Licensure," J. W. England, *Amer. Jour. Phar.*, 1921, 539.)

### U. S. Pharmacopœias of 1880 and Later

In the work of revising the Pharmacopœia every ten years the Philadelphia College of Pharmacy continued to play a leading rôle. In 1830 the work was, for all practical purposes, as we have seen, the sole production of Wood and Bache—they constituted the whole Faculty of the College—and in each decennial enlargement and improvement of the work, those who have had to do with the teaching and practice of pharmacy in Philadelphia have had a dominant part, justified by their interest and intimate knowledge of the subject.

In 1890 the Committee of Revision made an important decision. It would secure the copyright of the book for itself. It would be printed at the risk of the committee, and it would be distributed through selling agents. Then from the income, small sums could be paid to those whom it might be necessary to employ and honoraria could be distributed among the members of the committee as a slight return for their services in preparing the descriptions and tests of the book. That this might be done with more propriety, the United States Pharmacopœial Convention, as it had come to be called, was incorporated. A constitution and by-laws were adopted. The business affairs of the corporation would be administered by a board of trustees.

Charles Rice of the New York College of Pharmacy, of Austrian birth, a resident of this country since 1862, a learned pharmacist and a forceful executive, was chairman of the Committee of Revision in 1880, when radical changes were made in the style and character of the book. He served in the same position in 1890, and was continued in the post for the work in 1900, but illness interrupted and death ended his activities. (*Amer. Jour. Phar.*, June, 1901.)

The burden of the Eighth Revision then fell upon the shoulders of Professor Joseph P. Remington, who, as first vice-chairman since 1880, had hitherto borne no inconsiderable part in the direction of the work. Under his guidance, the book was now gone over again in the most careful manner. The revision was "the most thorough that had ever been attempted." It was extended and improved in so many ways that the publication was necessarily delayed. Indeed, it was not ready for use until 1905. Professor Remington was continued in the chairmanship in 1910, and upon his death in 1918, Professor Charles H. LaWall, his friend and assistant in the College for so many years, succeeded to the position.

When the Convention met in Washington in 1920 and a new Committee of Revision was appointed to take charge of the Tenth Decennial Revision, Professor E. Fullerton Cook of the College, who, in association with Professor Remington had rendered much useful service in connection with the editions of 1900 and 1910, was unanimously elected chairman, and he has now the responsibility of directing the work in progress.



To an increasing degree pharmacy rather than medicine was giving form to the Pharmacopœia. Pharmacists began in 1860 to dominate the Committee of Revision, because the work of review was pharmaceutical rather than therapeutical, and this condition still obtains. The College was brought into prominence in this work, not only through Remington having the chairmanship, but through the number of graduates and students of the school who were his associates. In 1910 no less than seventeen members of the committee had at some time attended courses in the school (J. P. Remington, *Bulletin of Phil. Coll. Phar.*, Feb., 1911), and twelve out of the thirty-three pharmacists on the Committee of Revision of 1920, including the chairman, are alumni of the institution. (*Amer. Jour. Phar.*, April, 1921.)

### Honors to Leaders of American Pharmacy

In the midst of all the commercial influences that have pressed in upon the profession of pharmacy in recent years, pharmacists have not been unmindful of the gratitude they owe their leaders. Charles Rice, who had done so much for pharmacy, and with inadequate reward, died on May 13, 1901, and was buried in Woodlawn Cemetery in New York. Funds were collected and his resting place was marked, in 1903, by a massive granite block upon which was inscribed the words, "Erected by his friends in grateful appreciation of his eminent services to Medicine and Pharmacy."

A movement was started at the meeting of the American Pharmaceutical Association at Put-in-Bay in 1899 to do suitable honor to William Procter, Jr., whom many called, "The Father of American Pharmacy." The suggestion was made by Albert E. Ebert, an old student of Procter at the College, who had later graduated as a chemist at the University of Munich, and now, for many years, had held a prominent place in pharmaceutical ranks in Chicago.

Professor Remington, also a student of Procter, and his successor in the Philadelphia College of Pharmacy, reviewed Procter's life in a memoir, prepared for and read at the meeting of the Association held in Richmond in 1900. "Twenty-six years have elapsed since Professor Procter passed away. Pharmacy has witnessed many changes in the last quarter of a century, but his work still remains. Methodical and careful in his habits, far-seeing, equipped by his experience in writing and teaching with the every-day needs of the pharmacist, no wonder need be expressed that time has made so few ravages and very little of his work can be said now to be obsolete." (*Amer. Jour. Phar.*, June, 1900.)

The subject was commended to the fiftieth anniversary meeting of the American Pharmaceutical Association, which was to be held in Philadelphia in 1902.

Editor Henry Kraemer opened the columns of the *American Journal of Pharmacy* to the subject of a memorial to Procter, which was discussed by many correspondents.

American pharmacy owed a debt of gratitude to this tireless research worker, in the science and art of pharmacy, whose findings were of fundamental importance and gave to American pharmacy not only national, but international prestige. He was truly the "Father of American Pharmacy." At the annual meeting of the American Pharmaceutical Association in 1902, it was resolved to solicit subscrip-

tions for a memorial monument to William Procter, Jr., to be erected on the Smithsonian Grounds at Washington, D. C. A committee was appointed of which John F. Hancock, former president of the Association and a personal friend of William Procter, Jr., was made chairman, and under his splendid leadership subscriptions were solicited, and the fund now amounts to more than \$10,000.

### Responsibility for Public Health

The dawn of the twentieth century brought an awakening social sense. It was borne in upon us on all sides that there was public responsibility for community conduct. Evils done to society must be checked by legal action. The distribution of habit-forming drugs, for the control of which there had been no regulatory provisions, other than the personal judgment and conscientious sense of the seller, must be put under restraint. The sale of alcohol must be controlled. Here were two classes of subjects calling for the intervention of Government. Good order, the best interests of society, required that the drug store should not be an exchange for the distribution of intoxicants and narcotics. Codes of ethics in the profession were not adequate. Here was found a fruitful field for state enactments to which the pharmacist would be obliged to conform.

More impended in the enactment of food and drugs laws. A self-evident necessity, so we must think today, and yet it was only now that the Government was held to have a duty in regard to the purity and quality of the food and drugs of the general public. It may have been that cupidity was increasing with the progress of invention, the accumulation of capital and the growth of business, that less honor was observable in trade. It was certain, however, that the people were aroused as to the wrong, which was bound up with deceit and fraud in the sale of articles so vitally affecting the public welfare and the social good. The doctrine that man was his brother's keeper had spread far and wide; especially with reference to the defective, the ignorant, the down-trodden, the immigrant, and the ill-conditioned on whatever account; but the practical application of it, as related to the protection of the public health, had not yet been put into effect legally.

Some states, such as Pennsylvania, in 1895 and later, had entered this field with laws which for the most part were impracticable and inoperative. For a long time an agitation had been in progress looking to the enactment of a Federal food and drugs law. If correct standards could be established through Congress for the nation to cover interstate commerce, legislation in the separate states to cover intrastate commerce could follow and soon the whole situation could be brought under proper control. Concurrently, a certain number of writers in influential periodicals began an assault upon the nostrum evil, directing public attention to the harmful ingredients in patent medicines upon which honorable pharmacy had been waging war ever since the day the College was founded in Philadelphia. Some periodicals were freeing themselves from the corrupting influence of the advertisers of proprietary remedies. The public was coming to understand the danger in the unregulated traffic of these products. The recently organized Council on Pharmacy and Chemistry of the American Medical Association was developing an effective propaganda against the spread of quackery and hurtful self-medication.

### Enactment of the Federal Food and Drugs Law

In June, 1906, "an act for preventing the manufacture, sale or transportation of adulterated or misbranded or poisonous or deleterious foods, drugs, medicines and liquors, and for regulating traffic herein, and for other purposes," passed Congress and became effective on January 1, 1907. The administration of the law



HARVEY W. WILEY

Harvey W. Wiley was born (1844) in Kent, Ind. Son of Preston P. and Lucinda Weir. A.B. (Hanover, Ind.) College (1867), A.M. (1870); M.D., Indiana Medical College (1871); B.S., Harvard (1873); (Hon.Ph.D., Hanover; 1876, LL.D., 1898, LL.D., U. of Vt., 1911; D.Sc., Lafayette, 1912). Professor of Latin and Greek, Butler College, Indianapolis (1868-70); teacher of science in high school, Indianapolis (1871); professor of chemistry, Butler University (1874); professor of chemistry, Purdue University, and state chemist of Indiana (1874-1883); chief chemist, U. S. Department of Agriculture (1883-1912); professor of agricultural chemistry, George Washington University (1889- ). President of U. S. Pharmacopœial Convention of 1910-1920; member of American Pharmaceutical Association and of Philadelphia College of Pharmacy; member, also, of many national and international scientific bodies. Contributing editor of *Good Housekeeping Magazine* (1912- ) and author of books on chemistry and allied science in relation to foods and their adulterations; also, many U. S. government bulletins and scientific papers embodying the results of original investigations. To Dr. Wiley, probably more than any other man, is due the development of public opinion which resulted in the enactment by Congress of the Federal Food and Drugs Act of 1906, a measure which has proven to be of incalculable value in bettering the purity and quality of food and drugs in this country.



was given to the Department of Agriculture, of which Dr. Harvey W. Wiley was chief chemist. Henceforth, drugs must be pure—they must measure up to the standards of identity, purity, quality and strength laid down for them in the United States Pharmacopœia or the National Formulary. If they were adulterated, a plain statement of fact must accompany such drugs for the information of the purchaser—they must be sold for what they were.

Moreover, no drug might be misbranded; one thing could not be sold for another; imitations could not be sold for what was genuine. Nor could any drug be misleadingly labeled in other respects. It might not bear "any statement, design, or device regarding the ingredients or substances contained therein, which should be false or misleading in any particular," nor should it be "falsely branded as to the state, territory or country in which is manufactured or produced." If it should contain alcohol, opium, cocaine, or other substances named in the law, and which were calculated to exert a deleterious influence, the quantity of these ingredients must be stated on the outside of the package.

### Enactment of State Food and Drugs Laws

Within one year, no less than seventeen states had enacted laws patterned after the Federal food and drugs law of 1906. Not only could adulterated food and drugs not be trafficked—in, between and among states—they could not be made and sold within the boundaries of individual states. Before June, 1907, Georgia, Vermont, West Virginia, Kansas, North Carolina, South Carolina, Wyoming, Oregon, California, Washington, Missouri, Colorado, New Hampshire, South Dakota, North Dakota, Texas, Indiana and Tennessee had followed the Federal example and had established standards for food and drugs for the protection of their population. Other states soon engaged themselves with the subject. Pennsylvania revised its laws of 1895 and later in 1909, and as a result of widespread and sustained effort the whole internal commerce in drugs in this country was brought under the surveillance of scientific men.

### Administration of the Federal Food and Drugs Law

At the head of the Bureau of Chemistry of the Department of Agriculture, to which department the administration of the Federal food and drugs law had been committed by Congress, stood Dr. Harvey W. Wiley. For years he had been combating entrenched fraud bound-up with the food and drug trades and had headed the movement which finally culminated in the enactment of the law, first as a citizen and later as an officer of the Federal government in a position to speak with authority.

Dr. Wiley now gave his care to the enforcement of the new law, and it is to the everlasting credit of the retail, wholesale and manufacturing drug trade of the country that he received their most hearty co-operation and support in his efforts to purge the trade of its abuses.

There had been no Federal law on the subject of drugs since that of 1848. Examiners still performed their functions under the law, year by year, as the ships came in with foreign drugs. Now there were some to say that this old enactment



MAHLON N. KLINE

Mahlon N. Kline (1846-1909). Born near Hamburg, Berks County, Pa. Educated in the public schools. Entered employ of Smith and Shoemaker, wholesale druggists, 243 North Third Street, Philadelphia (1865), and exhibited a remarkable aptitude for salesmanship; three years later was admitted into firm, Mr. Shoemaker retiring and the firm name being changed to Smith, Kline & Co. In 1887 the business was removed to 429 Arch Street; a year later the firm name was changed to Smith and Kline Co. In 1891 Harry B. French entered the firm, when it was re-organized as Smith, Kline and French Co. Rapidly became one of the foremost figures in wholesale drug circles, and in 1885 was elected president of the National Wholesale Druggist's Association, and for many years was chairman of some of its most important committees. Was president of the Philadelphia Drug Exchange (1884), and a director. Was one of the founders of the Trade's League (afterwards the Philadelphia Chamber of Commerce). Became a member of the College (1886), then trustee (1897), and chairman of the Board of Trustees (1901). Was elected first vice-president of the College (1905). Was liberal in contributing to the support of the College, his most notable contribution being as a member of the Smith, Kline and French Co., in conjunction with Howard B. French, the purchase and donation of the famous Martindale Herbarium in 1894. He was a staunch advocate of the Federal food and drugs act of 1906; Dr. Harvey W. Wiley has said that he owed more to Mr. Kline in the framing of the regulations of the law than to anyone else. Was closely identified with civic, philanthropic and religious work, and was a reformer in municipal politics. No higher tribute can be paid to Mahlon N. Kline than to say that he was a strong, broad gauged Christian gentleman who practiced what he preached. He loved work and rejoiced in accomplishment. He was enthusiastic in all that he did and strove to make each day's work better than that of the day before. His passing was a national loss to pharmacy.

was superfluous. It was no longer important what might be received from other countries if its sale was regulated after its receipt. Indeed it would be to the advantage of manufacturers if it should be made lawful to import crude drugs below official strength, provided the importer gave an adequate guaranty that the goods would be used for many manufacturing purposes only. No interest would now be endangered, it was urged, if this form of Federal activity was abolished and the restrictive power of the government to interstate trade through the agencies at Washington was applied. (*Amer. Jour. Phar.*, Jan., 1909.)

But Attorney-General Bonaparte stated that, in his opinion, the Federal Drug Import Law of 1848 was still in full force and effect and did not antagonize the Federal Food and Drugs Law of 1906 in any way, and this opinion has not been questioned legally.

The recognition by Congress of the National Formulary in naming it as a legal standard with the Pharmacopœia, under the Federal Food and Drugs law, made necessary the improvement of that work to meet new conditions. The book had been a development of the New York and Brooklyn Formulary which Dr. Charles Rice and other New York pharmaceutical writers and investigators had made successful. In 1885 Dr. Rice proposed to turn it over to the American Pharmaceutical Association. When the gift was accepted, it became the National Formulary, the first edition of which was issued in 1888. However valuable it might have been, now, since Rice's death, it clearly needed revision to fit it as a legal standard. The subject was taken up by the American Pharmaceutical Association, which appointed a committee, which promptly brought the Formulary into full conformity with the Pharmacopœia as a legal standard.

### Narcotic Laws

The Federal Food and Drugs law of 1906 was followed by another important enactment bearing upon the drug trade. In December, 1914, Congress passed the so-called Harrison Narcotic Act, which put necessary restrictions upon the importation and interstate commerce of opium, coca and their salts, derivatives or preparations, obliging all importers, manufacturers and dealers to register with the Collector of Internal Revenue of the district in which he purposes carrying on his trade, and to sell or distribute under certain specified conditions only. (U. S. Statutes at Large, Vol. 38, 785-90.) The Federal law was soon followed by the enactment of many state laws on the same subject covering interstate commerce.

### First Commercial Training in Pharmacy

The Philadelphia College kept abreast of the changing age. In 1899 an optional course in commercial training—later made obligatory—with the object of teaching students method of bookkeeping and commercial practice in use in drug stores—the first of its kind in the country—was introduced by Professor Remington and later put in charge of Frank Gibbs Ryan, who had been Remington's assistant for a number of years as an instructor in pharmacy, and who subsequently



associated himself with Parke, Davis and Co., one of the leading manufacturing pharmaceutical houses of the United States, with numerous branches in foreign countries, of which corporation he became the president. (*Amer. Jour. Phar.*, June, 1920.)

Charles H. LaWall, who became an instructor of pharmacy in 1900, was elected associate professor of pharmacy in 1906. His interest in the subject of food and drug legislation, his experience as a chemist of the Pure Food Bureau of the Pennsylvania State Department of Agriculture, and of the Federal Government in the examination of drugs coming into the port of Philadelphia, put the College in active relationship with such service.

### Food and Drugs Course (1907)

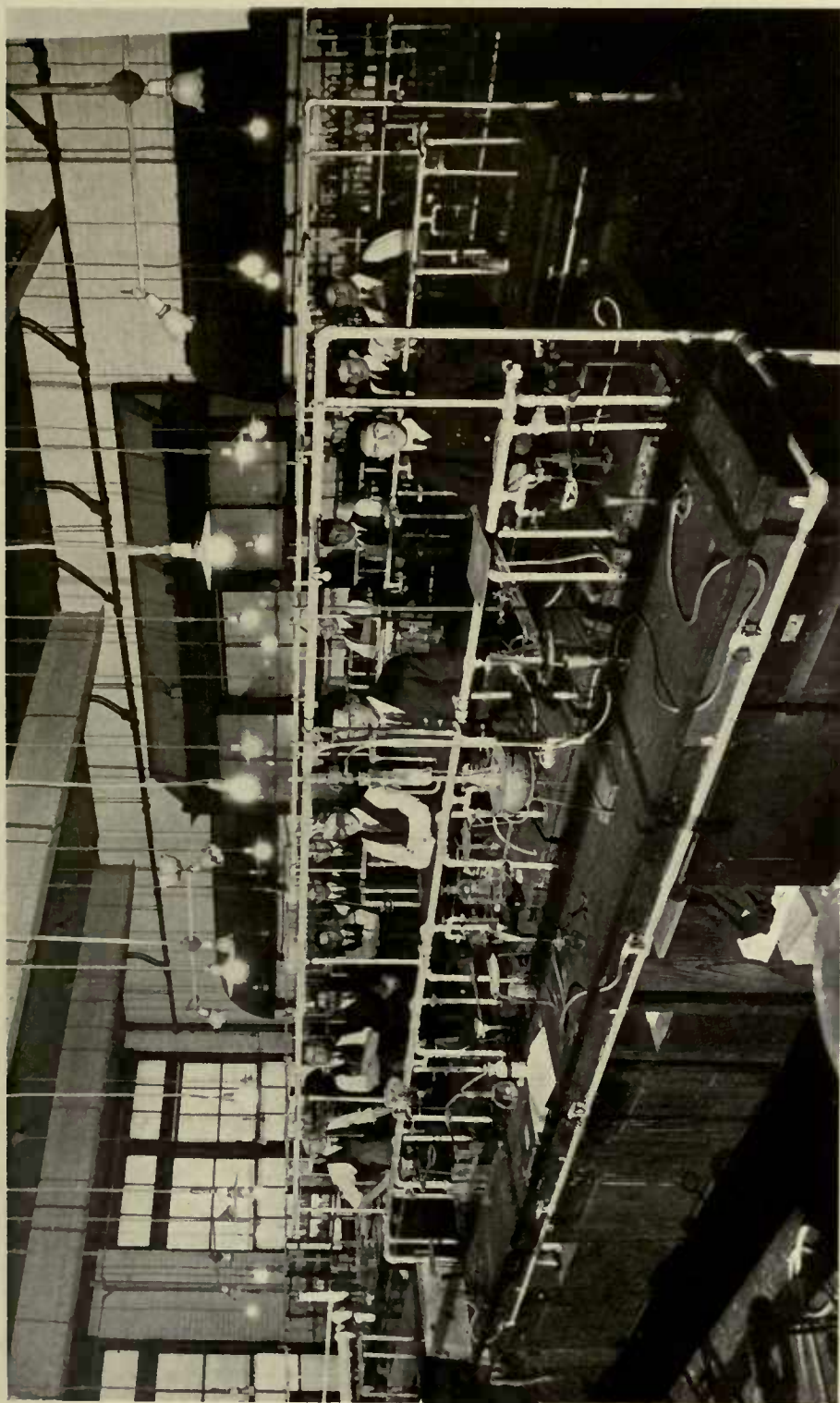
The time had now come when steps should be taken "to establish a course to educate students in such studies as are adapted to qualify them for service under the Federal Food and Drugs Act of June 30, 1906," and, of course, including State acts



ANNEX BUILDING OF THE COLLEGE—1907

to be enacted later; and the details of the course were agreed upon, the title to be "The Food and Drugs Course of the Philadelphia College of Pharmacy."

On December 2, 1907, it was decided to name the new laboratory building, "The Philadelphia College of Pharmacy Annex." The Aimwell School property on Cherry Street, which the College had purchased in 1889, was now to be torn



TECHNICAL, PHARMACEUTICAL AND ADVANCED CHEMICAL LABORATORY (ANNEX BUILDING)

away to make room for the new Food and Drug Laboratory for the use of those wishing to enter this field of work. The late Mahlon N. Kline, Chairman of the Board of Trustees, and Joseph P. Remington secured contributions of some thousands of dollars for the purpose of building the laboratory, the tenants were notified to vacate the premises, and the new building and fixtures costing \$22,296 was connected with the old building and opened for use.

### Faculty Changes

Freeman P. Stroup, for a number of years an instructor in chemistry, became an associate professor of chemistry in 1910 and a full professor in 1916. Dr. John A. Roddy was elected professor of bacteriology and hygiene in 1914. E. Fullerton Cook who, like Charles H. LaWall, had enjoyed unusual opportunities for the development of skill and the acquisition of specialized knowledge through his close and continued contact with Professor Remington, and who since 1900 had been assistant director of the pharmaceutical laboratory, was advanced in 1915 to an associate professorship of operative pharmacy and in 1918 to full professorship.

In the autumn of 1917, Professor Henry Kraemer was elected to a responsible position in the Department of Pharmacy of the University of Michigan, whereupon Heber W. Youngken, who had been serving as Kraemer's associate, was advanced to the chair of botany and pharmacognosy. The editorship of the *American Journal of Pharmacy* passed to George M. Beringer, long and actively identified with the interests of the College. Professor Roddy's absence in government service during the World War led to Louis Gershenfeld taking over the courses in bacteriology, and to his, later, being made a full professor of the branch, the position he now holds.

### Merging of the Department of Pharmacy and Chemistry of the Medico-Chirurgical College

In 1916 when the Medico-Chirurgical College of Philadelphia and the University of Pennsylvania were consolidated, the University remained true to the policy which it had adopted in 1821, when, after the rather unfortunate experiment, made upon the advice of Dr. John Redman Coxe, it had left the field of pharmaceutical education to the Philadelphia College of Pharmacy. The Medico-Chirurgical foundation included a well organized and successful department of pharmacy and chemistry, regarded in many ways as the strongest department of that institution. Provost Smith and President French entered into negotiations for the merger, which was effected, and with the transfer of a number of teachers. Professor Julius W. Sturmer who had come from Purdue University in 1912 to be the dean of the school, was added to the Faculty of the College as professor of pharmaceutical chemistry. Others were assigned to professorships and lectureships. The Philadelphia College of Pharmacy and the "Medico Chi" alumni came together in a hearty union, merging their interests and traditions as happily as this result had been accomplished in the Faculty.



### Text Books Issued by the Faculty

The output of text books and other scientific literature by the members of the Faculty of the College during the past fifty years continued to attest to their vitality as workers in their respective fields. Maisch issued his first manual on "Organic Materia Medica," in 1881, and, with Alfred Stille, Professor of the Theory and Practice of Medicine and of Clinical Medicine of the University of Pennsylvania, first issued "The National Dispensatory," in 1879, which passed through a number of editions, and is now "The National Standard Dispensatory."

Remington in 1885 issued his highly important work called "The Practice of Pharmacy." The work was fully illustrated and by its clear explanations of the manipulative processes necessary in a drug store it soon won for itself an authoritative position in the pharmaceutical world. It was destined to pass through successive editions and it has long been a standard work. It contains "a larger amount of general information which the pharmacist is likely to need in the course of his ordinary routine business than any other book on pharmacy which has ever been published." No other work of its kind has had so large a sale, a fact which must be taken to be a measure of its general merit and usefulness. (*Amer. Jour. Phar.*, Jan., 1886, and Feb., 1906.) Nothing which has come from the press, except the United States Dispensatory of Wood and Bache, has been accounted so nearly indispensable to the working pharmacist.

Sadtler's name appeared upon a text book of "Industrial Organic Chemistry" which has had a wide circulation in this country and England and has been translated into other languages. In association with Henry Trimble, he, in 1895, issued a text book on "Pharmaceutical and Medical Chemistry." This work has passed through a number of editions.

Remington and Sadtler, with Dr. Horatio C. Wood, in 1880, assumed the responsibility for the future revisions of the United States Dispensatory. Remington later became the senior editor, sharing the responsibility with Horatio C. Wood, Jr., with the aid of associates who gave a supervising care to the subjects lying within their particular fields of knowledge.

Up to the year 1896, President French has said, there had been published 200 volumes on scientific subjects which have carried the names of teachers and professors or members of the College as author or editor on the title page, and the number since that date has been materially increased. (*College Bulletin*, Feb., 1911.)

### Service of the College in the World War

The services performed by the College in the cause of pharmacy as this subject bore upon the fortunes of the World War, attained importance. Many of its students and alumni, nearly 1,000 in all, and several members of the Faculty, entered the army, the navy and the marine corps, or filled civil positions.

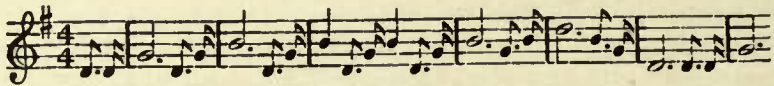
With the reduction in the number in attendance upon the courses the College was able to undertake the training of naval hospital corpsmen; 150 such students

were assigned it. This department was known as the United States Naval Hospital Corpsmen Training School of the Philadelphia College of Pharmacy and under the command of Lieutenant W. T. Minnick, M.D. When the work was finished, a second class of thirty selected students was sent to the College to be trained. A



U. S. NAVAL HOSPITAL CORPSMEN AT COLLEGE

number of professors, among them LaWall, Stroup, Sturmer and Cook, co-operated with the government in the important work of examining medical, chemical and pharmaceutical supplies for the United States Army.



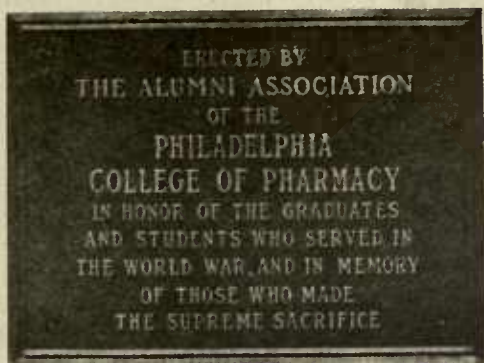
**TAPS**

Men who died in service or were killed in action:

- |                              |                             |
|------------------------------|-----------------------------|
| BRENNER, GEORGE H., '17      | MARSHALL, WILLIAM C., '18   |
| EVANS, GEORGE B., JR.        | OCKER, SGT. JOHN W.         |
| FITZSIMMONS, WILLIAM H., '14 | RODES, HARRY B., '17        |
| GRAY, JOHN CALVIN, '14       | SAGORSKY, M. H., Chi '14    |
| HARTMAN, ALLEN K., '12       | SHELL, FRANK W., '11        |
| HAY, KENNETH B.              | SEIF, LT. LOUIS EDWARD, '13 |
| HUBER, ARNOLD H., '15        | SHEPHERDSON, GEORGE PAUL    |
| KELLY, DANIEL V.             | SHOWERS, GUY WARREN, '16    |
| KEPHART, JAMES W., '15       | SMITH, DOLE M., '16         |
| KRAUSS, EDWARD, '17          | SMITH, WILLIAM M., Chi '16  |



MEDAL PRESENTED TO GRADUATES AND STUDENTS OF THE WORLD WAR



TABLET ERECTED IN HONOR OF GRADUATES AND STUDENTS OF THE WORLD WAR IN THE COLLEGE

### Graduates of Pharmacy in Pharmaceutical Journalism

As a rule, the literature of a profession is written first in its periodicals and then into its text books, and then becomes history. In the publication of the scientific literature of pharmacy, the pharmaceutical press of the country has done splendid service, and it may be fairly said that, in this work, the graduates of the Philadelphia College of Pharmacy who have followed journalism have played no small part. Among those whose work has been outstanding, there may be mentioned: William Procter, Jr., Henry Trimble, Henry Kraemer, George M. Beringer and Ivor Griffith, editors, successively, of the *American Journal of Pharmacy*, also Henry V. Arny, C. S. N. Hallberg, Caswell A. Mayo and Eugene G. Eberle; sketches of the last three named follow:

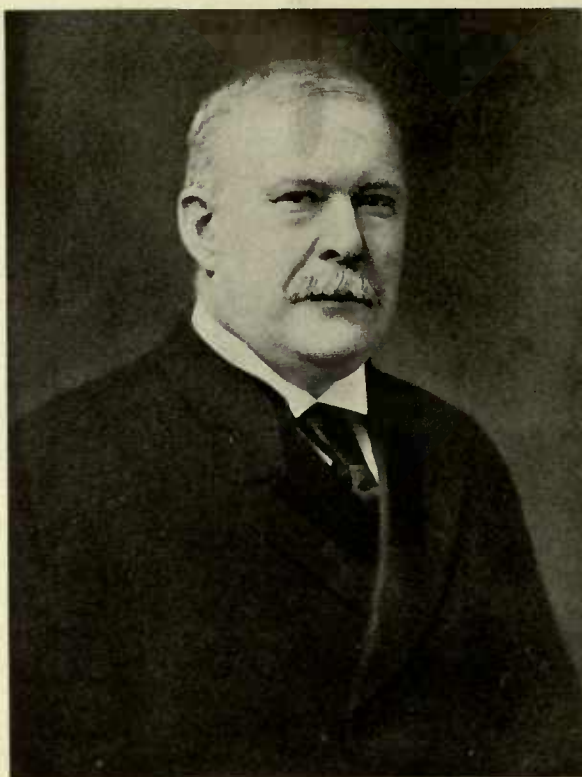
#### C. S. N. Hallberg

Carl Svanté Nicanor Hallberg (1856-1910). Born in Helsingborg, Sweden, on the Sound, opposite the Danish City of Elsinore with its ancient fort, in which was laid the scene of the story of Hamlet. Early education in public and private schools. Parents with young Carl came to America (1869), settling in Altoona, Pa. Apprenticed to Dr. S. M. Sellers of that city (1870). Came to Philadelphia and entered employ of M. K. Smith and Co., wholesale druggists, 243 North Third Street, then of E. B. Garrigues and Co., Fairmount Avenue and Tenth Street, where, under the tutelage of Edwin M. Boring, he received a most thorough and practical training in scientific pharmacy. Graduated from Philadelphia College of Pharmacy (1876), subject of thesis being "Pharmaceutical Notes." Went to Chicago (1877),



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clerked with C. F. Hartwig for two years, and then engaged in manufacturing pharmacy with C. G. Wheeler. During 1888 and 1889 was associated with C. L. Feldkamp, manufacturing pharmaceutical preparations, for which the firm was awarded a gold medal by American Pharmaceutical Association at its exhibition in Detroit in 1888. Early identified himself with pharmaceutical journalism (1878). Became editor of the *Druggist*, later, the *Western Druggist* (1882-1890). Became professor of pharmacy in Chicago College of Pharmacy and continued as such when College was merged with University of Illinois (1890-1910). Joined American Pharmaceutical (1879), and Illinois Pharmaceutical Association (1881). Member of Committee on National Formulary (1886-1910). Delegate to Pharmacopœial Conventions (1890-1900-1910), and a member of the Committee of Revision elected by each convention.



C. S. N. HALLBERG

Contributed many papers to the American Pharmaceutical Association and to pharmaceutical periodicals, upon a wide variety of subjects. Secretary of Section on Scientific Papers (1890-1891), and chairman (1891-1892). Especially active on all questions affecting pharmaceutical education and legislation, instituting statistical reports to serve as the basis for more thorough and scientific pharmacy laws. Editor of the "Bulletin of the American Pharmaceutical Association" since the first issue (1906), and was a tireless worker in its behalf. Indeed it may be said that, in all probability, the monthly Journal of the Association would not have been established in 1911 had he not paved the way by his preliminary work on the monthly Bulletin. In 1901 he became a member of the Council on Pharmacy and Chemistry of the American Medical Association; in fact, the credit for the origin of the Council was largely his, and his wide pharmaceutical knowledge was of great service to that body. A man of marked personality and unusual ability. Courageous at all times, he was ever ready to battle for his convictions. No one ever questioned his honesty, and while his intense aggressive-

ness sometimes bordered on harshness, he almost invariably won the respect of his opponents by his frankness, ability and evident honesty. He was one of the great men of American Pharmacy in the constructive work he did for the pharmaceutical education, legislation and journalism.

### Caswell A. Mayo

Caswell Armstrong Mayo was born (1862) at Columbus, Miss. Early education and pharmaceutical training in native town. Graduated from Philadelphia College of Pharmacy (1887), while employed in pharmacy of William Procter, Jr., Company. Became associate editor of *Druggist's Circular* (1887-1891), and of *Oil, Paint and Drug Reporter*, (1891-1892), and editor of *Merck's Market Report* (1892), and of *American Druggist*, (1892-1919). Later,



CASWELL A. MAYO

became associated with William S. Merrell Co., as editor of its publications. In addition to his arduous journalistic duties, Mr. Mayo has been actively identified with the work of the American Pharmaceutical Association for many years, having been historian, chairman and secretary of Section on Historical Pharmacy, vice-president of the Association (1912) and president (1914). He has high ideals for American Pharmacy and enthusiastically strives to achieve them.

### Eugene G. Eberle

Eugene G. Eberle was born (1863) at Watertown, Wis. Early education in public and private schools, and later in Northwestern University, at Watertown. Entered employ of G. and H. T. Eberle, consisting of father and brother, the latter a graduate of the class of 1873 of the Philadelphia College of Pharmacy. Came to Philadelphia, having secured a position with Charles Shivers, northeast corner of Spruce and Seventh Streets. Graduated from

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the College (1884), the subject of his thesis being "Cascara Sagrada." Returned to native state, and entered employ of Dunning and Summer, wholesale and retail druggists at Madison. Went to Fort Worth, Gainesville and Honey Grove, successively, entering employ of J. B. Ryan, and later became his partner until death of Mr. Ryan (1891). Managed business for estate and then came to Dallas (1894) to help organize the Texas Drug Company, wholesale druggists and manufacturing pharmacists, having charge of its laboratory. Did editorial work on Texas Druggist. Founded the Southern Pharmaceutical Journal (1908), and was active in the Texas Pharmaceutical Association, becoming its president (1901-1902), and secretary (1910-1914). Became member of American Pharmaceutical Association



EUGENE G. EBERLE

(1896), and its president (1910). Was professor of pharmacy in the Department of Pharmacy of the University of Dallas, which in 1903 merged with Baylor University, and of which he also became dean, resigning in 1915. Member of U. S. P. Revision Committee (1910-1920). Became editor of the Journal of the American Pharmaceutical Association in 1915 and in this capacity has become a national figure in American Pharmacy, rendering services of inestimable value in promoting the development of scientific pharmacy, in all its phases; his loyal and self-sacrificing labor for the Association has won the respect and appreciation of a wide circle of friends. Is a thirty-third degree Mason.

### Changes in the Courses and Degrees

The three year course leading to the degree of Doctor in Pharmacy (P.D.), was instituted in 1895, and was continued to 1915, when it was replaced by a two year course leading to the degree of Graduate in Pharmacy (Ph.G.). (The last



class to receive the degree of P.D. graduated in 1917.) In the fall of 1916, the College provided a post-graduate course of approximately fourteen hundred hours leading to the degree of Ph.C., this course having been planned to provide for control-chemists in pharmaceutical manufacturing establishments; it was based upon the two-year course and a general education of four years of high-school study. The degree of Phar.D. was conferred in 1917-1918, but not thereafter.

To meet the needs of retail pharmacy for a more comprehensive training than was afforded by the Ph.G. course, the College in 1917 planned a post-graduate year of approximately seven hundred hours, leading to the degree of Bachelor in Pharmacy.

A four-year plan of study was first offered in 1915, and embraced all the branches of the Ph.G. course, and practically all the subjects of the technical chemistry course, with additional laboratory instruction in bacteriology and technical microscopy. The admission requirement was four years of high-school study, and the degree awarded, Bachelor of Science in Pharmacy and Chemistry. This course has been discontinued, being replaced by the academic course of Bachelor of Science now being offered under the amended College charter of 1920.

The College has developed, also, courses in certain highly specialized lines of applied science, as follows:

1. The Course in Technical Chemistry, instituted as a two-year course in 1885, and subsequently lengthened to three college years of ten months each. It offers a thorough training in analytical chemistry and in allied sciences, and is intended primarily for control chemists and "works chemists." On completion of this course the Certificate of Proficiency in Chemistry is awarded.

Within recent years this course has been materially broadened and improved by the inclusion of the subjects of bacteriology, technical microscopy, and certain additional lecture branches.

2. Instruction in bacteriology was given as early as 1899, but a separate Department of Bacteriology was inaugurated in 1913.

3. In 1900 commercial training was made an obligatory branch of the pharmacy course, and in 1920 a supplementary course known as Advanced Commercial Training, was developed, and offered to the graduates of this College and to others interested in the commercial development of retail pharmacy.

4. The Course in Physiological Assaying was added in 1916, and since that date the list of special courses has been augmented by the following, all of which are still offered:

5. Course in Technical Microscopy.
6. Course in Advanced Pharmacognosy.
7. Course in Clinical Chemistry.
8. Course in Perfumery and Cosmetics.

On completion of any special course, a certificate attesting to the fact is issued.

### **Bachelor of Science Courses**

As a fitting climax to one hundred years of progress, the charter of the College was, in 1920, amended to grant authority for the awarding of the Bachelor of

Science degree in pharmacy, in chemistry, in bacteriology, and in pharmacognosy; and courses leading to these degrees, and in harmony with accepted academic standards, were planned and are now offered.

The freshman and sophomore years are devoted to English, foreign languages, mathematics, physics, chemistry and biology; the junior and senior year to the professional branches, an arrangement which provides for a liberal education in science, and offers opportunity of specialization in the professional subjects of pharmacy, chemistry, bacteriology, and pharmacognosy.

### Honorary Degree of Master in Pharmacy

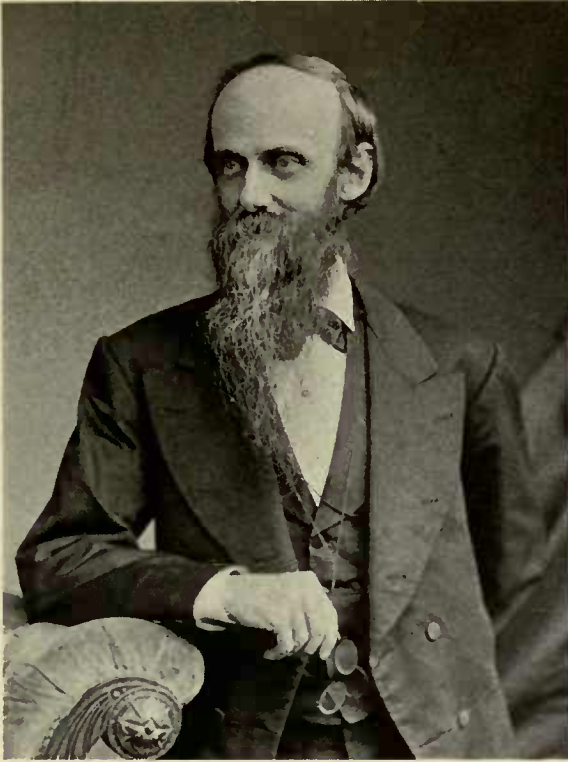
Pharmacists who are deemed worthy of the distinction, in recognition of service which they have rendered for the advancement of pharmacy, may have conferred upon them, as a mark of special honor, by the Philadelphia College of Pharmacy, the degree of Master in Pharmacy *honoris causa*. The following have received this degree:

1887 Alfred B. Taylor	1897 Lucius E. Sayre	1915 Eugene G. Eberle
1887 William B. Webb	1903 Henry S. Wellcome	1915 Caswell A. Mayo
1887 Charles A. Heinitsh	1903 James M. Good	1915 Henry M. Whelpley
1887 C. Lewis Diehl	1903 George M. Beringer	1915 William Mittelbach
1887 William T. Wenzell	1903 Wallace Procter	1917 William B. Day
1888 William J. Jenks	1905 Frank X. Moerk	1917 Frederick J. Wulling
1888 Joseph P. Remington	1908 Samuel Argo Darlington	1917 John K. Thum
1888 Thomas S. Wiegand	Sheppard	1917 Julius W. Sturmer
1889 John M. Maisch	1908 Samuel William Fairchild	1918 E. Fullerton Cook
1889 Charles Bullock	1908 John Francis Hancock	1918 Otto Raubenheimer
1889 Joseph L. Lemberger	1908 William McIntyre	1919 Henry Vin Arny
1889 T. Roberts Baker	1908 Horatio Nelson Fraser	1919 Heber W. Youngken
1889 Alonzo Robbins	1912 Benjamin T. Fairchild	1919 William A. Puckner
1891 James T. Shinn	1912 Ewen McIntyre	1920 Frederick B. Kilmer
1891 Henry Trimble	1912 Frank G. Ryan	1920 Francis E. Stewart
1891 Charles Rice	1912 Freeman P. Stroup	1921 Edward Rhodes Stitt
1894 Robert Shoemaker	1912 Lucius L. Walton	1921 Samuel L. Hilton
1894 Edward R. Squibb	1913 Samuel P. Sadtler	1921 Edward Kremers
1894 Albert E. Ebert	1913 Henry Kraemer	1921 Josiah C. Peacock
1897 Virgil Coblentz	1913 James H. Beal	1922 Henry H. Rusby
1897 Charles T. George	1913 Frederick B. Power	1922 Julius A. Koch
1897 John Uri Lloyd,	1913 Joseph W. England	1922 Samuel C. Henry
1897 Jacob H. Redsecker	1915 William L. Cliffe	1922 Ambrose Hunsberger

### Alfred B. Taylor

Alfred B. Taylor (1824-1898). Born in Philadelphia. Educated at Haddington Boarding School, and University of Pennsylvania, graduating in 1841. Entered drug business with Henry C. Blair of Philadelphia, as preceptor. Graduate from College (1844). Went to Rushton and Co. and later, Hegeman and Co., of New York. Bought drug store at Eleventh and Walnut Streets (1847), and then (1853) moved to Ninth and Walnut Streets; then (1861) to a larger store at 1015 Chestnut Street, then (1876) to 31 South Eleventh Street, and then under the Continental Hotel until he retired from business. Had an experience of nearly forty years in the retail drug business. Was appointed (1848) Inspector of Drugs for the Port of Philadelphia. Was elected the first secretary of the American Pharmaceutical

Association at the initial meeting in 1851, and in 1890 became president of the Association. Was elected a trustee of the College (1848), secretary of the College (1850-1871), corresponding secretary (1871-1886), and member of Publishing Committee of *American Journal of Pharmacy* (1852-1871). Alma Mater conferred upon him the honorary degree of master in pharmacy (1887). Rendered services of exceptional value to the Committees of Revision of U. S. Pharmacopœia, having been a member of this committee for four decades. Was secretary of the National Committee for 1860 and 1870 revisions of Pharmacopœia, and performed continuous and laborious duties involving critical experiments, recording and reconciling the



ALFRED B. TAYLOR

views of the members of the Committee, and finally, correcting the proofs, etc., with the greatest efficiency. Was associated with Remington in the preparation of the first edition of the latter's "Practice of Pharmacy." Was the first to propose the use of cacao butter as a base for suppositories. Contributed many papers on practical pharmaceutical subjects to the American Pharmaceutical Association and pharmaceutical periodicals. His faithful, unremitting devotion to the best traditions of his profession will ever associate his name with the science of pharmacy.

#### William T. Wenzell

William Theodore Wenzell (1829-1913). Born in Muehldorf, Germany. Came to America at early age. Graduated from Philadelphia College of Pharmacy in 1855, subject of thesis being "A Proximate Analysis of the Tubers of *Corydalis Formosa*." Removed to La Crosse, Wis. Practiced pharmacy and studied medicine, receiving M.D. degree from the La Crosse Medical College (1864). Was appointed professor of chemistry and toxicology



in the Pharmacy Department of the University of California in 1872, which chair he held until 1898, and from 1875 to 1880 was professor of chemistry and toxicology in the Medical College of the Pacific. University of California granted him (1890) degree of Pharm.M., and made him emeritus professor of chemistry of the Department of Pharmacy (1898). Became (1897) professor of chemistry and toxicology in Cooper Medical College, and later (1904) emeritus professor in same institution. Was awarded the honorary degree of master



WILLIAM T. WENZELL

in pharmacy by his Alma Mater in 1887. Was appointed chemist in the United States Appraiser's Stores (1899) at San Francisco, which position he held until his death. Especially interested in the proximate analysis of plants, in alkaloids, particularly of ergot, in the volatile oils of the cone bearing trees of the Pacific Coast, and other phytochemical subjects, making valuable contributions to pharmaceutical literature. Was a life member of the American Pharmaceutical Association, joining in 1870.

### Degree of Master in Pharmacy in Course

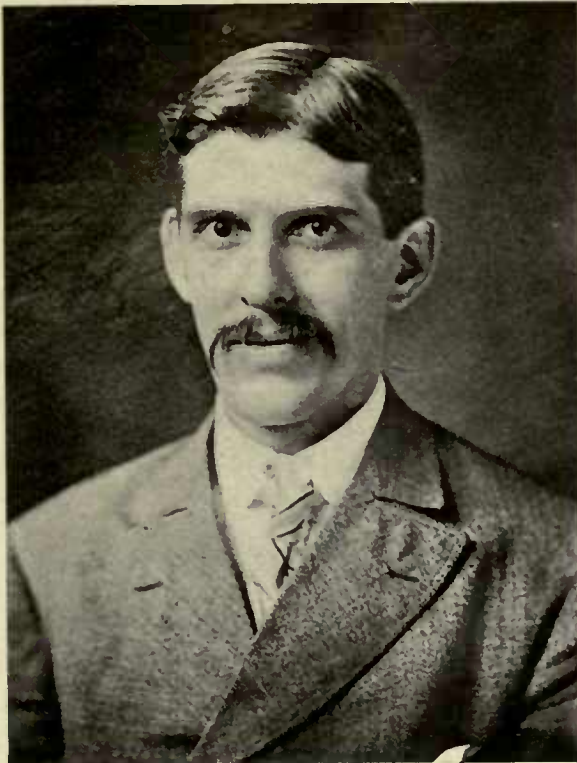
Graduates of the Philadelphia College of Pharmacy of not less than five years' standing and engaged in the practice of pharmacy or allied scientific pursuits for the period named since graduation and of good character, may have conferred upon them the degree of Master in Pharmacy in course, upon the presentation of an original dissertation upon a subject connected with any of the branches taught at the College, together with suitable specimens of the results, an account of what-

ever aid may have been received in the investigation and the written evidence of the qualifications above mentioned, upon the approval by vote of the Board of Trustees. The following have received this degree:

1903	Martin I. Wilbert	1918	W. Wilson McNeary
1905	Charles H. LaWall	1918	Robert P. Fischelis
1914	Edwin L. Newcomb	1920	Louis Gershenfeld
1917	Charles E. Hoffman	1921	Ivor Griffith
1918	Paul S. Pittenger	1921	Ellery H. Harvey

### Martin I. Wilbert

Martin I. Wilbert (1865-1916). Born at West Leyden, Lewis County, N. Y. German parentage. Early education in public and private schools. Employed in drug store of Utica. Graduated from College in 1890, subject of thesis being "Aluminii Acetas." Owned a retail drug store for a short time and then became chief apothecary of German Hospital of Philadelphia, where he rendered most efficient service. Was a pioneer in the use of the X-Ray in this



MARTIN I. WILBERT

country, making the first X-Ray machine used by his institution. At the German Hospital he adopted the policy of buying crude drugs and making all his preparations. In this way he became deeply interested in experimental work on pharmaceutical preparations and in the literature relating thereto, as well as the literature of pharmacy generally. In 1908 became an assistant in the Division of Pharmacology of the Hygienic Laboratory, U. S. Public Health Service, where his work on the Digest of Comments on the U. S. Pharmacopœia (IX),

and the National Formulary (IV) excited most favorable comment. Was an active member of the American Pharmaceutical Association, the Franklin Institute, the American Roentgen Ray Society, and the American Medical Association, being a member of its Council on Pharmacy and Chemistry. Was a member of the Committee of Revision of the U. S. Pharmacopœia (IX), Committee on Revision of the National Formulary, and a member of the Philadelphia College of Pharmacy. Was given the degree of master in pharmacy in course by his Alma Mater (1903). Contributed many articles to the *American Journal of Pharmacy*.

"His influence on medicine and pharmacy was unique. His knowledge of pharmacy was such that he could have obtained prominence in the manufacturing field and with it come to a large measure of financial reward. But he chose to devote his thoughts and energies to the general good rather than to his own profit. He gave a life of service with never a thought of reward and earned every honor bestowed upon him." (W. A. Puckner.)

### The Spirit of Research

Not the least important work of the College has been the inculcation in students of a desire for original investigation. From its earliest days, the College has fostered the spirit of research, and the thousands who have gone forth from its halls have carried this spirit with them. Apart from the epochal work done by those directly connected with the College, like that of Daniel B. Smith, Wood, Bache, Carson, Procter, Parrish, Maisch, Bullock, Taylor, Remington, Sadtler, Trimble, Bastin, Kraemer and others, including the present faculty, many of the assistants, students and graduates have either engaged in research or encouraged it in others, and published important findings, to the advantage of pharmacy and collateral sciences. Thus, we have as outstanding figures: C. Lewis Diehl, with his masterly work as Reporter on the Progress of Pharmacy of the American Pharmaceutical Association, William T. Wenzell, Albert E. Ebert, C. S. N. Hallberg, Lucius E. Sayre, Herman Frasch, discoverer of the famous Frasch-method of mining sulphur, Martin I. Wilbert whose experimental work on pharmaceutical preparations and studies of pharmaceutical literature constitute a bright page in the history of American Pharmacy, and Frank G. Ryan, of Parke, Davis and Company; also Frederick B. Power, of the Bureau of Chemistry, Department of Agriculture, with his masterly work in the Wellcome Research Laboratories of London, Edward Kremers, of the University of Wisconsin, Henry V. Army, of the College of Pharmacy of the City of New York, George M. Beringer, of Camden, N. J., Josiah K. Lilly, of Eli Lilly and Company, and Milton Campbell and H. K. Mulford, of the H. K. Mulford Company, for their development of the manufacturing of biologics.

As Henry H. Rusby writes us: "Next to the work itself, the most important feature of research work is its reactions on the workers. All the results secured are, in a broad sense, insignificant as compared with the effects of the work itself upon the people who work; and this is true of all efforts for higher things." The spirit of research of the College has not only produced a rich harvest of achievements within its walls, and among those who have fared forth from it, but it has engendered a like spirit in others. Thus, among the foremost of research workers which this country has produced, there may be mentioned: Edward R. Squibb, whose constructive work in the upbuilding of American manufacturing pharmacy has challenged the admiration of the pharmaceutical world; Charles Rice, whose scholarship and research in everything that pertained to pharmacopœias, formu-



laries and the progress of scientific pharmacy stands out as a beacon-light for others to follow; Henry H. Rusby, whose studies upon the American flora, especially of the South American countries, through which he has traveled so extensively, have been of the highest economic and industrial importance, and John Uri Lloyd, whose comprehensive researches in pharmacy and allied sciences have been of potential influence in promoting its growth and development.

The spirit of research is world wide and it is especially pleasing to note the research work of the Wellcome Research Laboratories of London, England, and of Khartoum, Africa, because the work has been of the highest scientific value. The founder of these laboratories, Henry S. Wellcome, the head of Burroughs, Wellcome & Co., London, manufacturers of fine chemicals and galenicals, with establishments in the United States, Italy, Canada, Australia, India, China, and other countries, graduated at the Philadelphia College of Pharmacy in the days of Procter, Maisch and Bridges. From the beginning of his career, Mr. Wellcome made original scientific research and strictly ethical methods the foundation of his life work, and to this policy is attributed the unique and universal reputation of the firm.

Apart from the research and experimental laboratories at his firm's works which have to their credit an immense number of important original researches, Mr. Wellcome has established several scientific institutions which are co-ordinated and under separate direction. The directors and staffs of these institutions are men of high attainments, and some of them are scientists of wide repute. In this connection it may be noted that a specially appointed committee of the American "Chemical Foundation (Inc. 1921)," in a recent report states: "Probably the Laboratories in England which have done the most co-operative work on the relations of chemistry to physiology and pharmacology are the Wellcome Research Laboratories."

The institutions referred to are:

I. The Physiological Research Laboratories, Langley Court, Beckenham, Kent, near London, were founded by Mr. Wellcome, in 1894. The activities of this institution cover a wide field of therapeutic investigation, being devoted to serological, bacteriological, and pharmacological inquiries. They are concerned in the production of preventive and curative sera and bacterial preparations. These laboratories were pioneers in serum research and produced the first anti-diphtheria serum introduced to the medical profession in the British Empire and in the United States.

During the World War extensive research in this institution led to the development of various sera and vaccines which proved of great importance and assistance to the Allies.

From the beginning the pharmacological work has been associated with research on the purely physiological problems thereby suggested and which it involves. Methods were originated and developed for controlling and standardizing by physiological experiment, the activity of those potent drugs to which chemical methods of assay are not applicable.

II. The Chemical Research Laboratories, 6 King Street, London, were founded by Mr. Wellcome in 1896, and Dr. F. B. Power was the director of them for eighteen and a half years. These laboratories are devoted to a wide range of investigations in various departments of organic and inorganic chemistry. The researches have been of the most varied character comprising problems in both pure and applied chemistry, and the synthetic production of various substances. They have included the complete examination of a very large number of plants and vegetable products from all parts of the world, especially such as are likely to be of value in the treatment of disease.

III. The Bureau of Scientific Research, 25-26-27 Endsleigh Gardens, London, and the auxiliary Entomological Research Laboratory at Witley in Surrey, were founded by Mr. Wellcome in 1913, and are intended to advance the cause of science in various directions. The Central Bureau is chiefly concerned with research in connection with tropical medicine and hygiene, especially researches in bacteriology, parasitology and sanitation. The regular work of the institution was interrupted by the outbreak of the World War, when Mr. Wellcome placed the Bureau and its staff fully at the disposal of the British War Department. During the War the Government sent the Director-in-Chief of the Bureau, Colonel Andrew Balfour and his First Assistant, Colonel C. M. Wenyon, to the various fighting fronts as advisory Commissioners to study and investigate the many medical and sanitary problems and to advise and report on the same. In the course of the War, Colonel Balfour visited practically every important field of operation. The other members of the staff of the Bureau were engaged in army medical research work and in training army medical officers for tropical and sub-tropical war areas.

This Bureau exists not only for the purposes of research but also to supply information gratis to medical men, sanitary administrators, and others interested in Tropical Medicine and Hygiene. Furthermore, it sends out highly trained experts to tropical and other countries to prosecute researches in respect to local problems.

IV. The Museum of Tropical Medicine and Hygiene, London, founded by Mr. Wellcome in 1913, is affiliated with the Bureau of Scientific Research, and contains an extensive collection of objects, pictures, etc., illustrating in a graphic manner the subjects of Tropical Diseases and Hygiene. The purpose of its foundation was to aid medical men, sanitary officers and others engaged in the study of problems of tropical diseases and sanitation.

V. The Historical Medical Museum, 54A Wigmore Street, London, was founded by Mr. Wellcome in 1913. It contains a vast collection of original objects, paintings, engravings, etc., illustrating the history of medicine, surgery, chemistry, pharmacy and allied sciences from the earliest times. This Historical Museum is international and the collecting of these exhibits from all parts of the world has occupied much of Mr. Wellcome's time for many years. The Museum is affiliated with his various research institutions and is intended to serve as an educational aid to medical men, surgeons, chemists, pharmacists, scientists and other research workers and students who may be interested.

VI. The Wellcome Tropical Research Laboratories, Khartoum, A. E. Sudan, Africa, and the fully equipped auxiliary Floating Tropical Research Laboratory on the Upper Nile, founded by Mr. Wellcome in 1902, are intended to serve the following purposes:

- (a) To promote technical education.
- (b) To promote the study, bacteriologically and physiologically of tropical disorders, especially the infective diseases of both man and beast peculiar to the Sudan, and to render assistance to the officers of health, and to the clinics of the civil and military hospitals.
- (c) To aid experimental investigations in poisoning cases by the detection of toxic agents, particularly the obscure potent substances employed by the natives.
- (d) To carry out such chemical and bacteriological tests in connection with water, food stuffs, and health and sanitary matters as may be found desirable.
- (e) To undertake the testing and assaying of agricultural, mineral and other substances of practical interest in the industrial development of the Sudan.

At a meeting in London, February, 1922, of the Governing Board of the Gordon College, Khartoum, with which these Laboratories are affiliated, the chairman, General Sir Reginald Wingate (for twenty years Governor-General of the Sudan) stated: "We must readily acknowledge the immense benefits conferred on the country by the institution of the Wellcome Tropical Research Laboratories. Their generous founder is still with us, constant in his endeavor to maintain tropical research and all it entails at its present high standard of efficiency."

From his early childhood days, when he discovered a Neolithic stone implement amongst the ancient Indian mounds in Wisconsin, Mr. Wellcome has been a keen student of archæology. During one of his expeditions to the Sudan, after Kitchener's reconquest, he discovered several important prehistoric Ethiopian archæological sites in the Upper Nile region, to the west of Abyssinia, and he has since carried out under his personal direction, extensive excavations and researches at those sites, with very fruitful results. In this undertaking he has employed a technical and administrative staff of twenty-five Europeans and more than three thousand native workmen. Professor G. A. Reisner of Harvard University, the greatest living authority on Oriental archæology, writing of this work, says: "The excavations carried out by H. S. Wellcome have thrown an unexpected light on early Ethiopian history in this region. For the first time a scientific archæological record has been made of a site in the interior of Africa."



HENRY S. WELLCOME

Henry S. Wellcome, the son of a clergyman, was born in Wisconsin, in the region of the Chippewa and Menominee Indian Tribes. When about five years of age he, with his parents and a party of several other families, migrated westward, trekking across the wild open country by day in covered wagons, called Prairie Schooners; they halted, coralled and camped at night. Their destination was Garden City, a small but thriving frontier settlement in Minnesota, located between the Sioux and Winnebago Indian Tribes, in "The Land of Hiawatha," not far from "The Falls of Minnehaha, The Merry Laughing Water" and near



to the sacred Red Pipestone Quarry where the Tribal Pipes of Peace were wrought. The environment was inspiring and primeval nature fair to see. The strenuous unconventional frontier life presented many delightful experiences and happy associations but also involved many severe hardships and grave difficulties which required the utmost fortitude to surmount.

Wellcome's primary education at Garden City was first in a typical frontier log school-house, but as the pioneer settlement prospered, superior buildings were erected and higher grade schools established.

While still very young, a highly qualified English chemist came to Garden City, was appointed manager of a local pharmacy, and Wellcome, outside his school hours, received from him practical training in chemistry, pharmacy and *materia medica*, making such progress that when thirteen years of age he was appointed assistant dispenser.

When seventeen years old he had attained such proficiency that he was placed in charge of the dispensing department of Poole & Geisinger's Pharmacy, Rochester, Minnesota. After two years' practical experience at Rochester, he went to Chicago, arriving immediately after the great fire. He took a position in the pharmacy of Thomas Whitefield and attended the Chicago College of Pharmacy for one year, then came east and entered the Philadelphia College of Pharmacy, where he continued his duties and graduated in the class of 1874, with his friend Frederick B. Power.

Wellcome then went to New York and took a position with Caswell, Hazard & Co. His keen love of research at this early period was evidenced by his numerous investigations, the results of which were published in the *Proceedings of the American Pharmaceutical Association*, the *American Journal of Pharmacy*, and various other periodicals in America and abroad. At this time he was offered the editorship of an important pharmaceutical journal. This offer he declined, but after two years' service with Caswell, Hazard & Co., he resigned and accepted an important position with McKesson & Robbins, New York, in connection with their manufacturing department. They sent him on special missions to various parts of the United States and Canada, and into Mexico, Central and South America. While in South America, he studied the native Cinchona forests, his account of which was read before the American Pharmaceutical Association and published in its *Proceedings*.

The English chemist, under whose guidance Wellcome studied at Garden City in his early youth, had loaned him various English scientific publications and told him much about England, her extensive libraries, museums and educational institutions, and described the unique industrial and commercial advantages of London as the greatest distributing and financial center of the world. While connected with McKesson & Robbins, he discussed this subject with his friend S. M. Burroughs (P. C. P. Class of 1877), who offered to enter into partnership with him to establish chemical and pharmaceutical works in England. As a result, Wellcome resigned his position with McKesson & Robbins, and the firm of Burroughs, Wellcome & Co., was founded in London in 1880. (Burroughs died in 1895).

Wellcome has always been an indefatigable student, unceasing in his quest for knowledge, and a strenuous, systematic worker. Personally, he is modest and unassuming, genial and kindly in manner and leads a simple, though busy life. He is magnanimous in promoting scientific research and worthy benefactions. As a pioneer in welfare work he provided clubs and institutions with technical instruction, and a park, sports fields, and gymnasiums for the educational and social betterment of his staff and employees generally.

For many years Wellcome has enjoyed the close friendship of a great number of the most eminent men in the various fields of science and public life in America and Europe. He has done much to promote a better understanding between the United States and the British Empire. He was a founder and the second president of the American Society in London, which has for many years rendered valuable service in fostering cordial relations amongst the English-speaking peoples. During the South African War, he bore the entire cost of the medical and surgical equipment of the American Hospital Ship *Maine*.

In 1903 the Philadelphia College of Pharmacy conferred upon him the honorary degree of master in pharmacy. As an expression of his high regard for his Alma Mater, he presented to the College in 1905 a massive gold-plated silver loving cup, which under the present rules will be awarded to the B.Sc. graduating class attaining to advanced scholarship.

Research may be defined as the original investigation of facts or principles. It is a science or an art or both. It may be a determination or an interpretation, but it must be original and it must be truth. It is not confined to the natural sciences, it may be historical, musical, economic, etc. Herein are given the names (and biographies) of those who, it is believed, have been the master research workers of American Pharmacy during the past century, who have done the most worth while work in stimulating scientific pharmaceutical research in this country. There are many other research workers whose work has been most praiseworthy, but it has not been, we believe, so wide in scope and potent in influence upon the development of American Pharmacy as the work of those named.

### The Master Research Workers of American Pharmacy

1. †Daniel B. Smith (1792-1883), Pharmacist.
2. \*William Procter, Jr. (1817-1874), Pharmacist.
3. Edward R. Squibb (1819-1900), Pharmacist.
4. Emil Scheffer (1821-1902), Pharmacist.
5. \*Charles Bullock (1826-1900), Pharmacist.
6. ‡John M. Maisch (1831-1893), Pharmacist, Chemist, Botanist and Pharmacognocist.
7. †Albert B. Prescott (1832-1905), Chemist.
8. \*C. Lewis Diehl (1840-1917), Pharmacist.
9. †Charles Rice (1841-1901), Pharmacist.
10. Albert B. Lyons (1841- ), Pharmacist,-Chemist.
11. \*Joseph P. Remington (1847-1918), Pharmacist.
12. John Uri Lloyd (1849- ), Pharmacist.
13. \*Henry Trimble (1853-1898), Chemist.
14. \*Frederick B. Power (1853- ), Chemist.
15. Henry H. Rusby (1855- ), Botanist and Pharmacognocist.
16. \*George M. Beringer (1860- ), Pharmacist.
17. Julius W. Schlotterbeck (1865-1917), Pharmacognocist, Pharmacist.
18. \*Martin I. Wilbert (1865-1917), Pharmacist.
19. §Edward Kremers (1865- ), Chemist.
20. \*Henry Kraemer (1868- ), Botanist and Pharmacognocist.
21. \*Henry V. Arny (1868- ), Chemist.

\* Graduate of Philadelphia College of Pharmacy.

† Member of College.

‡ Teacher of College.

§ Student of College.



*William Procter Jr*

1817-1874.





DANIEL B. SMITH  
1792-1883



EDWARD R. SQUIBB  
1819-1900



EMIL SCHEFFER  
1821-1902



CHARLES BULLOCK  
1826-1900



JOHN M. MAISCH  
1831-1893



ALBERT B. PRESCOTT  
1832-1905

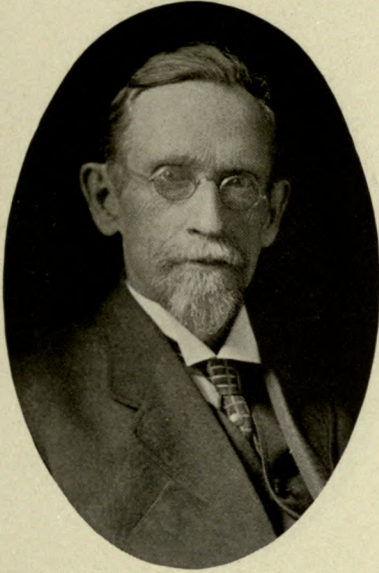


C. LEWIS DIEHL  
1840-1917

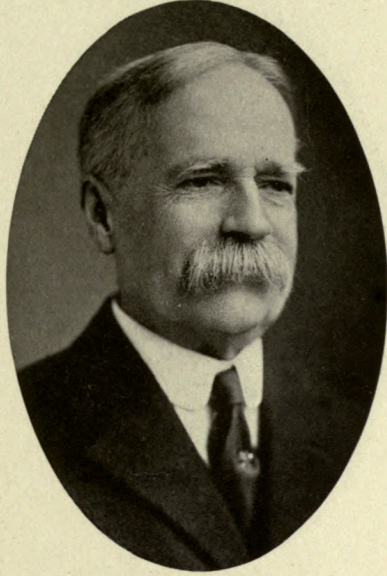


CHARLES RICE  
1841-1901

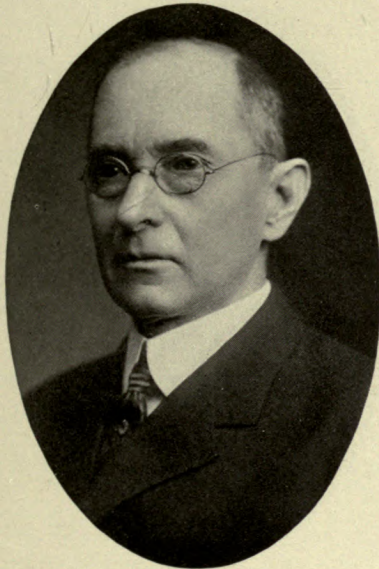




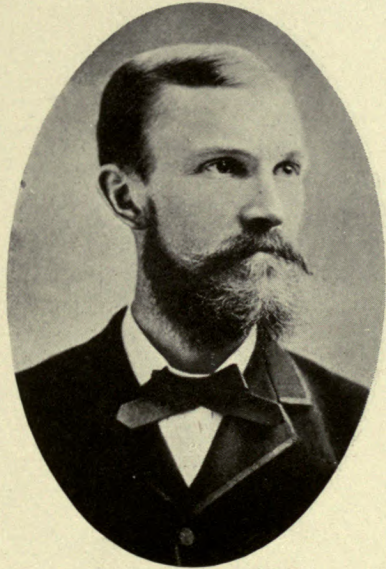
ALBERT B. LYONS  
1841-



JOSEPH P. REMINGTON  
1847-1918



JOHN URI LLOYD  
1849-



HENRY TRIMBLE  
1853-1898





FREDERICK B. POWER  
1853-



HENRY H. RUSBY  
1855-



GEORGE M. BERINGER  
1860-



JULIUS W. SCHLOTTERBECK  
1865-1917



MARTIN I. WILBERT  
1865-1917



EDWARD KREMERS  
1865-



HENRY KRAEMER  
1868-



HENRY V. ARMY  
1868-

## Biographies of the Master Research Workers of American Pharmacy

1. Daniel B. Smith: (Under Chapter XI).

2. William Procter, Jr.: (Under Chapter XI).

3. Edward R. Squibb. Born (1819) in Wilmington, Delaware. Parents, James R. and Catherine H. Squibb. Early education in Wilmington. Learned the drug business with Warder Morris, of Philadelphia; later Warder Morris and J. H. Sprague (1837-1842). Graduated from Jefferson Medical College in 1845. Practiced medicine in Philadelphia until 1847, when he became assistant surgeon in U. S. Navy. Saw active sea service for four years. Ordered to Naval Hospital in Brooklyn, directed by Dr. Benjamin Franklin Bache. When the pharmaceutical laboratory of the Navy Department was authorized in 1852, Bache was made its director and Squibb its assistant director. Here he gained a practical experience in manufacturing that was destined to yield most important results. In 1857 he resigned from the Navy and the following year established a manufacturing pharmaceutical laboratory of his own in Brooklyn. With the outbreak of the Civil War (1861), the demand for the Squibb products enormously increased. He had unusual mechanical ability and loved research, and he abhorred secrecy, freely disclosing his discoveries to all, even to competitors. His articles in the *American Journal of Pharmacy*, the *Proceedings of the American Pharmaceutical Association* and his own *Ephemeris*, were many and of great practical and scientific value. His *Ephemeris*, a periodical dedicated to medicine and pharmacy, was unique and characteristic. It disseminated thousands of pages of the most useful and practical drug information and was issued gratuitously as seemed to be required. It had no subscription list. He took an active part in the development and improvement of the Pharmacopœia beginning with the 1860 revision. Became a member of the American Pharmaceutical Association in 1858, and of many pharmaceutical and medical bodies, and was an honorary member of the British Pharmaceutical Conference and of the Pharmaceutical Society of Great Britain. The degree of master in pharmacy honoris causa was conferred upon him by the Philadelphia College of Pharmacy in 1894. He died October 25, 1900.

Squibb had striking individuality. "He consecrated his life to the object of furnishing honest medicines for the relief of disease, and naturally his laboratory work had the first place; morning, noon and night found him there. Habits of order and cleanliness he instilled in all who were under his guidance or instruction. He hated a lie, even a little one, and he was always the soul of honor. He delighted in original investigation if it had any bearing upon making medicines. Abstract subjects he took little interest in, he would not waste time upon anything which he did not believe productive of results of immediate practical value to mankind. His standards of purity for pharmaceutical products were the highest attainable. He never hesitated to share with others the benefits of his great ingenuity and wide experience, so that his services to his profession were far reaching, not only on account of the enormous volume of work he accomplished, but also, because he enabled others to do much." (Joseph P. Remington.) He never yielded to any course of doubtful morality, and he often stood alone, his motto being: "God and one are a majority."

4. Emil Scheffer. Born (1821) at Stuttgart, Wurtemberg. Son of Carl L. F. and Marie M. Scheffer. Early education in public schools. Apprenticed to apothecary of Tuebingen, and attended the Polytechnicum, then the University of Tuebingen. Came to America (1849), journeyed to Cincinnati, Ohio, and entered the employ of Charles Schmidt; later (1850) of widow of F. W. Kniess of Louisville, Ky., and developed the business so successfully that he was admitted to full partnership (1852), "the compact being sealed by the gift of her heart and hand" (Diehl). Continued in business until 1882. Became much interested in the study of pepsin, and upon his researches the modern pepsin industry has been built. He communicated his process of pepsin manufacture to the world in 1872. As Diehl has written, "In revealing his process for the manufacture of 'saccharated pepsin' to the world, Scheffer un-



doubtedly gave the incentive to the more intelligent and comprehensive study of the proteolytic ferments, and these, in their turn, have encouraged the investigation and study of biological products in general." Was a founder of the Louisville College of Pharmacy, also, director (1866-1889), president (1884-1888), treasurer (1888-1889), and professor of materia medica and botany (1871-1884). Became a member of the American Pharmaceutical Association (1872), of the Committee of Revision of U. S. Pharmacopœia (1880-1890), also, a commissioner of pharmacy of Kentucky (1874-1882). He died January 22, 1902. He contributed a number of research articles to the *American Journal of Pharmacy*, especially on the subject of pepsin.

5. Charles Bullock: (Under Chapter XI).

6. John M. Maisch: (Under Chapter XI).

7. Albert B. Prescott. Born (1832) at Hastings, N. Y., graduated in medicine at University of Michigan (1864); assistant surgeon, U. S. V., (1864-65); assistant professor of chemistry in University of Michigan (1865); professor of organic and applied chemistry (1870), and dean of the School of Pharmacy (1876). Received degree of doctor of philosophy (1886), and the honorary degree of doctor of laws from University of Michigan (1896), and by the Northwestern University (1903). Became president of the American Association for the Advancement of Science (1891), the American Pharmaceutical Association (1899-1900), the American Conference of Pharmaceutical Faculties (1900), and the American Chemical Society (1902), and became a fellow of the Chemical Society of London (1876), a member of the American Philosophical Society (1898), and an honorary member of the British Pharmaceutical Conference (1891). Was an active member of the Committee of Revision of the U. S. Pharmacopœia (1880-1890), and was made an honorary member of the Philadelphia College of Pharmacy (1902). Was the author of a number of text books—"Qualitative Chemical Analysis" (1874), "Outlines of Proximate Organic Analysis" (1875), "Chemistry of Alcoholic Liquors" (1875), "Morphiometric Processes for Opium" (1878), "First Book of Qualitative Chemistry" (1879), "Nostrums in their Relation to the Public Health" (1881), and "Manual of Organic Analysis" (1888). He did a large amount of original research work; his work on the composition of alkaloidal-periodides having been described by Victor C. Vaughan as probably Prescott's *opus magnum*. His contributions to scientific periodicals were many. He died in 1905. His life was devoted to high ideals, and he rendered services of inestimable value to the progress of scientific pharmacy and the elevation of pharmaceutical education by his earnest and consistent adherence to advanced standards. And with this, he was a singularly unselfish, modest, helpful, generous and lovable man.

8. C. Lewis Diehl. Born (1840) at Neustadt A. H., in the Palatinate (Rhenish Bavaria). Father came to this country and located on a farm in Southern Illinois, family joining him in 1851. Early education in public schools. Apprenticed with Dr. John R. Angney, of Philadelphia. Graduated from Philadelphia College of Pharmacy in 1862. Chief of laboratory of John Wyeth and Brother. Enlisted in 15th Pennsylvania Regiment in Civil War. Wounded at Stone's River. Discharged from service in 1863. Obtained position in U. S. Army Laboratory in Philadelphia (until 1865). Reorganized Louisville Chemical Works. Opened retail store in Louisville (1869). Reporter on the Progress of Pharmacy of the American Pharmaceutical Association (1873-1891; 1894-1915.) A founder of the Louisville College of Pharmacy, being its president during the first ten years, then its professor of pharmacy. Member of first state board of pharmacy of Kentucky. One of the foremost research workers of the country and a frequent contributor to pharmaceutical literature. Received honorary degree of master in pharmacy from the Philadelphia College of Pharmacy in 1887. He died in 1917. He will be remembered in American Pharmacy long after many of his contemporaries have been forgotten. For thirty-eight years he was Reporter on the Progress of Pharmacy and for twenty-eight years most actively identified with the work of the National

Formulary. But it was not the number of his years of service that made them so worth while; it was the high scientific quality of his work, rendered possible by his analytical mind, his well balanced judgment and his whole-hearted devotion to the profession he loved so well. His work was constructive, never destructive, he was no politician, and his labor for pharmacy will bear fruit through the years to come and be a lasting memorial to him.

9. Charles Rice. Born (1841) in Munich of Austrian parents and educated in public and private schools. Came to the United States during the Civil War. Gained first pharmaceutical experience as a surgeon's steward in sloop-of-war "Jamestown" bound for a cruise around the world. Returning to this country, he was seized with malaria and taken to the Bellevue Hospital of New York City, and upon recovery was made an assistant in the drug department; and later, chemist of the general drug department, and subsequently, also, of the Department of Public Charities and Correction, which offices he held until his demise. Became eminent as a philologist, having an international reputation. It is said that he could read twenty languages and converse fluently in eight others, while as a Sanskrit scholar he became world-famous. The bibliography of his pharmaceutical writings would require many pages, but it was as chairman of the Committee of Revision of the Pharmacopœias of 1880, 1890 and 1900, that he became best known, not only as an original investigator, but also as an efficient organizer. Was chairman of the editing committee of the "New York and Brooklyn Formulary" in 1884, and chairman of the committee of the American Pharmaceutical Association to convert this book into the "National Formulary." Was associate editor of "New Remedies," later merged into the "American Druggist" (1876-1891). Was elected trustee of the New York College of Pharmacy in 1870. Was given the honorary degree of doctor of philosophy by the New York University, and honorary degree of master in pharmacy by the Philadelphia College of Pharmacy (1891). Was an active honorary fellow of the New York Academy of Medicine, and held honorary and active membership in many foreign and American scientific bodies. Joined the American Pharmaceutical Association in 1870; was its first vice-president in 1883-1884, and Reporter on the Progress of Pharmacy from 1891 to 1892. He died May 13, 1901.

10. Albert B. Lyons. Born (1841) at Waimea, Hawaii, son of Rev. Lorenzo Lyons, a missionary on the island of Hawaii. Early education in public schools, and Oahu College. Entered Williams College, Massachusetts, graduating in 1865. Taught chemistry and physics at Eagleswood Military Academy, Perth Amboy, N. J. Took medical and pharmaceutical courses at University of Minnesota and graduated. Because especially interested in the study of alkaloids, was made assistant and then professor of chemistry at Detroit College of Medicine (1889-1901). Opened retail drug store in Detroit, conducted it for ten years, and then went into partnership with A. B. Stevens. In 1881, severed his connection with retail pharmacy and accepted a position with Parke, Davis and Company as analytical and consulting chemist. Here he became impressed with the necessity of standardizing the fluid extracts of alkaloidal drugs, and his standards of nearly forty years ago have remained practically unchanged and have received official sanction. By reason of his work on this subject, he may be called the founder of alkaloidal assaying in America, being the author of the first textbook on the subject, a "Manual of Pharmaceutical Assaying" (1887). Became editor of the *Pharmaceutical Era* (1887), then published in Detroit (1887-1891), and was appointed (1888), Government Chemist for the Hawaiian islands. Went to Honolulu, and became, also, professor of chemistry and other natural sciences in the Oahu College. Was a member of the Committee of Revision (1890, 1910), and chairman of the sub-committee on tables. Returned to Detroit (1907), took charge of the chemical department of Nelson, Baker & Co. Member of American Pharmaceutical Association (since 1885), secretary of scientific section (1887, 1897), and was chairman of section on education and legislation (1898); and a member of the committee on U. S. Pharmacopœia of the Association. Member of the Committee of Revision of the U. S. Pharmacopœia (1900, 1910), and has done most valuable work on the official tables and assay processes. Revised his "Manual of Pharmaceutical Assaying" in 1899, changing the title to "Practical Assaying of Drugs and Galenicals," and recently has



issued an entirely new book on the "Practical Standardization of Organic Drugs." In 1890 he published his work on Botanical Synonyms entitled "Plant Names, Scientific and Popular," and has recently revised this work. No less an authority than Henry H. Rusby, accords Dr. Lyons as the highest authority in this country on botanical nomenclature and synonyms. The British Chemical and Pharmaceutical Societies have recognized his abilities and honored him, as has also the American Pharmaceutical Association by electing him an honorary president (1913-1914). Wilbur S. Scoville has said of him: "His extreme modesty has held him back from public prominence and has made him appear to be indifferent to public honors. Yet his is not the indifference of selfishness, but only a difference in the estimation of values. Friendship he values highly, but flattery cannot deceive him." He is honored in American Pharmacy not only for his research achievements, but also for his remarkable versatility as a scientist and his strength of mind and character.

11. Joseph P. Remington: (Under Chapter XI).

12. John Uri Lloyd. Born (1849) at W. Bloomfield, N. Y. Son of Nelson Marvin and Sophia Lloyd. Early education in private schools. Professor of pharmacy in Cincinnati College of Pharmacy (1883-1887), and professor of chemistry (1878- ), President of Eclectic Medical Institute (1896-1904); Associate editor of "Pharmaceutical Review" (to 1909). Senior member of Lloyd Brothers, of Cincinnati, manufacturing pharmacists. Outside of profession has studied dialect, superstition and folk-lore of northern Kentucky. President of Lloyd Library and Museum. President of American Pharmaceutical Association in 1887. Member of Ohio Pharmaceutical Association, Authors Club, New York; and Franklin Inn Club and Franklin Institute of Philadelphia. Author of "Chemistry of Medicine" (1881), "Drugs and Medicines of North America" (with C. G. Lloyd, 1884), "King's American Dispensatory" (with Dr. John King), (1885); "Elixirs, their History and Preparation" (1892); "Etidorhpa, the End of the Earth" (1895); "The Right Side of the Car" (1897); "Stringtown on the Pike" (1900); "Warwick of the Knobs" (1901); "Red Head" (1903); "Scroggins" (1904). His latest technical work is on "Pharmaceutical Vegetable Drugs" (1922). Has contributed results of many original and extensive investigations to chemical and pharmaceutical journals, especially in plant chemistry, precipitation in fluid extracts, capillarity and colloidal chemistry. Editor of many book-publications issued by the Lloyd Library. Was given honorary degree of master in pharmacy by the Philadelphia College of Pharmacy (1897), doctor of philosophy degree by University of Ohio (1897), and learned doctor of laws by Wilberforce University. For more than half a century Lloyd has been one of the outstanding figures in American pharmaceutical and chemical research, and his researches have attracted world wide attention.

13. Henry Trimble: (Under Chapter XI).

14. Frederick B. Power: (Under Chapter XI).

15. Henry H. Rusby. Born (1855) in Franklin, N. J. Early education in public schools. Two years at the Westfield (Mass.) State Normal School and one year at the Centenary Collegiate Institute of Hackettstown, N. J., and taught school for several years in Massachusetts and New Jersey. Early evidenced love of botany. Exhibited herbarium of plants of Essex County, N. J., at the Centennial Exposition (1876), and received medal. Made an agent of the Smithsonian Institution in 1880, and toured New Mexico for eighteen months in its service. Was sent in 1883 by Parke, Davis & Co., to study the medicinal plants of Arizona, and in 1885 to study the coca industry, cocaine just then coming into use as a remedial agent. Crossed the South American continent and discovered Cocillana; also introduced Pichi to medicinal use in the United States. Brought back 45,000 specimens, representing 4,000 species, many formerly unknown. Submitted to the Pan-American Medical Congress, on his return, a plan for the systematic examination of American flora, which was adopted. Explored Venezuela in 1896 for botanical specimens. In 1916, explored the mountains of southern Colombia for new sources of quinine. Under President Diaz, made



several journeys through Mexico to investigate the rubber supplies of that country. Became (1888), professor of botany, physiology and materia medica in the New York College of Pharmacy. Has contributed largely to botanical literature and has been a strong proponent for reform in botanical nomenclature. Has published several books including his "Manual of Botany," and is an editor of the "National Standard Dispensatory." Was elected president of the American Pharmaceutical Association for 1909-1910. Was president of the Torrey Botanical Club for many years, and one of the founders of the New York Botanical Garden, and a member of its Scientific Directors and Board of Managers. Has recently returned from a trip as head of the Mulford Exploration of the Amazon Basin, of the H. K. Mulford Company, the aim of which has been to comprehensively study South American plants from various viewpoints, especially as to new sources of medicinal and economic products. Has recently had conferred upon him by the Philadelphia College of Pharmacy the honorary degree of master in pharmacy. He is strong, self-reliant, and positive in his opinions, and unalterably opposed to those who are guided by policy rather than principle. His research work in botany and pharmacognosy has been of the highest economic and industrial importance.

16. George M. Beringer: (Under Chapter XI).

17. Julius O. Schlotterbeck. Born in Ann Arbor, Mich. (1865). Early education in public schools. Graduated from University of Michigan (1887), and became assistant instructor in pharmacognosy and pharmacy (1888), later assistant instructor in pharmacy (1891), and was granted B. S. degree. Went to University of Berne, Switzerland, and graduated (1897) with the doctor of philosophy degree. Became assistant professor of pharmacognosy and pharmacy at the University of Michigan (1897-1904), then professor of the same (1905-1917); and was made dean of school of pharmacy (1905-1917). Was associated with Frederick Stearns and Company, of Detroit, as consulting expert for many years, and for a time was a member of the J. Hungerford Smith Company. Was a member of the Committee of Revision of the U. S. Pharmacopœia, of the American Association for the Advancement of Science, of the American Pharmaceutical Association, former secretary and president of the American Conference of Pharmaceutical Faculties, and member of the American Chemical Society. Schlotterbeck's research work was largely phytochemical; he discovered several vegetable alkaloids. Was a frequent and valued contributor to leading scientific journals and published many important papers. He was summoned to the "Final Analysis" in the noontide of his life (1917), when his brilliant ability as a pharmaceutical scientist was rapidly obtaining wide recognition.

18. Martin I. Wilbert: (Under Chapter VI).

19. Edward Kremers. Born (1865) in Milwaukee, Wisconsin. Son of Gerhard and Elise Kremers. Matriculated at Philadelphia College of Pharmacy (1881). Graduated as Ph.G. in University of Wisconsin (1886), B.S. (1888), Ph.D., University of Gottingen (1890); Sc.D., University of Michigan. Instructor of pharmacy (1890-1892), professor of pharmaceutical chemistry and director of course in pharmacy (1892- ), director of pharmaceutical experiment station (1913- ), of the University of Wisconsin. Editor of "Pharmaceutical Review" (1896-1909). Scientific editor of "Midland Druggist and Pharmaceutical Review" (1909-1910). Co-editor of National Standard Dispensatory. Member of Committee of Revision, U. S. Pharmacopœia (1900-1910). Member of A. A. S., American Chemical Society, American Pharmaceutical Association (since 1887), and historian (1902-1912), Wisconsin Academy of Sciences, Arts and Letters, and Wisconsin Historical Society. Author of (English edition) Gildemeister—Hoffmann—Kremers "The Volatile Oils" (1913-1920). Has contributed the reports of many original investigations to pharmaceutical and scientific periodicals.

20. Henry Kraemer: (Under Chapter XI).

21. Henry V. Army: (Under Chapter X).

### A Specialized Scientific School

The passing of Professor Remington on the New Year's Day of 1918, was a breaking of the ties with the past. As we have seen, his connection with the College encompassed half a century. During all of this time he had been a vital force in Philadelphia; for a large portion of the period a controlling factor—the foremost figure, indeed, of American Pharmacy. He had completed his service as Chairman of the Committee of Revision of the Ninth Decennial Revision of the Pharmacopœia.



CHARLES H. LAWALL

The sixth edition of his *Practice of Pharmacy*, and the twentieth edition of the *United States Dispensatory*, upon whose title page his name appeared as the principal editor, had just been finished, and were on the press.

He died "in the harness." He had been ill indeed for sometime, so ill as to be unable to continue his accustomed labors and the end was not a surprise. His burial from Holy Trinity P. E. Church brought together a large body of men distinguished in pharmacy and other walks of life. From all sides came expressions attesting his work and worth, emphasizing the sense of loss which pharmacy everywhere had experienced. He had "attended more meetings in all probability and had taken an important part in them," said Professor LaWall, "than any other professional man of our time." In the American Pharmaceutical Association, in the Pennsylvania and other state association meetings, in international congresses, as a

delegate to and as the head of delegations to meetings of the American Medical Association and other associated and related scientific bodies, for the purpose of establishing closer ties between the professions, he was always the quiet, effective and successful figure which he had been and was in the smaller circle in which he moved in Philadelphia. His "diplomatic power and his harmonizing influence," says his friend LaWall were "wonderful." His personal magnetism led to his being very justly called a great stabilizer. Those who had known him best noted his deep abiding faith in the nobility and dignity of pharmacy as a profession. There



E. FULLERTON COOK

was no task too difficult to perform, no expense was questioned when he saw an opportunity to be of service in the advancement of a profession of which he was so proud. To his gift of imparting knowledge and enthusiasm to others there were many witnesses. He was a teacher of teachers and generations of pharmacists would not look upon his like again. (Charles H. LaWall, *Amer. Jour. Phar.*, Feb., 1918.)

Following the death of Remington, LaWall was advanced to his chair as Professor of the Theory and Practice of Pharmacy. At the same time, 1918, he was elected Dean of Pharmacy and Chairman of the Faculty. Professor Cook was made Professor of Operative Pharmacy and Director of the Pharmaceutical Laboratory. Professor Sturmer, who had been associate dean, was made Dean of Science.



The College had long ceased to be a College of Apothecaries, for the "old-time apothecary," as Professor Sturmer observed, was no more. He has "gone the way of the tallow candle and the Franklin stove," and his place has been taken by "the modern prescriptionist and the manufacturer of medicinal products, the assayer and control chemist, the bacteriologist, the clinical chemist and hospital technician, the distributor of sick room supplies, the manager of the drug emporium and the merchant prince, dealing in drugs on an extensive scale." (*College Bulletin*, April, 1921). It had now become a great specialized scientific school. In token of the extension of its activities, a new charter was secured in 1920, and the name of the corporation was changed to the Philadelphia College of Pharmacy and Science. Beginning a hundred years ago with two lectureships and two courses—one on materia medica and pharmacy, and one on chemistry, given at night two or three times a week, during the winter months, the College in 1921 had come to have an instructional corps of forty teachers in a wide variety of related subjects, giving graded courses, conferring many kinds of degrees and awarding a number of certificates. Each one of three lecture rooms accommodates 350 students. The school is equipped with five large laboratories. Already, in 1908, its rolls contained the names of 18,000 matriculants. Its diplomas have been given to 7500 graduates; and the whole number of students who have heard the lectures and worked in the laboratories of the College now exceeds 20,000.

### Lecture Rooms and Laboratories

The College building is equipped with three large lecture rooms, each provided with desks for students; with a projection apparatus for lantern slides; and with an unusually rich equipment for illustrations and demonstrations, which has been accumulated by the College during the one-hundred years of its activities. There is in addition a smaller lecture room for the use of advanced classes in chemistry. There are five large laboratories as follows: (1) Pharmacy, (2) Analytical Chemistry, (3) Botany and Pharmacognosy, (4) Bacteriology, (5) Technical, Pharmaceutical and Advanced Chemistry. In connection with the latter, there are smaller rooms equipped respectively for water analysis, gas analysis, polariscopic determinations, fire assays, and electrolytic analysis. The Department of Botany and Pharmacognosy conducts also a laboratory for advanced microscopical work.

### Library

The library contains upwards of 20,000 volumes, one of the largest and most complete collection of books and pamphlets on pharmacy and related sciences in the country. It is supplemented by the Remington Memorial Library, made up of scientific works assembled by and formerly owned by Professor Joseph P. Remington, who bequeathed them to Professors LaWall and Cook, and who in turn have made them available for the use as a reference library of the College. There are regularly on file, also, current numbers of the principal drug journals, both American and foreign.

The Edward T. Dobbins Library Fund of \$20,000, established in 1921 by Miss Mary A. Dobbins in memory of her brother—Edward Tonkin Dobbins, a graduate of the class of 1862 and a trustee of the College—a most generous contribution—is for the purpose of supporting and enlarging the library.

### Museum

The museum has developed from the little "cabinet" early formed in the old German Hall on Seventh Street. The collections are now reckoned as the most important of their kind in the United States. Drugs, chemicals, preparations and apparatus (modern and historical) gathered from many sources, are preserved, arranged and displayed, and are available for purposes of study. The specimens of plants are very numerous and include not only the Durand herbarium but also upwards of 200,000 specimens, assembled by Isaac C. Martindale, of Camden, N. J., and presented to the College in 1894, jointly by Howard B. French and the Smith, Kline and French Company. In addition, a large number of botanical specimens were presented to the College by the Commercial Museums of Philadelphia in 1916. Some of the material has been gathered from many sources, notably the Centennial Exposition (1876), the Columbian Exposition (1893), and the National Export Exposition (1900).

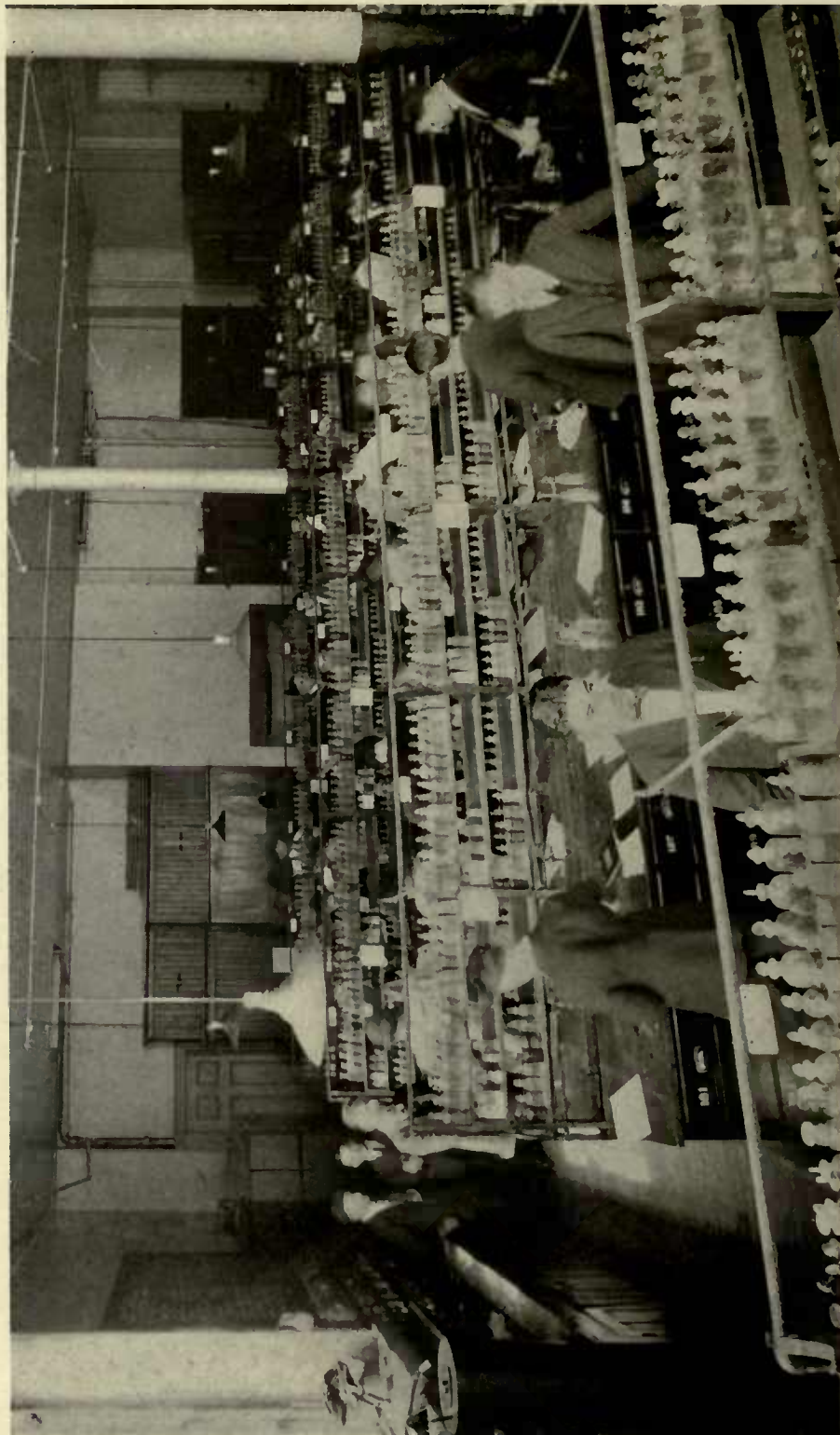
### Botanical Gardens

An ideal, long cherished, has recently been realized through the generosity of the H. K. Mulford Company, which has given the College the use of a tract of land located at Ridgway, near Glenolden, Pa., as botanical gardens for the cultivation of medicinal plants. These gardens are under the direction of Professor Heber W. Youngken, aided by Dr. Thomas S. Githens, Chief Botanist of the H. K. Mulford Company and comprise four plots covering about three acres of ground. The two largest of these are laid out in a series of family beds, each containing a representative variety of plants of medicinal and general interest for systematic study. A third plot covers a stretch of nearby woodland where such sylvan species as Golden Seal, Witch Hazel, Wahoo, Ginseng and Cranesbill are grown, while plot four occupies a marsh and sub-marsh area for the growth of such plants as Calamus, Typha, Iris, Veratrum, Skunk Cabbage, etc. A greenhouse and cold frames on the grounds provide adequate facilities for the growth of seedlings. In addition, the College maintains a greenhouse and garden on the roof of one of its laboratories for use in growing material for class work, and in connection with experiments in plant physiology.



PHARMACEUTICAL LABORATORY





ANALYTICAL CHEMICAL LABORATORY



BOTANICAL AND PHARMACOGNOSTICAL LABORATORY

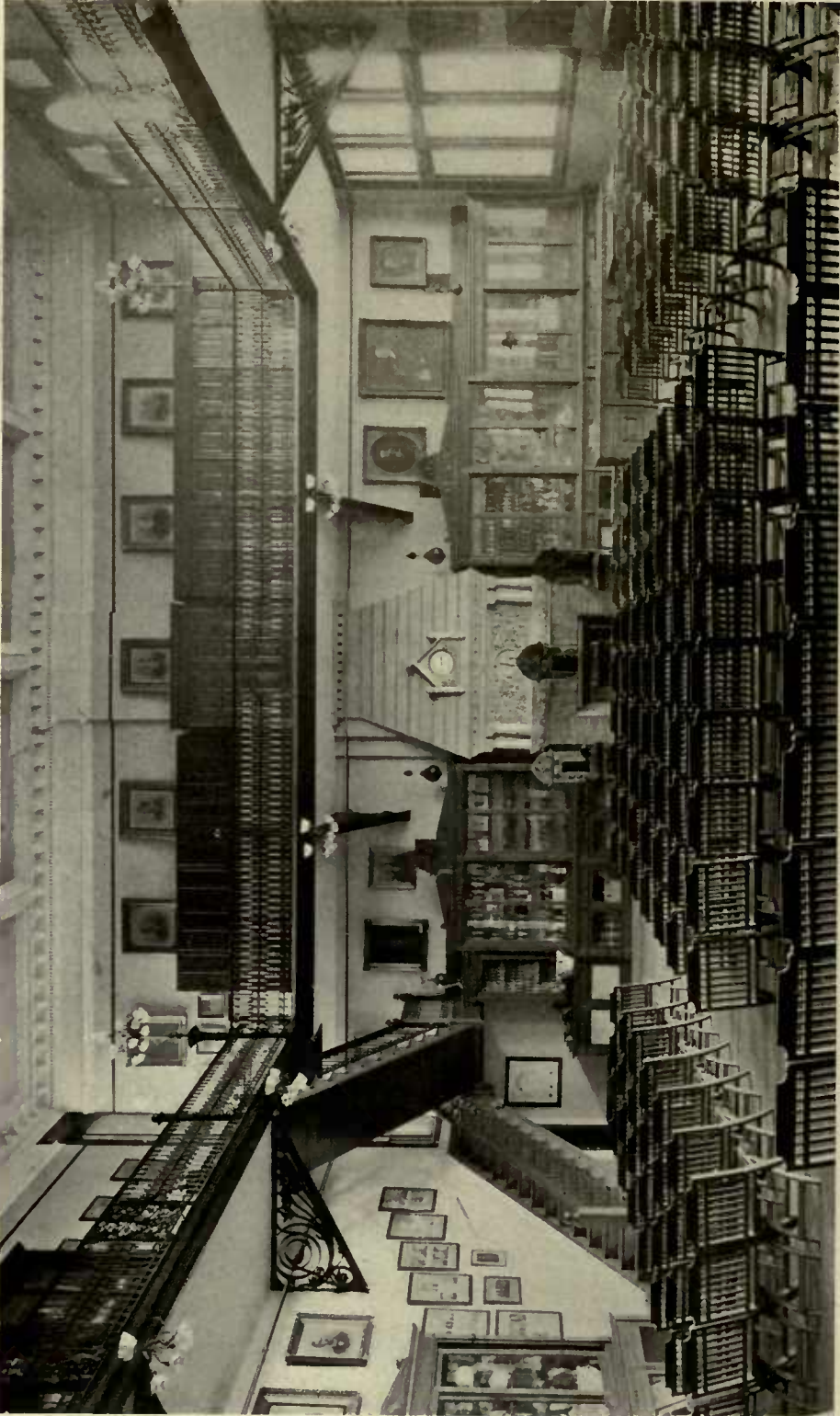


BACTERIOLOGICAL LABORATORY





LIBRARY



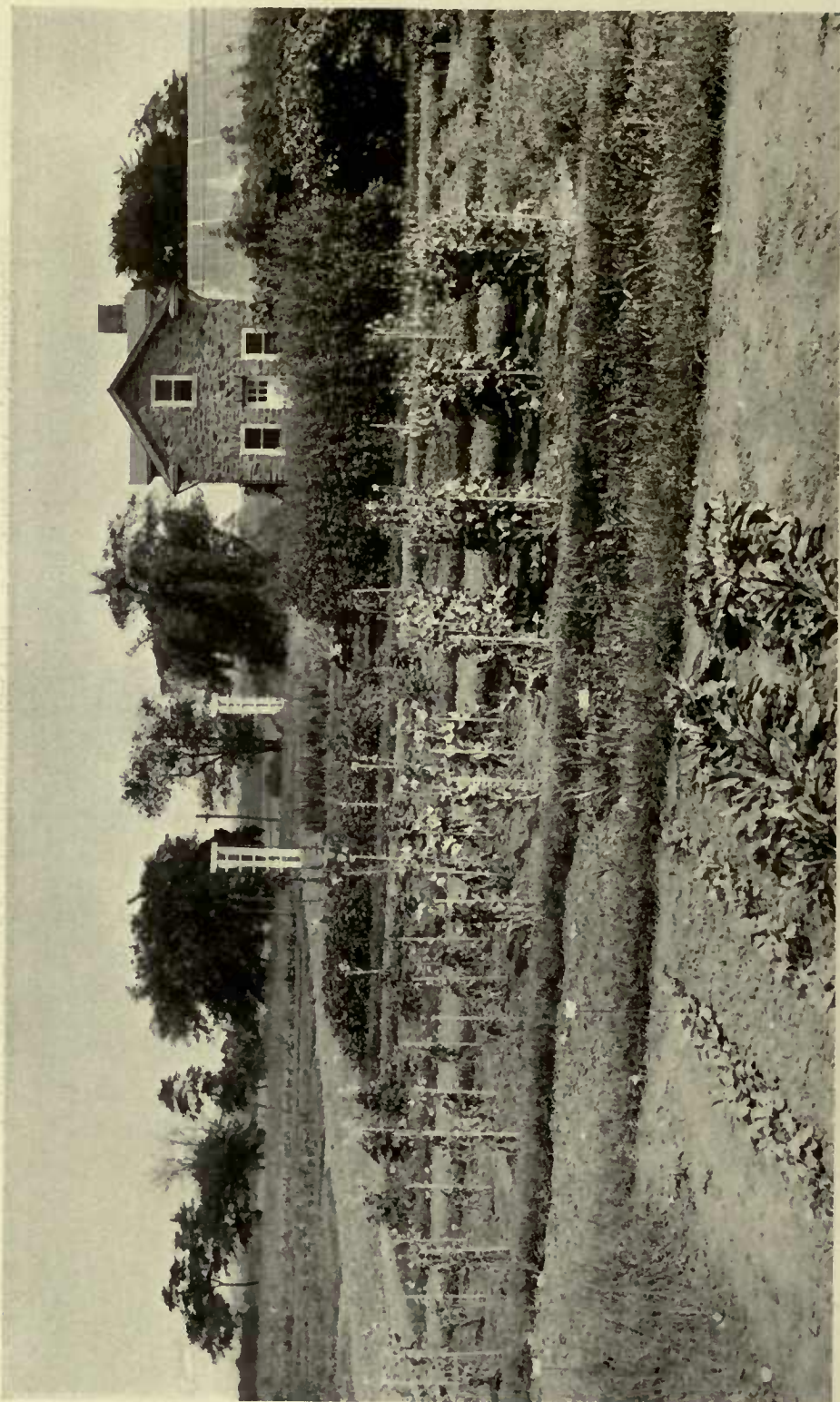
MUSEUM





BOTANICAL GARDENS OF THE PHILADELPHIA COLLEGE OF PHARMACY AND SCIENCE





BOTANICAL GARDENS OF THE PHILADELPHIA COLLEGE OF PHARMACY AND SCIENCE

### Scholarships, Fellowships and Prizes

To promote scholarship and research, there have been founded, from time to time, by friends of the College, certain grants, privileges and prizes to students and post graduates, as follows:

#### Scholarships for New Students

The Philadelphia Public School Scholarships (Founded 1903)—one free scholarship to each of the following schools of Philadelphia: The Central High School, the Northeast High School, the West Philadelphia High School for Boys, the South Philadelphia High School for Boys, the Germantown High School, the Frankford High School, the Southern High School for Girls, the High School for Girls, the William Penn High School for Girls and the West Philadelphia High School for Girls, upon the condition that each student to whom one of the foregoing scholarships is to be awarded first signs an agreement to follow the study and practice of Pharmacy or one of its allied branches for a profession.

The E. T. Dobbins Scholarship (Founded 1906)—The E. T. Dobbins Scholarship is limited to matriculants who are residents of New Jersey and is awarded after a competitive examination. The applicant must produce evidence of the possession of a good English education and a good moral character. Preference is given to those applicants who are engaged in the practice of Pharmacy.

Pennsylvania Scholarships (Founded 1919)—The Legislature of Pennsylvania in 1919 established competitive State Scholarships to aid young men and women in obtaining a higher education. These scholarships are offered to graduates of a four-year high school course and the successful applicant may enter any college or university approved by the State Council of Education. The Scholarship consists of \$100 per year for four years. Each county is entitled to one scholarship or as many as there are entire Senatorial districts in the county. The competitive examinations must be held under the direction of the State Council of Education and scholarships are awarded by them.

#### Scholarships for Second Year Students in Ph.G. Course

The Thomas S. Wiegand Scholarship (Founded 1909), valued at \$100.00.

The James T. Shinn Scholarship (Founded 1909), valued at \$100.00.

The Thomas H. Powers Scholarship (Founded 1899), valued at \$75.00.

The Henry and W. P. Troth Scholarship (Founded 1904), valued at \$75.00.

The Peter Williamson Scholarship (Founded 1874), valued at \$45.00.

The Robert Bridges Scholarship (Founded 1879), valued at \$45.00.

The John M. Maisch Scholarship (Founded 1894), valued at \$45.00.

The Edward C. Jones Scholarship (Founded 1897), valued at \$30.00.

These scholarships are awarded annually on merit as evidenced by the scholastic record of the students' first year of the course.

Inter-Collegiate Competition Scholarship—Samuel W. Fairchild, New York City, offers a scholarship annually amounting to \$300.00 in cash to the member of the first year class of any college or school of pharmacy in the American Conference of Pharmaceutical Faculties. The award is made by a committee of the American Pharmaceutical Association on the basis of a competitive examination to be held at the respective colleges in June, on a date to be announced through the Deans of the colleges.

#### Scholarships for Post-Graduate Students

The Keasbey & Mattison Scholarship (Founded 1900)—Its value is equal to the tuition fee for a single year for any post-graduate course which leads to a degree.

The Class of 1884 Memorial Scholarship (Founded 1909)—This scholarship, established by Frank G. Ryan, Ph. M., and continued since his decease by his daughter, Mrs. Charles A.



Dean, Jr., of Detroit, Mich., has a value of \$100.00 and will be applied on the tuition of the post-graduate student to whom it is granted.

The Pennsylvania Alumni Scholarship (Founded 1915)—Valued at \$100.00, to be applied on the tuition of the student receiving the award.

These scholarships are awarded on merit as evidenced by the students' scholastic record in the under graduate course.

### Research Fellowship

Clayton French Fellowship (Founded 1914, by his daughter Mrs. Mary I. Banks)—The sum of \$5,000 has been donated by Mrs. Mary I. Banks to found a post-graduate fellowship, the holder of which shall devote himself to scientific research along pharmaceutical lines.

### Joseph Price Remington Loan Fund for Students

Under the will of the late Professor Joseph P. Remington, a bequest of ten thousand dollars was left in trust so that the income could be used to assist students in the payment of their tuition fees. The maximum amount to be loaned to any student is \$100.00, which is advanced at a low rate of interest and under certain rules prescribed by the Board of Trustees.

### Class Prizes

The Howard B. French Cup.—Former President, Howard B. French presented in 1901, a silver loving cup in commemoration of the eightieth year of the existence of the College, to be held by the class of 1901, "until a succeeding class attains a higher general average, at which time it is, by direction of the Board of Trustees and upon recommendation of the three oldest professors (in point of service), to be awarded to said class, and to be retained by that class until a succeeding class shall have attained a higher general average, and so on perpetually from class to class, possession being regulated solely by a class attaining a greater general average than the class then in possession of the cup."

It has been awarded to the classes of 1901, 1902, 1903, 1904, and 1909, under the terms of the gift.

Under the provisions now operative, the Howard B. French Cup will be awarded on recommendation of the Committee on Examination and Faculty to the Ph.G. Class attaining advanced scholarship.

Wellcome Cup.—Henry S. Wellcome, of Burroughs, Wellcome & Co., of London, England, a graduate of the Philadelphia College of Pharmacy, Class of 1874, has presented a silver-gilt loving cup to the College as an expression of regard for his alma mater. This cup has been awarded to the second year classes of the three-year course, and was earned successively by the classes graduated in 1906, 1910, 1911, 1913, and 1914.

Under the provisions now operative, the Wellcome Cup will be awarded to the B.Sc. graduating class attaining to advanced scholarship.

Martin Cup.—N. H. Martin, F.L.S., F.R.M.S., of New Castle, England, an honorary member of the Philadelphia College of Pharmacy, has presented a silver loving cup, dedicated to the memory of distinguished English and American Pharmacists.

The cup is awarded to the graduating class of the two-year course obtaining a higher average than the one immediately preceding it.

It has been awarded to the classes of 1909, 1911, 1912, 1913, 1915, 1916, 1918 and 1921.

"Graduate 1913" Cup.—The Class-Book Committee of the Class of 1913, has presented a silver loving cup to be awarded to the Class of 1916 at the conclusion of the First Year Course, to be held by the class "until a succeeding First Year Class attains a higher general average, at which time it is to be awarded to said class, and to be retained by that class until a succeeding class shall have attained a higher general average, and so on perpetually from class to class, possession being regulated solely by a First Year Class attaining a greater general average than the class then in possession of the cup."

It has been awarded to the P.D. classes of 1916 and 1917, and to the Ph.G. classes of 1917 and 1919.



### Individual Prizes

**Procter Prize.**—The "Procter Prize" (gold medal and certificate), awarded to the most meritorious member of the Class graduating with the degree of Ph.G., provided, that in accordance with the will of the late Professor William Procter, Jr., such is, in the opinion of the Board of Trustees, deserved.

**William B. Webb Memorial Prize.**—A gold medal and certificate is offered by Mrs. Rebecca T. Webb for the highest general average attained at the final examinations in the branches of Operative Pharmacy, Analytical Chemistry and Pharmacognosy by a member of the class graduating with the degree of Ph.G.

**The Joseph P. Remington Memorial Prize.**—Twenty dollars, offered by the Estate of Joseph P. Remington to the member of the class graduating with the degree of Ph.G., who shall have attained the highest average in the examination in Operative Pharmacy and Dispensing.

**The Frank Gibbs Ryan Prize.**—A gold medal endowed recently by the Class of 1884, as a memorial to their distinguished classmate, who for many years was an instructor in the College and assistant to the late Professor Remington, is awarded to the student making the best average in the chemical and pharmaceutical laboratory courses in the first and second years.

**Pharmacy Research Prize.**—Twenty dollars, offered by Professor E. Fullerton Cook to the member of the class graduating with the degree of Ph.G., who shall present a sufficiently meritorious thesis outlining an original investigation and improvement in a Pharmacopœical or National Formulary preparation or group of preparations, accompanied by specimens.

**Upsilon Sigma Phi Fraternity Prize.**—Twenty-five dollars, offered by Upsilon Sigma Phi Fraternity, for any outstanding service, in any form of student activity, which in the opinion of the Faculty and the Officers of the Fraternity is particularly to the benefit of the student body and the College as a whole. To be awarded annually, and open to any student of the College.

**Mahlon N. Kline Pharmacy Prize.**—A Troemner Agate Prescription Balance is offered by the Mahlon N. Kline Estate to the member of the class graduating with the degree of Ph.G., who shall have attained the highest average in Theory and Practice of Pharmacy.

**The J. B. Moore Memorial Prize.**—Twenty-five dollars in gold, offered by the Rev. J. J. Joyce Moore and Mrs. H. H. Watkins, Jr., in memory of their father, J. B. Moore, to the member of the class graduating with the degree of Ph.G., who presents the best thesis representing work in the Department of Pharmacy.

**The Bacteriology Prize.**—Twenty-five dollars, offered by the H. K. Mulford Company to the student of the graduating class who attains to the highest general average in Bacteriology and Serum Therapy.

**Pharmacy Prize.**—Twenty-five dollars, offered by Professor Charles H. LaWall to the member of the class graduating with the degree of Ph.G., who presents the most acceptable thesis embodying original work in connection with any problem of research in Pharmacy.

**General Chemistry Prize.**—Twenty-five dollars, offered by Professor Freeman P. Stroup to the member of the class graduating with the degree of Ph.G., who presents the most acceptable thesis embodying original work in connection with any problem of research in General Chemistry.

**Materia Medica Prize.**—Twenty-five dollars, offered by Professor Clement B. Lowe, to the member of the class graduating with the degree of Ph.G., who presents the most acceptable thesis involving original research in Materia Medica.

**Analytical Chemistry Prize.**—Twenty-five dollars, offered by Professor Frank X. Moerk, to the member of any graduating class who presents the most acceptable thesis involving original work in Analytical Chemistry.

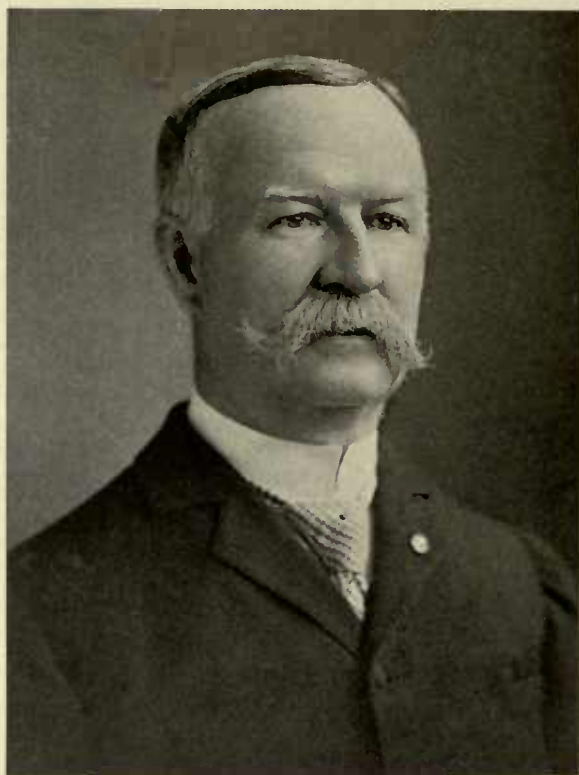
**Pharmaceutical Chemistry Prize.**—Twenty dollars, offered by Professor Julius W. Sturmer to the member of any graduating class who presents the most acceptable thesis involving original work in Pharmaceutical or in Industrial Chemistry.

## 236 First Century of the Philadelphia College of Pharmacy

**Biological Research Prize.**—Twenty dollars, awarded by Professor Heber W. Youngken to the member of either the Ph.G., or B.Sc., class presenting the most meritorious thesis involving original work in either Botany, Pharmacognosy or Zoölogy.

**The James J. Ottinger Prize.**—Twenty-five dollars, offered by Miss Elizabeth H. Ottinger, to be awarded to a student making not less than 90 per cent in each of the branches of Pharmacy, Operative Pharmacy, Materia Medica and Chemistry, and who has been employed in a reputable pharmacy for at least one year prior to graduation, and who has a satisfactory record, both as a student and as an employee. In case of a tie the award is to be made to the candidate who has the highest per cent in his practical pharmacy work.

**Maisch Botany Prize.**—A special prize of twenty dollars in gold, offered by Joseph Jacobs, Ph.G., Phar.D., D.Sc., of Atlanta, Ga., to the member of any graduating class who shall have presented the best herbarium collection of plants, or in case a meritorious herbarium is not submitted, then for the best thesis on the microscopical structure of one of our



EDWARD T. DOBBINS

medicinal plants, either official or unofficial. In case a herbarium is presented, the specimens must be mounted on standard herbarium paper; each specimen must have been collected by the contestant and must be properly labeled, the label giving the botanical name of the plant, date and place of its collection, character of soil and any other useful information placed on the lower right-hand corner of the sheet.

**Alumni Prizes.**—A gold medal will be awarded to the member of the class graduating with the degree of Ph.G., and a silver medal to the first year student, who attain the highest averages in their classes.

Prize certificates will be awarded to the members of the class graduating with the degree of Ph.G., who excel in the final examinations in the individual branches.

Pharmacy Review Prize.—One year's membership in the American Pharmaceutical Association, offered by Ivor Griffith, P.D., to the member of the class graduating with the degree of Ph.G., who shall have attained the highest average in Theory and Practice of Pharmacy in the Senior Year of his course.

#### Edward T. Dobbins

Edward T. Dobbins (1841-1906). Born at Pemberton, N. J. Apprenticed with William B. Webb, of Philadelphia. Graduated from the College in 1862 and entered the employ of John Wyeth; became a member of the firm, and later, second vice-president. Was actively identified with the College as a member (1898-1906) and as a trustee (1899-1906). His will provided for the establishment of a scholarship in the College. Was an early member of the Union League of Philadelphia, a member of the Colonial Society of Pennsylvania, the Sons of the Revolution and the Country Club. Of the highest integrity, he was always ready to help those in need.

#### James T. Shinn

James T. Shinn (1834-1907). Born in Philadelphia. Early education at Friends' schools. Apprenticed with Charles Ellis and Co. Graduated from the College (1854), and succeeded his brother in business at the northeast corner of Broad and Spruce Streets, afterwards remov-



JAMES T. SHINN

ing to the southwest corner of same streets. Elected a member of College (1858), a trustee (1859) and treasurer (1894). Member of Pharmaceutical Examining Board of Philadelphia (1872-1887). President of American Pharmaceutical Association (1880-1881). Was Secretary of Board of Managers of Pennsylvania Hospital for many years; also, manager of Fuel



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Savings Society, president of Catherine Street Home of Industry, and president of Vacant Lots Association. A man of broad-minded sympathies who filled a large place in the charitable activities of his city.

### Samuel W. Fairchild

Samuel W. Fairchild, of Pilgrim ancestry, in a direct line from Thomas Fairchild, one of the Company who founded the plantation of Stratford, Connecticut, about 1636. Born at Stratford, 1852; son of Thomas B. Fairchild and Susan A. Fairchild. Graduated from the Philadelphia College of Pharmacy, under the tutelage of Alfred B. Taylor, 1873; worked for Caswell, Hazard and Company, of New York, and McKesson and Robbins. Went into business with his brother, Benjamin T. Fairchild, as manufacturing chemists, in New York. Early evidenced interest in public affairs, and the promotion of pharmaceutical education. Received honorary degree of master in pharmacy from Philadelphia College of Pharmacy, 1908. Served as president of the College of Pharmacy of the City of New York, 1890-1896.



*Photo by Champlain Studios, N. Y.*

SAMUEL W. FAIRCHILD

Degree of master of science conferred upon him by Columbia University, 1911. President of the Union League Club of New York, 1911-1915; vice-president of the New York Chamber of Commerce; member of the Metropolitan Museum of Art; member of the Metropolitan Club of New York, Metropolitan Club of Washington, Virginia Club of Norfolk, Devonshire Club of London, Travelers' and L'Union Interalliée of Paris; interested in charitable and civic societies. For distinguished service during the World War received decorations from several foreign governments. Of fine native intelligence, sagacity, intuition and ideals motivated to an uncommon degree with the gift of common sense.

**Richard V. Mattison**

Richard V. Mattison, President of the Keasbey and Mattison Company. Born (1851) at Solebury, Bucks County, Penna. Son of Joseph Jones and Mahala Mattison. Attended public school. Graduated from the College in 1873, subject of thesis being "Elegant Pharmacy"; graduated from the medical department of the University of Pennsylvania in 1879. Established the Keasbey and Mattison Company, manufacturing pharmacists, and which plant later became the largest manufacturing plant in the world for magnesium carbonate, and the largest plant in the United States, if not in the world, for the manufacture of asbestos textiles of every description; the Keasbey and Mattison Company which succeeded the firm of Keasbey and Mattison, having in the meantime opened the world-famous Bell Asbestos Mines at Thetford Mines, P. Q., Canada, which is probably the most productive asbestos mines extant. After his graduation in medicine, he founded the Bell Asbestos Mines, a mining



*Photo by Gutekunst*

**RICHARD V. MATTISON**

corporation, and served as president of the First National Bank of Ambler, Penna., for ten years or more, still retaining his directorship in that body. Was elected a member of the College (1874), second vice-president (1900-10), first vice-president (1910-21). President of the Philadelphia Drug Exchange (1887-1888). Founded and is president of the Asbestos Shingle, Slate and Sheathing Company, the Bell Asbestos Mines, Thetford, P. Q., Canada, the Ambler Spring Water Company, the Upper Dublin Water Company, the Telenduron Company, etc. Member of many scientific societies; Republican in politics; Episcopalian in religion, he having some years ago erected the magnificent church in Ambler, known as the "Church of the Beautiful Windows," which he presented to the Diocese of Pennsylvania, in memory of his daughter.

### Clayton French

Clayton French (1824-1890). Son of Uriah and Mary (Ivins) French, of Swedesboro, N. J. Apprenticed to Dr. Edward S. Wilcox in retail drug business at northwest corner of Eleventh and Callowhill Streets. Upon his preceptor's death he formed a partnership with William Campbell, but after one year it was dissolved, and succeeded by the firm of French and Richards, wholesale druggists, afterwards French, Richards and Co. For over forty years Clayton French was the active member of the firm. In 1852 his elder brother, Samuel H., became associated with him, and in 1883, the brothers French dissolved business connection—Samuel continuing the manufacturing department at Fourth and Callowhill Streets, and Clayton the drug business at Tenth and Market Streets. Two years later, Clayton French



CLAYTON FRENCH

connected with him his son Harry B., and later (1888) his son Samuel H. French, Jr., and his nephew, C. Stanley French. Was one of the prominent figures in the drug trade of his day. Was one of the founders of the Philadelphia Drug Exchange in 1861, and a director (1861-1862), a partner of the firm of Bailey, Banks and Biddle, a director of the Guarantee Trust and Safe Deposit Company, the Pennsylvania Warehousing Company, the Pennsylvania Salt Manufacturing Company, the Philadelphia Board of Trade, and other bodies. Was actively interested in civic affairs during the Civil War, and later, believing in the maintenance of sound principles of government and upright political methods, and contending for them.



**William B. Webb**

William B. Webb (1824-1894). Born in York, Pa. Apprenticed to Caleb Needles, of Philadelphia (1842). Graduated from the College (1845). Went into business at Tenth and Spring Garden Streets (1847-1886). Early religious training was as a Presbyterian, but in 1852, he united himself with the Society of Friends. Was an earnest advocate for the abolition of human slavery, and of prohibition. Became a trustee of the College (1872-1894),

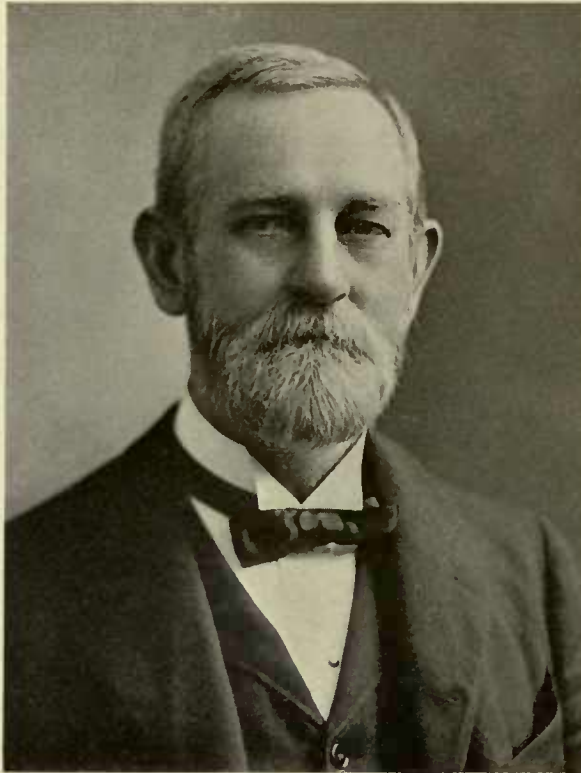


WILLIAM B. WEBB

and treasurer (1889-1894). Degree of master in pharmacy was conferred upon him by his Alma Mater, in 1887. As a pharmacist he earned a well-deserved reputation for skill and accuracy, while his conscientious views on the responsibility of his calling gained for him the esteem of the medical profession and his fellow pharmacists. He was devoted to his Alma Mater and untiring in his work for her.

**J. B. Moore**

J. B. Moore (1832-1909). Born near Newark, Del. Apprenticed to Dr. John N. Sutton, of St. George's, Del. (1846). Opened first pharmacy at Coatesville, Pa. (1853), but soon moved to Danville, Pa., and then to Philadelphia (1861), opening a store at the northeast corner and later the southeast corner of Lombard and Thirteenth Streets, where he was eminently successful in business, retiring in 1902. Was a master pharmacist and took the deepest interest in practical pharmacy. His contributions to the *American Journal of Pharmacy*,



J. B. MOORE

and to the *Druggist's Circular*, were many and valuable. Was a member of the American Pharmaceutical Association and the Philadelphia College of Pharmacy. He loved his profession and strove earnestly to advance it.

### James J. Ottinger

James J. Ottinger (1849-1914). Graduated from the College (1870). Became manager of John Wyeth and Brother, later going to New York as manager for Caswell, Hazard Company. Later (1880), opened a store at Twentieth and Spruce Streets, Philadelphia, where, as a retail and manufacturing pharmacist, he was very successful, his products being widely and favorably known. He was a member of a number of pharmaceutical bodies.

### Joseph Jacobs

Joseph Jacobs (1859- ). Born in Chicago; while an infant parents moved to Jefferson, Jackson County, Georgia. Graduated from the Philadelphia College of Pharmacy (1879). Started in business in Athens, Georgia (1879); removed to Atlanta, Georgia (1884), where he is president and chief owner of ten pharmacies and a laboratory. Member of American Pharmaceutical Association and chairman of its Section on Commercial interests in 1898. Instrumental in having the Government issue commercial reports, especially on the commerce of drugs. Has contributed many valuable papers to the daily and pharmaceutical press upon the cultivation of indigenous plants in this country. Instrumental in having the claims of his preceptor, Dr. Crawford W. Long, of Athens, Georgia, recognized as the dis-



JOSEPH JACOBS

coverer of the use of ether as an anesthetic, erecting in 1921 a bronze monument and medalion, in memory of Dr. Long, on the campus of the University of Georgia. Awarded Honorary Degree, D.Sc., University of Georgia, 1921. Has a noteworthy collection of Burns' volumes, some 400, beginning with the first Edinburgh edition in 1787 up to Dr. McNaught's work in 1921. On January 25, 1896, at a dinner given by Mr. Jacobs, the Burns Club of Atlanta was founded, and last year it celebrated its silver anniversary. This organization is regarded by the Burns Clubs of the World as being most unique. The membership is not confined to those of Scottish origin, but is composed of the lovers of Burns. The club owns large grounds, several buildings, including the only replica of the original cottage in existence, has no debts and is in a flourishing condition.

### Administrative Changes of 1921

In token of the development of pharmacy along so many lines and the growth of the needs and requirements of young men and women who are adopting this profession, a directing head for the new and various activities of the College was sought and found in Rear Admiral William Clarence Braisted of the U. S. Navy. With a thorough scientific training and wide practical experience, it was felt that this leadership would give the school valuable guidance. Compassing a knowledge of medicine as well as pharmacy, it was clear that he could make himself a useful link between the two professions, between which there has been, at times, an imperfect understanding and an unfortunate want of sympathy and co-operation.



Always the College had had for its president a Philadelphia business man, usually he had been some highly intelligent successful Quaker pharmacist. It was a very new policy to make a draft upon scientific ranks for an executive officer. Howard B. French, who had served the College in so many useful ways for forty or fifty years, for twenty years as its president, was succeeded on March 28, 1921, by Otto W. Osterlund, a graduate of the College and prominent in the drug circles of the city, a member of the Board of Trustees and former president of the Alumni Association, and he was succeeded on May 9, 1921, by William C. Braisted, former Surgeon-General of the U. S. Navy.



OTTO W. OSTERLUND

Frank R. Rohrman, a well-known graduate of the College, President of the Philadelphia Wholesale Drug Company, was elected first vice-president at the annual meeting of 1921 to succeed Dr. Richard V. Mattison, who retired after many years in this position; Milton Campbell, President of the H. K. Mulford Company, succeeded Aubrey H. Weightman as treasurer. Ambrose Hunsberger succeeded Dr. Charles A. Weidemann as recording secretary. Ivor Griffith, for a number of years an instructor in the College, and pharmacist of the Stetson Hospital, became, beginning with the April number, the editor of the *American Journal of Pharmacy*, to succeed George M. Beringer, who had been occupying the post since 1917.



WILLIAM C. BRAISTED

The officers of the College and the Faculty in 1921 after the changes attending the reorganization, were as follows:

OFFICERS  
OF THE  
PHILADELPHIA COLLEGE OF PHARMACY AND SCIENCE

*President*

William C. Braisted, Ph.D., M.D., D.Sc., LL.D.

*Vice-Presidents*

Frank R. Rohrman, Ph.G.

Joseph L. Lemberger, Ph.M.

*Corresponding Secretary*

Adolph W. Miller, Ph.G., M.D.

*Recording Secretary*

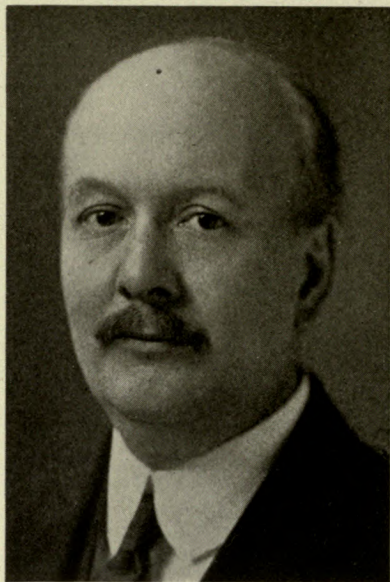
Ambrose Hunsberger, Ph.G.

*Treasurer*

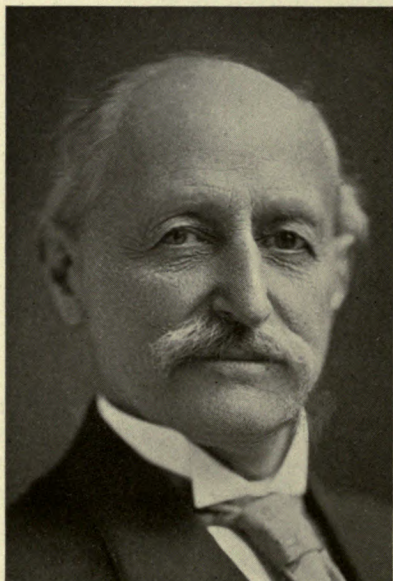
Milton Campbell, Ph.G.



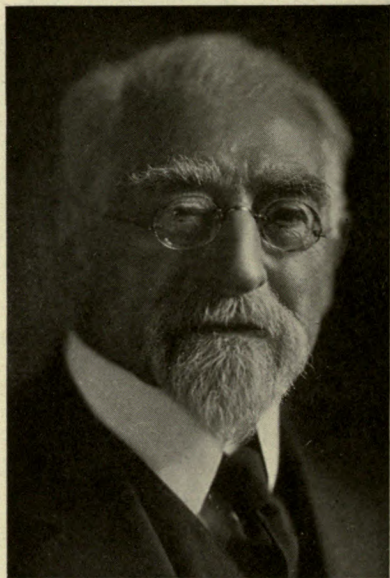
First Century of the Philadelphia College of Pharmacy



FRANK R. ROHRMAN  
First Vice-President



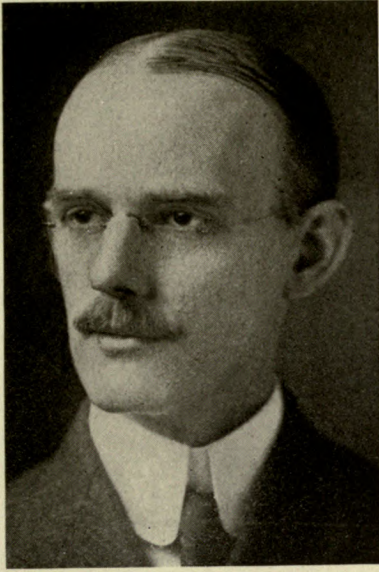
JOSEPH L. LEMBERGER  
Second Vice-President



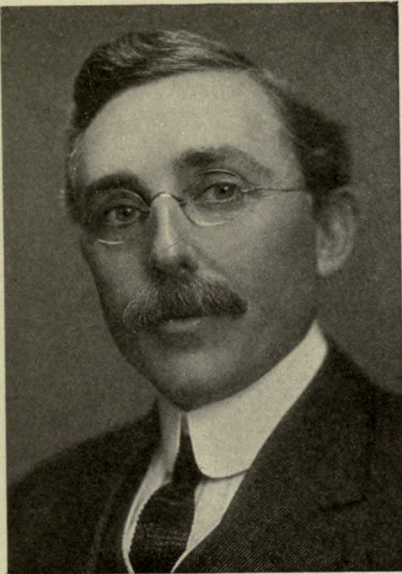
ADOLPH W. MILLER  
Corresponding Secretary



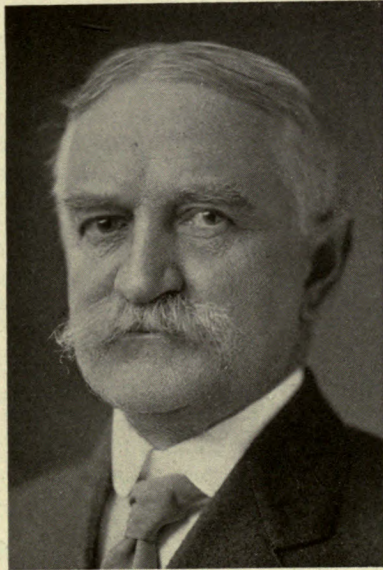
First Century of the Philadelphia College of Pharmacy



AMBROSE HUNSBERGER  
Recording Secretary



MILTON CAMPBELL  
Treasurer



SAMUEL P. SADTLER  
Chairman, Board of Trustees

*Board of Trustees*

Otto W. Osterlund, P.D.	Samuel P. Sadtler, Ph.D., LL.D.
Theodore Campbell, Ph.G.	William L. Cliffe, Ph.M.
Warren H. Poley, Ph.G.	Russell T. Blackwood, Ph.G.
Benjamin T. Fairchild, Ph.G.	Richard H. Lackey, Ph.G.
Josiah C. Peacock, Ph.G.	William Duffield Robinson, Ph.G., M.D.
Horatio N. Fraser, Ph.G., M.D.	Samuel P. Wetherill, Jr., B.S.
Joseph W. England, Ph.M.	Frank P. Streeper, Ph.G.
Otto Kraus, Ph.G.	Robert S. Sherwin, Ph.G.
Paul A. Kind	Walter V. Smith, Ph.G.
George B. Evans, Ph.G.	C. Mahlon Kline, Ph.B.
George D. Rosengarten, Ph.D.	Charles H. LaWall, Ph.M., Sc.D.
Samuel P. Sadtler, Ph.D., LL.D. <i>Chairman</i>	Joseph W. England, Ph.M. <i>Vice-Chairman</i>
Jacob S. Beetem, Ph.G. <i>Registrar</i>	Heber W. Youngken, Ph.M., Ph.D. <i>Curator</i>
Freeman P. Stroup, Ph.M. <i>Librarian</i>	Mrs. Ada S. Capwell <i>Assistant Librarian</i>

Ivor Griffith, Ph.M.  
*Editor of American Journal of Pharmacy*

## FACULTY

Charles H. LaWall, Ph.M., D.Sc., Dean of Pharmacy, Chairman of Faculty.  
Julius William Sturmer, Ph.M., Phar.D., Dean of Science.  
Frank X. Moerk, Ph.M., Director of the Technical Chemistry Courses.

## PHARMACY

Charles H. LaWall, Ph.M., D.Sc., Professor of Theory and Practice of Pharmacy.  
E. Fullerton Cook, P.D., Ph.M., Professor of Operative Pharmacy and Director of the  
Pharmaceutical Laboratory and Instructor in Commercial Pharmacy.  
Wallace S. Truesdell, A.M., Instructor in Latin.  
Ivor Griffith, Ph.M., Instructor in Pharmacy and in Pharmaceutical Arithmetic.  
Frank E. Stewart, Phar.D., M.D., Lecturer on Pharmacy Laws.  
Robert P. Fischelis, B.Sc., Phar.D., Lecturer on Commercial Pharmacy.  
Adeley B. Nichols, Phar.D., Instructor in Operative Pharmacy.  
Luther A. Buehler, Phar.B., Assistant in Operative Pharmacy.  
Howard Kirk, Esq., Lecturer on Pharmaceutical Jurisprudence and Commercial Law.  
C. A. Wesp, B.C.S., Instructor in Accounting.

## CHEMISTRY AND PHYSICS

Samuel P. Sadtler, Ph.D., LL.D., Professor Emeritus of Chemistry.  
Frank X. Moerk, Ph.M., Professor of Analytical Chemistry.  
Freeman P. Stroup, Ph.M., Professor of General Chemistry.  
Julius William Sturmer, Ph.M., Phar.D., Professor of Pharmaceutical Chemistry.  
Charles E. Vanderkleed, A.C., Phar.D., Lecturer on Chemical Control in Manufacturing  
Pharmacy.  
Henry Leffmann, M.D., Lecturer on Scientific Research.  
Joseph W. Ehman, Ph.G., Instructor in Analytical Chemistry.  
Ralph R. Foran, P.D., Instructor in Technical Chemistry.  
Edward J. Hughes, P.D., Instructor in General and Analytical Chemistry.



BOTANY AND PHARMACOGNOSY

Heber W. Youngken, Ph.M., Ph.D., Professor of Botany and Pharmacognosy, Director of the Microscopical Laboratory.

Benjamin H. Hoffstein, Ph.C., Instructor in Advanced Pharmacognosy and in Technical Microscopy.

Marin S. Dunn, A.M., Instructor in Botany.

MATERIA MEDICA

Clement B. Lowe, Ph.B., Ph.G., M.D., Medical Examiner and Professor of Materia Medica.

Mitchell Bernstein, P.D., M.D., Instructor in Materia Medica.

Paul S. Pittenger, Ph.D., Ph.M., Phar.D., Instructor in Physiologic Assaying.

BACTERIOLOGY

Louis Gershenfeld, Ph.M., B.Sc., Professor of Bacteriology and Hygiene.



## CHAPTER VII

## ALUMNI ASSOCIATION OF THE COLLEGE; ITS ORIGIN AND WORK

No college is stronger than its alumni, and no college in the land has more loyal and devoted alumni than the Philadelphia College of Pharmacy, including those of the Medico-Chirurgical College, merged with the College in 1916, who are ever voicing its praises and doing all within their power to promote its growth and development. It is therefore fitting that a chapter of this volume be devoted to the work and worth of the alumni body, as follows:

**Alumni Association of the College; Its Origin and Work**

JOSEPH W. ENGLAND, PH.M.

Recording Secretary of Alumni Association of Philadelphia College of Pharmacy and Science

The Alumni Association of the Philadelphia College of Pharmacy was organized under very modest circumstances, and to two men chiefly was the organization due—Edward C. Jones, '64, and his fellow classmate, Albert E. Ebert, '64.

From a beginning that was local, the Association has become national—the less than a score of original members have increased to over 5,000, resident in every state of the Union and in many foreign lands, and it is now one of the largest pharmaceutical organizations of the country.

The members of our Alumni Association have been signally honored in the pharmaceutical world by election to important and responsible positions in the city, state and national pharmaceutical bodies, and in many other directions. It is not possible to here enumerate those who have been so honored, but there may be mentioned the names of those who have become presidents of the American Pharmaceutical Association, as follows: William Procter, Jr. (1857), Edward Parrish (1868), Albert E. Ebert (1872), C. Lewis Diehl (1874), Charles Bullock (1876), James T. Shinn (1880), Alfred B. Taylor (1890), Joseph P. Remington (1892), Lewis C. Hopp (1903), Joseph L. Lemberger (1905), Eugene G. Eberle (1910), George M. Beringer (1913), Caswell A. Mayo (1914), Charles H. LaWall (1918), Lucius E. Sayre (1919). It may be noted, also, that Daniel B. Smith, president of the College in 1852, was the first president of the Association (1852), and Charles Ellis, president of the College from 1854 to 1869, was the sixth president of the Association (1857).

The training received by students in pharmacy affords an admirable preliminary training for students in medicine, and nearly five hundred graduates of the College have studied medicine, and are now in medical practice; and among these are the Surgeon-General of the U. S. Navy, colonels of the U. S. Army, rear-admirals, presidents of the state medical societies, specialists in the various branches of medical practice, professors, instructors, hospital superintendents, medico-legal experts, etc., an array that most worthily represents the College that gave them their pharmaceutical degree.

The organization was the result of a custom initiated by the senior students of 1855, and followed by succeeding classes, of organizing each year for mutual improvement, pharmaceutically, examining each other in the subject-matter of the lectures of the College and exchanging items of practical information. The organizations were ephemeral, disbanding at the close of each College year until 1864, when the Alumni Association was founded.

The first meeting of the Association was held on the evening of July 15, 1864, in a room above the drug store of Professor Edward Parrish, then at 800 Arch Street. Organization was effected, officers elected and a constitution adopted. The objects of the Association were stated to be: "The advancement of the profession of pharmacy, the perpetuation of the

pleasant social relations formed during College years, and the promotion of the interests of the Alma Mater."

The original members were: Edward C. Jones, Albert E. Ebert, Richard M. Shoemaker, C. Lewis Diehl, Adolph W. Miller, Edwin Tomlinson, Joseph E. Moore, Alfred W. Newton, J. H. C. Simes, William C. Bakes, Hiram Gold, Geo. W. Eldridge, Charles L. Eberle, W. H. H. Githens, Henry B. Morris and Joseph C. Kirkbride, of these, probably only two survive—W. H. H. Githens, class of 1861 and Adolph W. Miller, class of 1862, both of Philadelphia.

The following officers were elected: President, Wm. C. Bakes; first vice-president, Albert E. Ebert; second vice-president, Edwin Tomlinson; recording secretary, Hiram Gold; corresponding secretary, Adolph W. Miller; and treasurer, Richard M. Shoemaker. The Executive Board elected was: Edward C. Jones, Geo. W. Eldridge, C. Lewis Diehl, Charles L. Eberle, W. H. H. Githens, Henry B. Morris and Jos. C. Kirkbride.



EDWARD C. JONES

Edward C. Jones (1843-1895). Founder. Born in Philadelphia. Son of William and Jane P. Jones, members of Society of Friends. Early education in Friends' Select School. Apprenticed to Amos H. Yarnall. Graduated from College in 1864. Went into business with preceptor and with several partners succeeded him; later (1889) firm was dissolved, and he became associated with Robert Shoemaker and Company. Was elected treasurer of Alumni Association in 1868, serving with remarkable fidelity until his demise. Was a trustee of the College (1874-1895), a member of the American Pharmaceutical Association (1864-1895), and other pharmaceutical bodies. The love of his life was the College and its students, and many of these were the recipients of his acts of kindness, his simple and gentle words of sympathy and encouragement, and often, financial aid. It was in testimony of his years of self-sacrificing labor that the "Edward C. Jones Scholarship" of the College was founded.

## 250 First Century of the Philadelphia College of Pharmacy

Executive Board meetings were held during the year and twenty-one members were elected.

The first annual meeting of the Association was held on March 11, 1865, and the warmest interest was manifested in the welfare of the Alma Mater, resolutions being passed urging the establishment of a laboratory where pharmacy and chemistry could be practically taught, that a sinking fund be created out of the surplus funds of the Association, and that a special committee be appointed to obtain subscriptions and invest the same until a sufficient sum was obtained for the equipment of the laboratory. The passage of these resolutions resulted, ultimately, in the establishment of the first laboratory for teaching practical pharmacy and chemistry in a school of pharmacy in America.

The accumulation of the fund began, and by 1868 the subscriptions amounted to nearly \$5,000; in the fall of 1870, the laboratory for instruction in pharmacy and chemistry was opened and placed in charge of Professor John M. Maisch. At the annual meeting of March 14, 1872, it was stated that the expenses of fitting-up the laboratory has been paid, and a report from Professor Maisch, superintendent, was presented to the Association, detailing the work of the laboratory and giving the names of the twenty-four students in attendance during the session of 1870-1871 and the thirty-three students of 1871-1872.

At the annual meeting of March 17, 1873, the success of the new laboratory was dwelt upon and it was stated that, in view of the demand for increased facilities, the Executive Board had promptly met these in the fall of 1872, by placing a sufficient sum from its funds at the disposal of the Board of Trustees, and on December 3, 1872, the laboratory was formally transferred to the College by the Alumni Association and gratefully accepted.

The work of the laboratory grew, and in 1876 its two divisions of work were partially segregated—Professor Remington giving a course on pharmaceutical manipulations; and in 1878 he assumed full charge of the pharmaceutical laboratory (or laboratory of operative pharmacy), while Professor Maisch confined his instruction to the chemical laboratory. In the same year, the College first made obligatory an examination in practical pharmacy for graduation, and in 1884 practical examination in analytical chemistry was made compulsory.

The institution of prizes by the Alumni Association to stimulate the scholarship of students, was begun in 1871, when a gold medal was offered to the best student of the graduating class. Three years later the giving of a certificate of proficiency to the student having the highest average in each particular branch of study was commenced. In 1877 the awarding of a certificate to the best student in operative pharmacy was decided upon, and in 1878 the giving of a certificate to the student presenting, in competition, the best collection of indigenous plants, was inaugurated; a few years later, a silver medal was awarded to the best student of the Junior class, and a gold medal to best student of the Senior class, and in 1899, after the establishment of the three year pharmacy course, a bronze medal was awarded to the best student of the first year class, a silver medal to the best student of the second year class, and a gold medal to the best student of the third year class, to be followed, upon the return to the two-year-pharmacy course, by the award of silver and gold medals only.

Eight Alumni prize certificates for proficiency are now awarded in the following branches: Pharmacy, general chemistry, materia medica, operative pharmacy, analytical chemistry, pharmacognosy, pharmaceutical chemistry and commercial pharmacy.

Quizzing was very early instituted at the College and was conducted by the professors themselves, and in the late 70's by quiz masters approved by the Committee on Instruction of the Board of Trustees. In 1876 the subjects upon which quizzing was given were pharmacy and chemistry; the next year materia medica was added.

In 1880 the Alumni Quizzes were established by the Association in lieu of the quizzes of the quiz associations previously in vogue, and this constitutes the corner stone of the system of quizzing-reviews. The quizzes were very popular and successful.



The list of Alumni Quiz Masters included: Lucius E. Sayre, Chas. L. Mitchell, Henry Trimble, J. E. Cook, T. S. Wiegand, F. B. Power, Louis Genois, C. B. Lowe, F. E. Stewart and F. X. Moerk.

In 1881 College Reviews were inaugurated by the College, conducted by and placed in charge of the assistants to the professors; five years later the Alumni Quizzes and College Reviews were combined and conducted by the assistants, under the business management of



ALBERT E. EBERT

Albert E. Ebert (1840-1906). Founder. Born in Germany; father came to this country during Albert's early youth and settled in Chicago. Early education in public schools. Apprenticed (1852) to F. Scammon and Co., of Chicago. Attended Chicago College of Pharmacy (1859), entered the Philadelphia College of Pharmacy and graduated in 1864. Made doctor of philosophy by University of Munich (1867). Went into retail drug business in Chicago (1868). Became professor of pharmacy at Chicago College of Pharmacy (1871). Actively identified himself with the American Pharmaceutical Association (1864) and was its president in 1872. Deeply interested in pharmaceutical research. Founded the Ebert Prize Fund in the Association for stimulating original investigation. Active in revision of Pharmacopœia for several decades. Member of State Board of Pharmacy of Illinois for five years. Received master in pharmacy degree from P. C. P. (1894). Author (with A. Emil Hiss) of "Standard Formulary." Achieved national fame as a master-scientific pharmacist, his contributions to pharmaceutical literature being many and valuable.

the Alumni Association, Secretary William E. Krewson,\* representing the latter, as the College Review Quiz. In 1895 the entire control of the quizzes reverted to the College, and they were made compulsory.

For a score or more of years, beginning with 1876, monthly social meetings were held by the Association during each College year. Men of eminent ability addressed the meetings and recitations and entertainments were given, but the College grew and the demands on the students' time increased to such an extent that it became inexpedient to continue them.

In 1887 the Association requested the Board of Trustees to open a Reading Room in the College, which was done, and for a time it was in charge of the Secretary of the Association; ultimately it resulted in the present Reading Room of the Library.

To the Alumni Association belongs, also, the credit of first establishing in the College a microscopical laboratory. In the fall of 1881, the Executive Board considered the question of teaching microscopy as applied to pharmacy, but no definite action was taken until August, 1882, when a supply of microscopes and accessories was purchased, a course of study mapped out and Albert P. Brown elected as instructor in microscopy. Upon Mr. Brown's demise in 1892, George M. Beringer was appointed instructor, and continued to serve until the laboratory was turned over to the College by the Alumni Association in 1894, to become the botanical and microscopical laboratory.

With the completion of its first year of activities the Association published an annual report, and from 1865 to 1891 such reports were issued. Early in November, 1891, however, the Executive Board directed that the annual report be abolished and a periodical be published not less than eight times each fiscal year.

The change came about very naturally, dear old Edward C. Jones—the love of whose life was his Alma Mater—suggested to the writer (who was then president of the Alumni Association) in October, 1891, the advisability of issuing each month during the College year a circular, giving an account of each month's meetings at the College. The suggestion was elaborated into a project to print each month during the College year, beginning with November, eight monthly numbers to cover, not only the meetings, but the whole work of the Association; in other words, to unite the alumni and students in fellowship and interests. The writer well recalls the special meeting of the Executive Board held at the residence of the late C. Carroll Meyer,† at 1800 Callowhill Street, when this movement was decided upon and the earnestness and enthusiasm with which it was launched, and then later, how, with almost the same loving care that he would have shown to a child, Edward C. Jones fathered the project and toiled early and late to ensure its success.

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\* William E. Krewson (1845- ). Born near Hatboro, Pa. Early education in public and private schools. Learned drug business with Charles E. Davis, of Germantown, later with Robert S. Bower and then with Dr. Thomas Gorden, both of Philadelphia. Entered employ of George C. Bower (1868). Graduated from the College in 1869, entering employ of Dr. J. M. Higgins, Germantown Avenue and Norris Street, remaining until 1871, when he bought a drug store at Eighth and Montgomery Avenue, where he conducted business for fifteen years. Early identified himself with the Alumni Association of the College, becoming its president (1879-1880) and its recording secretary (1880-1904). Became a member of the College (1874) and a trustee (1881-1906). Member of Presbyterian Church for over sixty years and an elder for over forty years. Active in Masonic order, being a member of St. Paul's Lodge, No. 481, F. and A. M., Palestine Chapter, No. 240, R. A. M., Corinthian Chasseur Commandery, No. 53, K. T., and Philadelphia Consistory, S. P. R. S.; also, a charter member of Lu Lu Temple, No. 67, A. A. O. N. M. S.; also, recording secretary of Quaker City Lodge, No. 116, A. O. U. W., for over forty years.

† C. Carroll Meyer (1854-1919). Born in Philadelphia. Early education in Saint Joseph's College, Fourth Street and Willing's Alley. Apprenticed (1869) to Thomas J. Husband (Class of 1833), originator of Husband's Magnesia, Third and Spruce Streets. Graduated from College (1873), subject of thesis being "Ichthyocolla." Went into business (1879), at 1802 Callowhill Street, then at 1800 Callowhill Street, and finally at 341 North Eighteenth Street. For nearly half a century he served the Association, holding every elective office save that of recording secretary, and was a trustee of the College for seventeen years. Love and loyalty was his life motto—love and loyalty toward his alma mater, the Alumni Association, his church and his fellowmen, whose servant he ever strived to be.

In 1892-1893 the monthly issues were increased to nine in number, and in 1898 to twelve, issued from January to December, inclusive.

The publication of the Alumni Report quickly won the active interest and support of the alumni and students of the College and has been of the highest value in promoting the objects for which the Association was founded.

In 1907 the Alumni Report was merged with the annual "Announcement" of the College to be called the "Bulletin of the Philadelphia College of Pharmacy and Alumni Report," to be issued quarterly; and 1921, the title was changed to make the name of the periodical comport with the new name of College, as was also, the corporate title of the Association to that of the "Alumni Association of the Philadelphia College of Pharmacy and Science."

The editors of the periodical have been: Joseph W. England (1891-1901); Melvin W. Bamford (1901-1904); Clement B. Lowe (1904-1911); Freeman P. Stroup (1911-1917); and Julius W. Sturmer (1918- ).

Upon the twenty-fifth anniversary of the Association (1889) there was established in the College an Edward C. Jones Scholarship, in honor of Edward C. Jones, but it was limited in scope, and in 1895, upon his demise, it was decided to have the scholarship embrace as many of the obligatory studies and as much of the laboratory work as possible, and to this end subscriptions were solicited, which were supplemented by a legacy of \$950 left by Edward C. Jones to the College, and this constituted the enlarged scholarship. It became effective in 1897.

The Alumni Association of the Philadelphia College of Pharmacy was incorporated by Court of Common Pleas, No. 1, on April 10, 1894, and the title was changed in 1921 to conform with the new title of the College. The incorporators were: C. Carroll Meyer, Joseph W. England, Wm. Nelson Stem, Howard B. French, Edward C. Jones, Wallace Procter, Joseph P. Remington, Thos. S. Wiegand, Wm. E. Krewson, Chas. Bullock, David H. Ross, Henry Trimble.

Early in 1894 the Association launched a movement to secure subscriptions for an Electric Light Plant for the College. In a short time \$1,400 was raised, which was turned over to the Board of Trustees, and the plant was installed in December, "tested and gave entire satisfaction."

No event in the evening of the nineteenth century so stirred the sympathies of our nation and led to such far-reaching consequence in its development as a world-power, as the sinking of the U. S. Ship Maine in Havana Harbor, on Tuesday evening, February 15, 1898, when 253 souls were swept into eternity. The nation lamented the loss of its brave men; and our Association the loss of Walter S. Sellers, class of 1896, the Maine's Apothecary. In his memory the Alumni Association has placed a tablet on the walls of the College which reads:

In Honor of the Memory of

Walter S. Sellers, Ph.G.

Class of 1896, P.C.P

Who Lost His Life in the Harbor of Havana, February 15, 1898,

While in the Discharge of Duty

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Alumni Association of the  
Philadelphia College of Pharmacy

In 1909 the Alumni Association urged that the memory of Thomas S. Wiegand (1825-1909), one time president of the Association and Actuary of the College, be honored by establishing a scholarship bearing his name. Thirty-five hundred dollars was raised by subscriptions and turned over to the College in October 13, 1910, and the scholarship founded.

A bureau of employment was established by the Association in 1899, for procuring clerks for employers and employers for clerks, and was highly successful; later the work was turned over to the office of the Registrar of the College.



The nucleus of the Pennsylvania Alumni Scholarship Fund was in the net proceeds of a musicale given by the Alumni Association, under the presidency of Clarence H. Campbell, in December, 1909, which, was turned over to the College for such a fund. By the addition of subscriptions the fund grew and was completed in 1914. It became effective in 1915.

With the merging of the Department of Pharmacy of the Medico-Chirurgical College with the Philadelphia College of Pharmacy in 1916, the graduates of the former were unanimously elected members of the Alumni Association of the Philadelphia College of Pharmacy with all the rights and privileges of membership, and the union has proven to be a most happy and congenial one.

In 1916 it was decided to form an Advisory Council of the Association consisting of one or more graduates from each state, territory, or dependency of the United States, the object being to crystallize the activities of the alumni body in all sections of the country so that its



WALTER S. SELLERS

Walter Spangler Sellers, born January 5, 1874, was the son of W. H. Sellers, of Chambersburg, Pa. Graduated from the Chambersburg High School (1891). Entered the drug store of Cressler and Keefer of that place (1894), and later was employed by Dr. Hugh S. Kinmouth, of Avon, N. J., and Thomas S. Newbold, of Philadelphia. Graduated from the College (1896), achieving high rank in his class. Immediately after graduation, he successfully passed the Board of Pharmacy of Pennsylvania, and the examination for the position of Apothecary on a U. S. man of war. Was assigned to the *Maine* in 1896. Occupied quarters in the forward part of the vessel, almost directly below the forward turret and very near the forward magazine, near or in which the explosion which sunk the vessel is said to have occurred. Was greatly attached to his duties on the *Maine*, which he faithfully performed even unto death. Walter S. Sellers lived as a hero should live and died at his post of duty.

work for the alma mater could be co-ordinated and made more effective. This was done and with gratifying results.

During the World War, nearly one thousand alumni and students of the Philadelphia College of Pharmacy saw service and of these more than a score made the Supreme Sacrifice.

The chief aim of the Alumni Association is to keep alive in memory dear the old alma mater, with its precious recollections of student days, and to enlist the interest and work of the alumni in her behalf, to the end that her splendid principles, traditions and service may be preserved. And her arms are ever open wide to her children when they come back to visit with her, even in thought. Coming back to the old alma mater is like coming back to the old home town. "There is no science nor strife nor stranger that can come between memory and the old home-town days," Cullen Cain so beautifully writes, and "the recollection of the woods and hills and the people burns as bright today as when the wick was first trimmed and lighted in the long, long ago. We strive a little and play a little and pray a little and do the best we can and set our faces bravely to the future and write sadly and softly when we think of the past. Cold voices sound on our ears, hard faces loom in the gray light close by. Stern and careless and indifferent is the stranger into whose land we have come. Suspicion arms him against us, and he exacts an eye for an eye and a tooth for a tooth in his dealings. If we slip, the lash falls. If we falter, he thrills a command. But a friend from the old home town! Ah, the angels wipe their weeping eyes and smile for a moment now. 'Tis a light in the gloom and a silver tenor strain among the many discords of a city in a strange land. He knows us well, this old friend; knows our strength and weakness, and in spite of all our faults, he loves us still."

And so, to the thousands of students who have passed through the portals of the Philadelphia College of Pharmacy—the memory of the old alma mater, of the old teachers, of the old class mates, burns as brightly within as it did years and years ago. How it all comes back! How green and callow we were when we matriculated. What "most potent, grave and reverend signiors" our professors appeared to be at the beginning of the course; and what princes of good fellows they proved to be at the end. How deep and learned their lectures. How we all enjoyed their ancient and honorable jokes the first year we heard them; but how "stale, flat and unprofitable" the jokes were to those who had to do the year's work all over again! What unholy glee greeted a lecture-demonstration that failed or a lantern-light that went out, and what cheers and applause when the professor "came back" at a smart Aleck who attempted to create disorder. What earnest, self-sacrificing teachers we had—Procter, Parrish, Maisch, Remington, Sadtler and Trimble—"we ne'er shall look upon their like again"—men who were masters of their craft and taught not for the love of money, but for the love of teaching—of guiding young minds into right channels of thought and action so that sick humanity might be best served.

And what friends we made; fast friends, friends that were staunch and loyal and true, friends who knew us, through and through, and knowing us, still remained our friends. Some of them have answered the Call of the West, but many remain and their friendship has been "tested by time and strained by distance and corroded by the selfishness of advancing years and ambition and greed of gain, and has withstood all of them." And when we meet these friends, we greet them as of our old home town—of our old alma mater!

And then the climax of student-days—the night of nights with the thrill that comes only once in a lifetime—the night when we stood upon the stage of the old Academy of Music and received that priceless bit of parchment we had worked so hard for—that proclaimed to all the world that we were graduates of the Philadelphia College of Pharmacy! How proud we were! How we all then highly resolved that come what might, in our future careers, we would be true to the teachings and traditions of our dear old alma mater.

And the old alma mater is proud of her children—proud of those who have gone forth from her halls, gone by the thousands into all corners of the world to practice their profession and serve humanity, because they have "made good" and brought honor and prestige to their craft, their alma mater and themselves.

## BIOGRAPHIES OF ORIGINAL OFFICERS

### William C. Bakes

William C. Bakes. Founder. First President. Born at Liskard, England, and came to this country quite young. Apprenticed to Elias Durand, the famous French pharmacist of Philadelphia, graduating in 1855. Went into business in upper part of city, and afterwards became manager of Edward Parrish's store, at 800 Arch Street. Upon Parrish's retirement



WILLIAM C. BAKES

from business, he opened a store of his own at 1100 Arch Street, removing later to Tenth and Arch Streets. Was for many years a member of the Pharmaceutical Examining Board of Philadelphia. Later, opened a drug store at Ocean Grove, N. J., and was very successful in its conduct. Took an active interest in the College, being for many years a trustee, and for sixteen years secretary of this body; he was also most active in the Alumni Association of the College, having been its first president. Deceased, 1886.



**Adolph W. Miller**

Adolph W. Miller. Founder. First Corresponding Secretary. Born (1841). Early education in public schools of Belleville, Ill. Entered store of Edward T. Robinson. Went to St. Paul, Minn., with his father (1857). Came to Philadelphia, was employed by F. Rollmann and by Henry O. D. Banks. Graduated from College in 1862. Went into partnership with Henry O. D. Banks and Co., which became, later, Aschenbach and Miller. Became a member of the American Pharmaceutical Association in 1868. Graduated from medicine at



ADOLPH W. MILLER

University of Pennsylvania (1871) and was made doctor of philosophy (1872). Elected demonstrator of pharmacy of Medical Department of University of Pennsylvania (1878); later, lecturer on materia medica. President of Alumni Association of Philadelphia College of Pharmacy (1875-1876), and of the Lotus Club, and has been Corresponding Secretary of the College since 1886. Was elected a member of the Pennsylvania Pharmaceutical Association in 1887. Is an ardent botanist and actively identified with the management of Bartram's Garden. Director of the Philadelphia Drug Exchange for many years, and a former president (1891, 1908, 1909). His interest in the College has been never failing and most faithfully has he served it.

**Richard M. Shoemaker**

Richard M. Shoemaker (1840-1921). Founder. First Treasurer. Born in Philadelphia; son of Robert and Elizabeth Moore Shoemaker. Received early education in the schools of Nazareth, Pa., and after service in 1861 with the Union League Volunteers in the Civil War, he matriculated at the College, graduating in 1862. Went into the wholesale drug business of his father at Fourth and Race Streets (founded in 1837), and upon the demise of the latter became head of the concern. Had an unusual knowledge of the pharmacognosy of vegetable drugs, and of drug-milling, and was consulted by such authorities as Parrish, Procter, Maisch and Remington. When the Alumni Association of the College was founded

**RICHARD M. SHOEMAKER**

in 1864, he was made its first treasurer. Became a member of the College in 1864, and was most active in its support and for a number of years treasurer (1908-1916) and a member of its Board of Trustees, and of the American Pharmaceutical Association from 1865. Deeply interested in the work of the Philadelphia Drug Exchange, serving as its president (1890), vice-president and a member of the Board of Directors. Was elected an honorary member of the organization in 1916. Was vice-president of the Home Missionary Society of Philadelphia and was a member of St. Paul's Protestant Episcopal Church of Overbrook.

## BIOGRAPHIES OF ALUMNI QUIZ MASTERS

### John E. Cook

John E. Cook, Pennsylvanian by birth, matriculated at the Philadelphia College of Pharmacy in 1871, and graduated in 1873; the subject of his thesis being "Botany." He displayed unusual talent as a student of botany and materia medica and became a quiz master of the



JOHN E. COOK

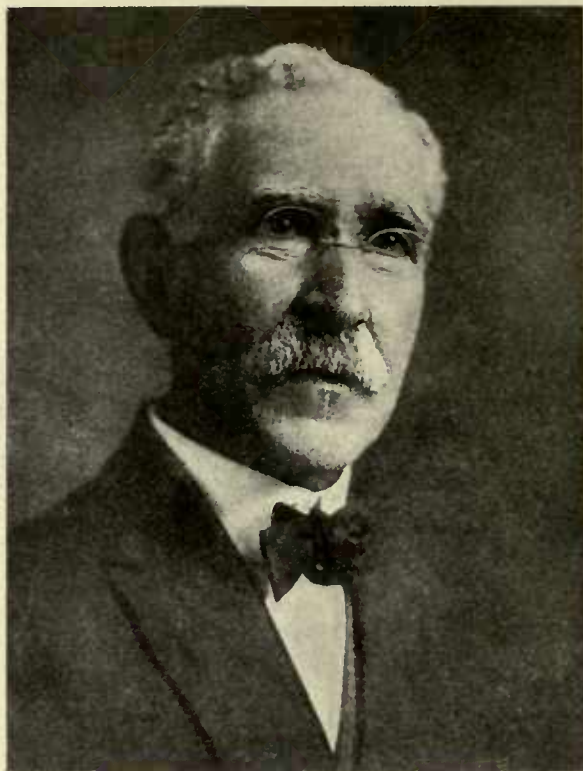
Alumni Association of the College and an assistant in materia medica and botany of the College; upon his demise (1890) he held a similar position in the Power's College.

### Lucius E. Sayre

Lucius Elmer Sayre. Born (1848) at Bridgeton, N. J., where he received his early education and served in the drug store of Robeson and Whitaker; he then came to Philadelphia and was employed by Dr. L. Updycke, Fairmount Avenue and Twelfth Street. Graduated from the Philadelphia College of Pharmacy (1866). Employed in laboratory of Frederick Brown, Chestnut and Fifth Streets, then with Henry C. Blair's Sons, and then went into business with his classmate—Joseph P. Remington at Market and Eighteenth Streets, which



partnership was later dissolved. At this time he was, also, a quiz master in materia medica of the Alumni Association of the Philadelphia College of Pharmacy, and lecturer in pharmacy at the Woman's Medical College. Became professor of materia medica (and dean) of the School of Pharmacy of the Kansas State University (1885). Elected director of drug analysis for Kansas State Board of Health (1907), and member of Botanical Staff of Kansas State Board of Agriculture. Widely known as an author by his contributions to pharmaceutical publications, proceedings of State and National Associations, and his text book on "Organic Materia Medica and Pharmacognosy." Member of the last three Committees of Revision of the U. S. Pharmacopœia. Received bachelor of science degree from University of Michigan (1896) and honorary degree of master in pharmacy from Philadelphia College of



LUCIUS E. SAYRE

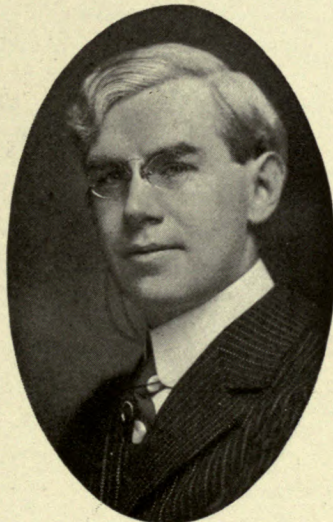
Pharmacy (1897). Elected member of American Pharmaceutical Association (1883); chairman of Scientific Section (1893); secretary of Historical Section (1917); and president of Association in 1919. The contributions of this enthusiastic worker in pharmacy have been many, embracing historical, pharmaceutical, chemical, botanical and pharmacognostical subjects. Has been especially interested in the proximate analysis of vegetable drugs, his work evincing the careful and thorough student.



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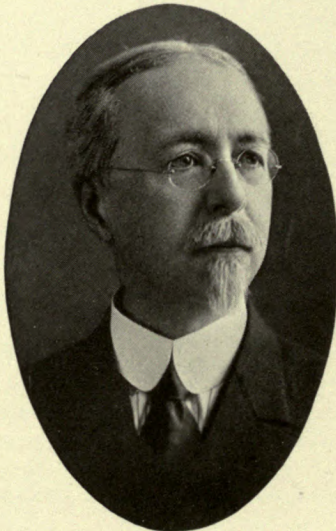


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1905-06	Freeman P. Stroup	John D. Burg	Charles H. LaWall
1906-07	John D. Burg	Charles H. LaWall	E. Fullerton Cook
1907-08	Charles H. LaWall	E. Fullerton Cook	Clarence H. Campbell
1908-09	E. Fullerton Cook	Clarence H. Campbell	David J. Reese
1909-10	Clarence H. Campbell	David J. Reese	Otto W. Osterlund
1910-11	Otto W. Osterlund	John W. Frey	Richard H. Lackey
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1912-13	Richard H. Lackey	William E. Lee	Alfred Heineberg
1913-14	*William E. Lee	Alfred Heineberg	Warren H. Poley
1914-15	Alfred Heineberg	Warren H. Poley	William A. Carpenter
1915-16	Warren H. Poley	William A. Carpenter	Jacob M. Baer
1916-17	Otto Kraus	John K. Thum	William H. Gano
1917-18	John K. Thum	William H. Gano	John N. G. Long
1918-19	John N. G. Long	Robert P. Fischelis	Wm. Duffield Robinson
1919-20	Robert P. Fischelis	Wm. Duffield Robinson	Russell T. Blackwood
1920-21	Wm. Duffield Robinson	Russell T. Blackwood	M. M. Smith
1921-22	Russell T. Blackwood	M. M. Smith	Ivor Griffith

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1884-85	" " "	David W. Ross	" " "
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1887-88	" " "	Wm. Nelson Stem	" " "
1888-89	" " "	Joseph W. England	" " "
1889-90	" " "	C. Carroll Meyer	" " "
1890-91	" " "	David H. Ross	" " "
1891-92	" " "	Wm. L. Cliffe	" " "
1892-93	" " "	Jacob S. Beetem	" " "
1893-94	" " "	J. Louis D. Morison	" " "
1894-95	" " "	Joseph Crawford	" " "
1895-96	" " "	James C. Perry	" " "
1896-97	" " "	Harry L. Stiles	William L. Cliffe
1897-98	" " "	Theodore Campbell	" " "
1898-99	" " "	Cornelius E. Spenceley	" " "
1899-00	" " "	John H. Hahn	" " "
1900-01	" " "	Wm. G. Nebig	C. Carroll Meyer
1901-02	" " "	Jacob M. Baer	" " "
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1913-14	" " "	William A. Carpenter	" " "
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1915-16	" " "	John K. Thum	" " "
1916-17	" " "	John N. G. Long	" " "
1917-18	" " "	Robert P. Fischelis	" " "
1918-19	" " "	Russell T. Blackwood	" " "
1919-20	" " "	M. M. Smith	" " "
1920-21	" " "	Ivor Griffith	(to Dec. 15, 1919)
1921-22	" " "	W. W. McNeary	Wm. H. Gano
			" " "



## CHAPTER VIII

MERGING OF THE DEPARTMENT OF PHARMACY AND CHEMISTRY  
OF THE MEDICO-CHIRURGICAL COLLEGE WITH THE  
PHILADELPHIA COLLEGE OF PHARMACY

The merger of the Department of Pharmacy and Chemistry of the Medico-Chirurgical College with the Philadelphia College of Pharmacy in 1916, brought to the older institution a considerable number of teachers, a strong alumni body and splendid traditions, deserving of treatment in a special chapter of this history, as follows:

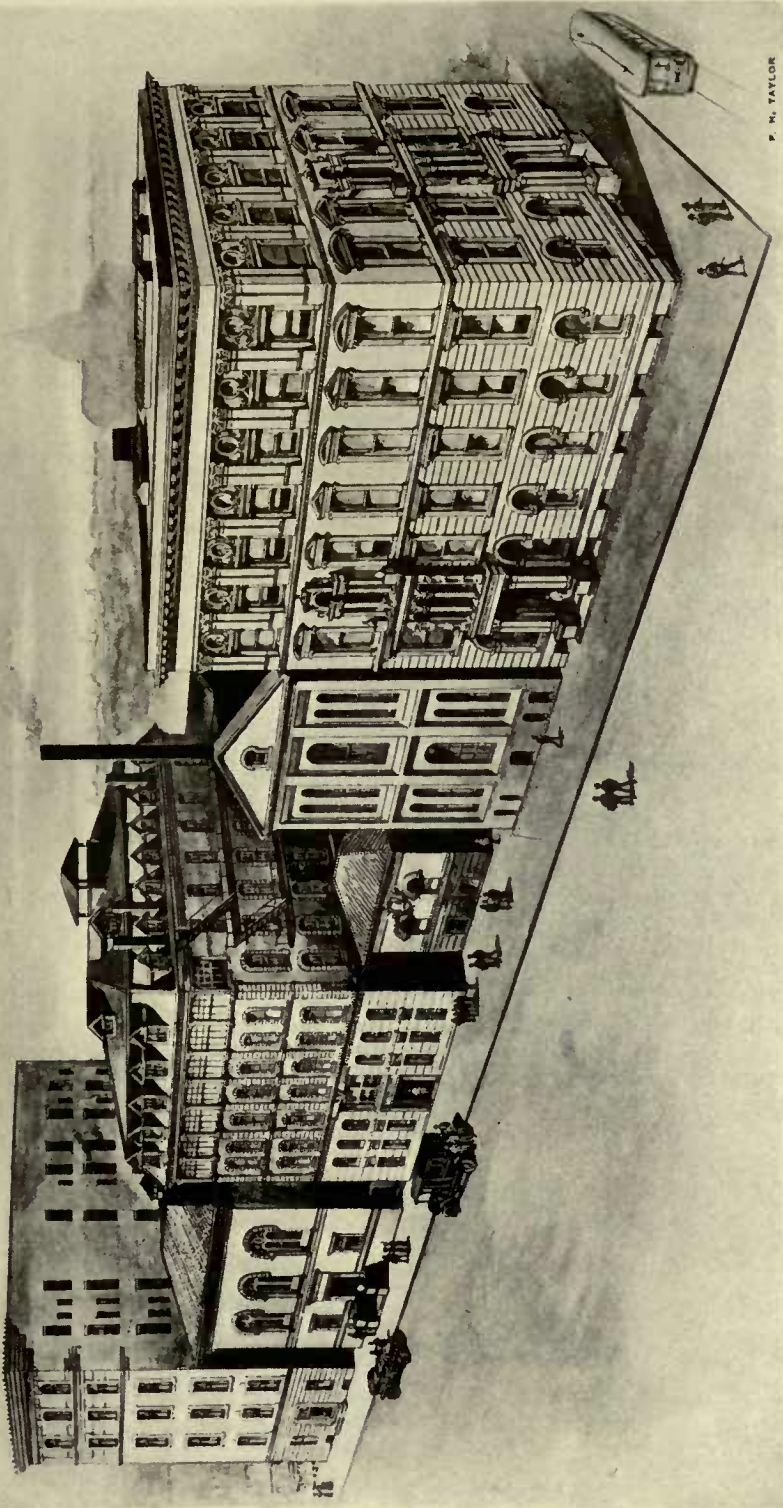
**Medico-Chirurgical College**

The Medico-Chirurgical College of Philadelphia had its origin in an association of physicians and surgeons formed at the home of Dr. James Bryan, a well-known figure in the medical history of the city, at the Northeast Corner of Tenth and Arch Streets, on May 13, 1848. It was born of a movement which had gained impetus at the meeting recently held in Baltimore where the American Medical Association was established. The College received a charter from the Legislature of Pennsylvania in 1850, at which time it had ninety-four members. Upon turning to a copy of its constitution and by-laws, we find that its objects were "the dissemination of medical knowledge, the defence of the rights and the preservation of the repute and dignity of the medical profession." Its members were to be of three kinds—Senior, Junior and Honorary. Its activities would be directed by twelve sections. With these twelve groups the members were to affiliate as their interests inclined them to one or another branch of medical science. The meetings were to be held on Saturday evenings throughout the year except in midsummer. The organization was another College of Physicians for the general improvement of the profession, not for giving courses of instruction or the conferring of degrees.

A specific purpose of the society was stated to be the foundation in Philadelphia of an extensive and a permanent medical library and cabinet, and curators were appointed with the duty of receiving and preserving books and specimens, a work calculated to be especially useful, it was believed, since "medical and other scientific gentlemen" constantly resorted "from all parts of the Union and likewise from foreign countries to this ancient seat of the medical sciences of America for the purpose of studying and investigating into different departments of professional knowledge."

The first president of the College was Dr. James Bryan, at whose call and at whose home the meeting for organization was held. The vice-presidents were Dr. Charles M. Griffith and Dr. John Dawson. The counselor of the society was that dilettante lawyer and writer, a graduate of the medical school of the University of Pennsylvania in 1839, Thomas Dunn English, remembered today as the author of the popular ballad "Ben Bolt."

In 1867 the charter was amended by the Legislature of Pennsylvania. The officers and professors of the College were endowed with "all the rights, immunities and privileges as to lecturing, granting diplomas and conferring degrees in medicine, as is possessed by the officers and professors of the University of Pennsylvania." A teaching staff was organized but on several accounts it was gradually dissolved, and was not reorganized until 1881 under the influence of Dr. George P. Oliver, properly regarded as the founder of the College as a school. He became its president and occupied the chair of surgery.



MEDICO-CHIRURGICAL COLLEGE BUILDINGS—1916

## 268 First Century of the Philadelphia College of Pharmacy

The institution had but a slow and uneventful growth until 1885 when there came into the Faculty and the Board of Trustees a number of forceful and energetic men, including Drs. John V. Shoemaker, William H. Pancoast and E. E. Montgomery, who joining Drs. Henry E. Goodman, Peter D. Keyser and William S. Stewart, and others, soon gave the institution the highest character. The Hospital of Oral Surgery, directed by Dr. James Garretson, was merged with the Hospital of the Medico-Chirurgical College.

From the first the course leading to the degree of Doctor of Medicine covered three years, and it was soon extended to four years. The College was a pioneer in raising the standards of medical education. The courts were appealed to for an interpretation of the charter, and it was determined that its terms were broad enough to warrant an extension of the activities of the institution. Accordingly, in 1897, the Board of Trustees established a Department of Dental Surgery; in 1898 a Department of Pharmacy; and in 1907 a Department of Pharmaceutic Chemistry. "In the rapidity and vigor of its growth," says Dr. F. P. Henry, "the College was, probably, without a parallel in the history of medical schools." ("Standard History of Medicine in Philadelphia," Dr. F. P. Henry.)

At first the College was housed in the upper stories of the Third National Bank Building at the Southwest Corner of Broad and Market Streets. In 1885, it joined forces with the Philadelphia Dental College and they together took over a building on Cherry Street between Seventeenth and Eighteenth Streets, earlier the Home for Aged and Indigent Women. The two institutions jointly occupied the premises until 1895 when they again went their separate ways. The Medico-Chirurgical College remained on the ground. Soon it was in possession of an imposing group of structures, including lecture halls, hospitals, laboratories, dispensaries, etc., which covered nearly an entire block. A new clinical amphitheater, illuminated by an enormous skylight, was accounted the finest as well as the largest in the United States or Europe. Its capacity was 600 students.

The Department of Pharmacy provided courses covering two years of seven months each, at the end of which time the student would receive the degree of graduate in pharmacy, presupposing and conditioned upon employment for four years in a drug store. The degree of doctor of pharmacy was given to those taking and successfully completing two additional years in the school. The lectures were at first delivered in the evenings in order that they should not conflict with the work in the Medical and Dental Departments. Thus, if it were desired, a student might carry on his studies in medicine and pharmacy or dentistry and pharmacy at the same time. This arrangement lasted until 1903 when the night classes were discontinued.

When it was first instituted the school of pharmacy was in charge of Henry C. C. Maisch, a son of Professor John M. Maisch, who held the chair of materia medica and botany; Carl E. Smith, professor of the theory and practice of pharmacy, who was Dean of the Department; Isaac Ott, professor of physiology, and Dr. George H. Meeker, professor of chemistry.



### Henry C. C. Maisch

Henry C. C. Maisch (1862-1901). Born in Brooklyn, N. Y. Son of John M. and Charlotte J. Maisch. Early education in public schools of Philadelphia. Employed by Lawrence Wolff, Twelfth and Chestnut Streets, Philadelphia. Graduated from Philadelphia College of Pharmacy (1885), winning the Procter prize. Entered Göttingen University, Germany (1886), and graduated with doctor of philosophy degree (1889). Returned to United States and became assistant professor at Clark University, and later, at Worcester Polytechnic;



HENRY C. C. MAISCH

was also, for a short time, professor of botany and materia medica at the Chicago College of Pharmacy. Purchased drug store at Ogden and Tenth Streets, Philadelphia, and was, successively, pharmacist to the Union Mission Hospital, chemist in Stetson Laboratory of Hygiene, and professor of materia medica and botany at the Medico-Chirurgical College (1898-1900). Entered employ of Hance Bros., and White (1889) as analytical chemist, remaining with this firm until his death. Was the author of a number of scientific contributions on chemical and pharmaceutical subjects. His studies on "Illicum Floridianum" (1885), and "On the Action of Acid Chlorides in Phenolether," were of exceptional merit. Revised the materia medica portion of the fifth edition to the "National Dispensatory," and Maisch's "Organic Materia Medica."

**George H. Meeker**

Born (1871) at Phillipsburg, N. J. Son of George E. and Hannah M. Meeker. Received B.S. (Chemistry) Lafayette College, Pa. (1893); M.S. (1895); Ph.D. (1898); Pharm.D., Medico-Chirurgical College of Philadelphia (1906); LL.D., Ursinus College, Pa. (1905);



GEORGE H. MEEKER

Sc.D., Villanova (1913). Professor of physics, chemistry, metallurgy and toxicology at Medico-Chirurgical College (1897-1916). Established 1907, and dean of department of chemistry of same in 1916. Professor of chemistry, and Dean of Graduate School of Medicine of University of Pennsylvania. Member of American Chemical Society, Franklin Institute, American Association for Advancement of Science, and other organizations.

**Harvey H. Mentzer**

Harvey H. Mentzer (1871- ). Early pharmaceutical education in stores of V. Ritchy, Carlisle, Pa., and of H. Lee Barber, Vandergrift and Rice and Frank E. Morgan, of Philadelphia. Graduated from Philadelphia College of Pharmacy in 1893, subject of thesis being "The Antipyretics." Conducted a drug store at Cheltenham and Pulaski Avenues, Germantown, for a number of years. When the Department of Pharmacy of the Medico-Chirurgical College of Philadelphia was organized, he became professor of pharmacy, and within a year was elected dean of the department, and served as such until 1906 when he resigned and moved to Carlisle, Pa.

Professor Smith was soon succeeded in the chair of pharmacy and as dean by Harvey H. Mentzer. In 1900 Dr. Charles H. Shaw became professor of botany and pharmacognosy and in 1901 Dr. Matthew Beardwood became adjunct professor of chemistry. In 1901 Dr. Henry Fisher joined the Faculty as professor of materia medica in the place of Dr. Maisch. In 1903 Harvey E. Kendig, who had served as an assistant under Professor Mentzer, was



HARVEY H. MENTZER

appointed to be adjunct professor of pharmacy. In 1905 Dr. Joseph McFarland joined the teaching staff as professor of bacteriology. Dr. John R. Minehart became adjunct professor of materia medica. Dr. William J. Ritter became a demonstrator of chemistry in 1902 and adjunct professor of pharmaceutic chemistry in 1906.

### I. V. Stanley Stanislaus

In 1906 I. V. Stanley Stanislaus became professor of pharmacy and dean. He was a graduate of the University of Illinois who had studied later at the University of Zurich. Returning home he was for four years professor of pharmacy at Notre Dame University. Subsequently he had been an instructor in the Brooklyn College of Pharmacy, from which he came to Philadelphia. In 1907 Dr. Charles H. Kimberly was elected professor of materia medica. In 1911 Dr. J. Hamilton Small was made professor of bacteriology, and Ambrose Hunsberger a lecturer on commercial pharmacy.

In 1907, after the enactment of the Federal Food and Drugs Law, in answer to the immediate demand which was felt for food and drug analysts, a separate Department of Phar-



maceutic Chemistry was established. The degree of pharmaceutic chemist was offered to the students who successfully completed 3,000 hours of instruction extending over two college years. Dr. George H. Meeker was made the dean of the new department. He was a graduate of Lafayette College, who had later studied abroad. He had been a practical chemist and the manager of various industrial plants, and since 1897 he had been professor of chemistry in the Medical Department of the Medico-Chirurgical College.

In the spring of 1912, Professor Stanislaus resigned as Dean of the Department of Pharmacy to be succeeded by Professor J. W. Sturmer, who came to the College from Purdue University. He assumed administrative charge of the Department and acted as professor of pharmacy and organic chemistry.

Soon afterward the Departments of Pharmacy and Pharmaceutic Chemistry were united to form the new Department of Pharmacy and Chemistry. The course was lengthened, and made to cover three years, the last year involving class and laboratory instruction for five and a half days in the week. Professors Sturmer and Meeker served as the deans of the consolidated schools. In 1914 it conferred degrees upon three doctors of pharmacy, twelve pharmaceutic chemists, and forty graduates in pharmacy.



I. V. STANLEY STANISLAUS

I. V. Stanley Stanislaus graduated from Chicago College of Pharmacy in 1895. Became professor of pharmacy at Notre Dame University (1897-1901), from which he received degree of bachelor of science (1900) and instructor in pharmacy in Brooklyn College of Pharmacy (1904-1906), from which he obtained degree of doctor of pharmacy (1905). Elected professor of pharmacy and dean of department of pharmacy of Medico-Chirurgical College (1906-1912). Resigned (1912) to engage in commercial work.

**Charles H. Kimberly**

Charles H. Kimberly graduated from Ohio State University, receiving his B.S. in 1900, M.S. in 1901, and Ph.D. in 1905. Assistant professor of pharmacy in North Dakota Agricultural College (1902-1906), and served as chemist for North Dakota Food and Drug Commission. Came to Medico-Chirurgical College as professor of analytical chemistry in Depart-



CHARLES H. KIMBERLY

ment of Chemistry and as professor of materia medica in Department of Pharmacy (1907). After a few years relinquished his duties as teacher of materia medica, and devoted entire time to chemistry. For several years had full charge of laboratory instruction in the food and drug course. Resigned (1914) to enter the industrial field.

The Department had six laboratories:

- (1) The manufacturing and dispensing laboratory for practice in the production of chemicals and pharmaceutical preparations, and the compounding of prescriptions.
- (2) The general chemical laboratory for the course in experimental and qualitative inorganic, analytic and hygienic chemistry.
- (3) The quantitative laboratory for instruction and practical drug assaying, the identification and estimation of alkaloids, examination of pharmaceuticals, foods, water, etc.
- (4) The laboratory of botany, pharmacognosy and microscopy for the study of vegetable drugs, foods and powders.
- (5) The bacteriological laboratory for the practice of the technique of bacteriology.
- (6) The physiological laboratory for testing the physiologic effects of drugs upon frogs, rabbits, cats, etc.

The laboratory of pharmacy was a commodious room arranged for 350 students; 200 could work in it at one time. The chemical laboratories were said to have been "the handsomest and most complete to be found in the state." The growth of the Department of Pharmacy was rapid, and the attendance for the session preceding the merger with the Philadelphia College of Pharmacy exceeded 200.

The first class of five students—J. B. Hagenbach, William Alvin Lum, Frank M. Mooney, Harvey E. Wenner and George C. Wilson—immediately upon graduation organized the Alumni Association of the Department of Pharmacy of the Medico-Chirurgical College of Philadelphia, Mr. Hagenbach being elected its first president. This association grew and prospered as the classes increased in size, until the consolidation of the school with the Philadelphia College of Pharmacy, when it was merged with the Alumni Association of that institution.

At the time of the consolidation, the Faculty and teaching staff of the Department was constituted as follows:

- George H. Mecker, Phar.D., Sc.D., L.D., Professor of Chemistry and Metallurgy, Dean for Chemistry.
- J. W. Sturmer, Phar.D., Professor of Pharmacy and Organic Chemistry, Dean for Pharmacy.
- Matthew Beardwood, A.M., M.D., Professor of General Chemistry and Toxicology.
- Charles E. Vanderkleed, B.Sc., A.C., Phar.D., Professor of Analytical Chemistry.
- Frank E. Stewart, Phar.D., M.D., Professor of Materia Medica and Botany.
- Ardrey H. Downs, M.D., Professor of Physiology.
- Joseph McFarland, M.D., Professor of Bacteriology.
- Benno Kirchbaum, Adjunct Professor of Botany and Pharmacognosy.
- Heber W. Youngken, Ph.G., Ph.D., Adjunct Professor of Botany and Pharmacognosy.
- Walter R. Fralic, Ph.C., Assistant Professor of Chemistry and Metallurgy.
- Robert P. Fischelis, B.Sc., Phar.D., Lecturer on Commercial Pharmacy.
- Stephen R. Ketcham, Ph.G., M.D., Assistant Professor of Bacteriology.
- J. Edward Brewer, Phar.D., Instructor in Mineralogy and Assaying.
- Franklin M. Apple, Phar.D., Lecturer on Prescription Compounding.
- Bell W. Youngken, Ph.G., Assistant in Pharmacy.
- Basil J. F. Mott, Ph.G., Assistant in Pharmacy.
- Nathan A. Simpson, Ph.G., Assistant in Chemistry.
- Paul S. Pittenger, Phar.D., Lecturer on Pharmacology.
- W. Wilson McNeary, Phar.D., Lecturer on Commercial Topics.
- Arthur F. Hutchins, M.D., Lecturer on Serums and Bacterins.

The Alumni Association of the Department of Pharmacy of the Medico-Chirurgical College was organized by its first graduating class, in the spring of 1899. They were few in number, but proved to be the men with vision. The preamble to the constitution adopted, set forth that the Alumni Association had been

"founded to unite our graduates into closer professional and social relationship, to advance the interest of our College, and to promote the cause of higher pharmaceutical education."

The organization, though small, functioned from its very inception; and in the next year, in 1900, arrangements were perfected for alumni quizzes, and quiz masters were appointed. These quizzes were continued until the expansion of the College curriculum transferred to the faculty, the responsibility for recitations and reviews.

The next important step was taken by the Alumni Association at its January meeting in 1901, when provision was made for a reception and social to be tendered the students of the department. This event proved so enjoyable, and was so fruitful of results, that the Alumni Social became an annual function, which was continued to the year of the merger.

In 1905 the association had grown sufficiently to make possible the instituting of monthly meetings throughout the College session. In 1907 the Alumni Association of the Department of Pharmacy co-operated with the Alumni Association of the medical and dental departments in the establishing of the Medico-Chi Club, which was housed on Arch Street, above Sixteenth, provided a library, restaurant, billiard rooms, and meeting places for the organizations of the College, and which played an important role in student activities from that time forward to 1916, the year of the merger.





ROBERT P. FISCHELIS

The practice of awarding annually a gold medal to the student in pharmacy making the highest record, and awarding life membership in the Alumni Association, to the student making the second best record, dates back to 1909; and the annual banquet to the graduating class, as an alumni activity, had its inception in 1912.

It may be seen that during the thirteen years of its existence the association had established a record for unselfish service to the College, and to the students in its classes. It had acquired numerical strength and solidarity. It had clear cut ideas as to its functions and potentialities. The time was ripe, therefore, for the obtaining of a charter, which was granted in the December term of 1913 of the Court of Common Pleas of the first district of Philadelphia, and a certificate issued April 15, 1914. This certificate bears the signature of Judge John M. Patterson, is signed by W. Wilson McNeary, U. Gilbert Ruff, Robert P. Fischelis, I. Subin, and Heber W. Youngken, in behalf of the association, and gives the following board of directors:

H. Wilson McNeary	John L. Ruhl	Wm. E. Crist
Walter E. Smith	Robert W. Moss	Eugene W. Youngken
Harry B. Roshon	Mortimer M. Smith	Tilden B. Bordeger
Victor Dorszewski	E. L. Weisgoerber	Herbert G. Lilly

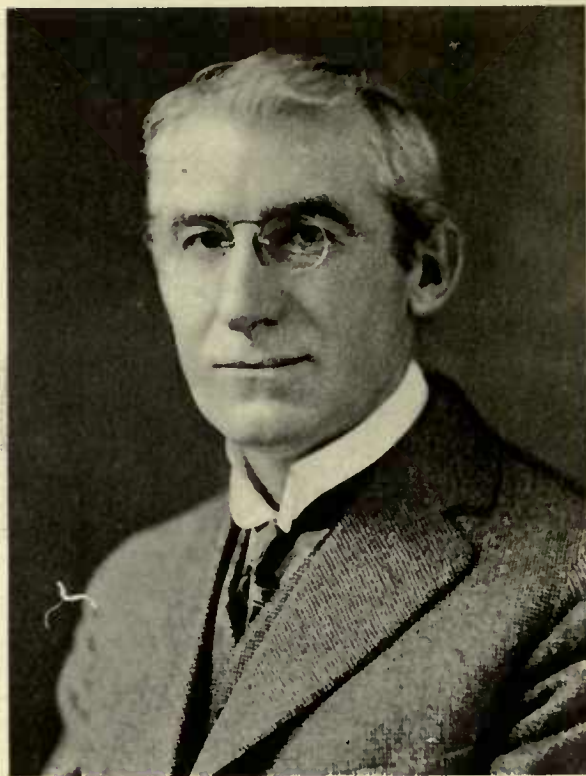
At the time of the merger, the association officers were as follows:

Honorary President—J. W. Sturmer.  
 President—U. Gilbert Ruff.  
 First Vice-President—Herbert G. Lilly.  
 Second Vice-President—Robert P. Fischelis.  
 Recording and Financial Secretary—Bruna C. Goodhart.  
 Corresponding Secretary—Eugene W. Youngken.  
 Treasurer—Mortimer M. Smith.

### The Merger—The Reason for It, and the Outcome

J. W. STURMER

The Medico-Chirurgical College stood in the path of the Parkway. The construction of this thoroughfare had been completed from Fairmount Park to Logan Square, but the great expense of penetrating the solid blocks of business buildings and homes from the latter point to City Hall had given pause to the enterprise, and the occupants of the buildings involved had come to think of eviction as a possibility of the distant future. Like the dwellers at the foot of Mount Vesuvius, they had become accustomed to the danger which threatened, and had ceased to make plans for removal to new quarters.



J. W. STURMER

But at this time—namely in 1914—the city rather unexpectedly resumed work on the Parkway, and the buildings in its path had to be vacated without unnecessary delay. For the Medico-Chirurgical College this meant prompt action in securing a building, suitable for college purposes, and large enough to accommodate the seven hundred students enrolled, and the various laboratories needed. Such a structure could not be found. Time pressed, and building anew was out of the question.

It was at this psychological moment that the University of Pennsylvania opened—or shall we say resumed?—negotiations with a view to merger. And in June, 1916, a consolidation which contemplated the absorption of the Medico-Chirurgical College, with all its departments, was officially consummated, the plan involving the transfer of all students who would be accepted by the University, and be given the opportunity to complete their respective courses—a plan which was readily carried out with the medical and the dental students.

But the University had no department of pharmacy. Nor could there be found on its campus, lecture and laboratory accommodations for pharmacy students, so that they might complete without interruption, the course upon which they had entered.

Fortunately, the officers and trustees of the Philadelphia College of Pharmacy were cognizant of the situation, and promptly offered to "take over" the entire department, alumni, students and faculty, and to carry out the details of the merger contract as far as it pertained to this department. As a result, the Department of Pharmacy and Chemistry of Medico-Chirurgical College was, by formal action of the Trustees of the University, and of the Philadelphia College of Pharmacy, merged in the latter institution—a solution which has proven a most happy one for all concerned. The Philadelphia College of Pharmacy was enlarged, and enabled to extend and to diversify its activities. The Medico-Chi alumni, as well as students and faculty members, found a new college home.

The graduates of Medico-Chi were welcomed to full membership in the Alumni Association of the Philadelphia College of Pharmacy, and were granted all the rights and privileges enjoyed by the members who had received their training at P.C.P., while the students were accepted under the provisions of their matriculation contracts, and were enrolled with full credit in accordance with their scholastic records. The faculty members assumed positions on the teaching staff of the Philadelphia College of Pharmacy. In short, all the details of a complete merger were carried out most conscientiously, and with exemplary generosity.

As a consequence, the Medico-Chi contingent does not now exist as an unassimilated and unassimilable faction within the College organization, but, on the contrary, has established a community of interest with the other members, has recognized the same ideals, and is working for the same results. The merger has been *complete*—the only form not followed by disappointments and heartaches, which have, unfortunately, so frequently come as the aftermath of college consolidations.

The Department of Pharmacy of the Medico-Chirurgical College functioned for eighteen years, from 1898 to 1916, and conducted its work successfully and creditably. In this period more than a thousand pharmacy students received systematic instruction, and more than seven hundred were awarded degrees. The department kept pace with the educational progress of pharmacy, and at the time of the merger, was a member of the American Conference of Pharmaceutical Faculties and had established a record for thorough teaching, high scholastic standards, and also for its friendly attitude toward sister institutions.

The physical equipment of the College was splendid and the enrollment most encouraging. In the session of 1915-16, more than two hundred pharmacy students completed the year's work. There were twelve graduates in Pharmaceutical Chemistry. Indeed, the session which ended with the merger, was the most successful in the history of the Department of Pharmacy and Chemistry. That the activities of this department were brought to an abrupt end, not in its decline, but at the height of its prosperity, and when its future seemed brightest, helps to make the memory picture of the Medico-Chi graduates an altogether pleasant one. For, naturally, when the boys from Medico-Chi call up remembrances of College life—so inextricably intertwined with their memories of youth—it is their own classmates which they visualize—and the instructors who taught them, and the lecture rooms and laboratories in the imposing college building, which in 1916 was demolished to make room for that expanse of asphalt over which now passes the swift-moving vehicular traffic of the Parkway.

But Medico-Chi has run its course, and is now a mere memory. The Philadelphia College of Pharmacy and Science, on the other hand, is an actuality, and the new Alma Mater ready to bestow favors upon her children, irrespective as to where may be laid the scenes of their college recollections—whether on Tenth Street or on Seventeenth Street.

The old home cannot be forgotten by the men from Medico-Chi. But it is in the present home where they must now foregather, to participate in the activities of today, and to plan and work for the future. They cannot merge the past; but they have merged their present interests, and have transferred their loyalty—whole-heartedly, unreservedly and completely—a fact which has made possible a college consolidation not followed by disappointments or regrets.



CHAPTER IX  
AMERICAN JOURNAL OF PHARMACY

The *American Journal of Pharmacy* is one of the earliest periodicals of its kind, and is recognized at home and abroad as the leading scientific pharmaceutical periodical of this country. Hence its history is of national and international interest, and is as follows:

**American Journal of Pharmacy**

IVOR GRIFFITH, PH.M.

Editor of the *American Journal of Pharmacy*

The Journal of the Philadelphia College of Pharmacy was established in 1825 by the Philadelphia College of Pharmacy for the advancement of pharmacy and allied sciences and the promotion of correlated education and research, through the publication of original articles, selections from scientific periodicals and books, transactions of the College, editorials, reviews and such other matter as might be deemed desirable. In brief, its main purpose was to promote the growth and development of pharmaceutical science and to improve the conditions and professional status of pharmaceutical practice. That it has fulfilled this mission is shown by the character and extent of its work during the past ninety-six years.

The original Publishing Committee consisted of Samuel Jackson, Henry Troth, Solomon Temple, Ellis H. Yarnall, and Daniel B. Smith, who was chairman of the committee and practically acted as editor; and under the guidance of that talented authority, versatile scientist and public-spirited pharmacist, the publication was established on a high plane as an ethical and scientific pharmaceutical journal.

Four preliminary numbers were published at irregular intervals from 1825 to 1828; in 1829 the Publishing Committee was reorganized with Benjamin Ellis as the editor, and the publication of the Journal at regular periods was begun and has been continued since.

When the College determined upon the publication of the Journal at regular periods, it was also agreed to commence the consecutive numbering of the volumes with the new issue, hence the four numbers previously published became known as the "Preliminary Volume." From then on until 1852, four numbers constituted a volume, except in 1847, when five numbers were published.

Upon the decease of Benjamin Ellis in April, 1831, Robert E. Griffith was appointed editor, and in 1835 the Publishing Committee was reorganized by the addition of Franklin Bache, Elias Durand, W. Hodgson, Jr., Joseph Scattergood, John C. Allen and Dillwyn Parrish; and the name of the Journal was changed to the *American Journal of Pharmacy*.

Robert E. Griffith's service as editor added greatly to the influence of the Journal, which had commenced to attract notice abroad, and in 1836 upon his resignation, Joseph Carson was chosen editor, and he associated with himself Robert Bridges as associate editor from 1839 to 1845, and William Procter, Jr., from 1848 to 1850.

During the editorship of Joseph Carson, several circumstances transpired to improve the scientific character of the Journal. The invitation to the Philadelphia College of Pharmacy from the official committee to participate in the revision of the United States Pharmacopœia in 1840 gave an impetus to pharmacy in Philadelphia which resulted in the establishment of the pharmaceutical meetings of the College and added considerable to the prestige and value of the Journal.

In 1835 it was decided to issue the Journal as a quarterly, and this was done until 1853, when it was issued bimonthly; with the forty-third volume (1871), it became necessary, due

to its increasing popularity, to issue the Journal monthly, and this policy has obtained in the succeeding issues of the Journal.

In 1848 when William Procter, Jr., was made associate editor of the Journal, an editorial department was started, which, during his incumbency as editor, became an important feature of the publication.

After a long period of active service, Dr. Carson retired in July, 1850, and William Procter, Jr., was chosen editor.

In 1852 an advertising department was introduced, and some changes made in the price, as well as in the size of the Journal. It was at this time that the American Pharmaceutical



IVOR GRIFFITH

Association came into existence, and for many years the minutes of the proceedings of that organization and most of the papers presented at the annual meetings of the Association were published in the Journal almost verbatim, although no official connection existed.

The Journal made notable progress until the Civil War when it became very much hampered in its work, but the editor and committee persevered through this crisis, and in 1865 a favorable reaction occurred which finally culminated in the election (in 1871) of a business manager, Henry H. Wolle being chosen to fill this position.

Upon the resignation of William Procter, Jr., as editor in April, 1871, due to failing health, John M. Maisch was chosen to succeed him, the Publishing Committee at this time consisting of William Procter, Jr., John M. Maisch, Charles Bullock, A. B. Taylor and Thomas S. Wiegand. Upon the organization of the committee a chairman, treasurer and secretary were elected.

In March, 1872, James T. Shinn was elected in place of A. B. Taylor, and in 1874, upon the death of William Procter, Jr., Henry N. Rittenhouse was chosen to succeed him.

Upon the death of John M. Maisch in 1893, Henry Trimble was elected as editor, and the Publishing Committee was reorganized (1894) as follows: Henry N. Rittenhouse, Samuel P. Sadtler, Wallace Procter, Joseph W. England, and the editor.

Upon the resignation of Mr. Wolle as business manager in 1894, Miss Florence Yaple was chosen his successor, and she remained with the Journal in that capacity, and later as assistant editor, until her death in 1912.

In 1898 when Henry Trimble died, and Henry Kraemer was chosen to succeed him as editor, the Publishing Committee was increased to seven members; Dr. Richard V. Mattison and Joseph P. Remington being the additional members.

By this time, the field of which the American Journal of Pharmacy had been the sole occupant in the United States for almost three-quarters of a century, had been considerably extended and to a great extent was now cultivated by several other journals. The pharmaceutical literature of North America, which at the time of the inception of the *American Journal of Pharmacy* was in its infancy, and which in fact dates its birth with the beginning of the *American Journal of Pharmacy*, was by this time well-known and duly appreciated throughout the civilized world.

Henry Kraemer entered upon his field of service as editor and fully maintained the high scientific character of the Journal.

In 1904 the title of the Publishing Committee was changed to that of Publication Committee, and in 1922 to Committee on Publication.

In 1917 Henry Kraemer resigned the editorship because of his acceptance of a chair in the faculty of the University of Michigan, and George M. Beringer was chosen as editor, at the same time holding the position of Chairman of the Board of Trustees of the College. Under his able management the Journal was materially increased in size, and continued to be the journalistic advocate and consistent exponent of the ethical practice of pharmacy.

The business management of the Journal during the editorship of Mr. Beringer, and to the present time, has been efficiently cared for by H. J. LaWall and C. E. Wetzal, who have placed the business activities upon a sound basis.

Upon Mr. Beringer's resignation as editor in March, 1921, Ivor Griffith was elected editor. He has endeavored to keep the Journal true to its name—that is, an *American* journal of pharmacy, which will encourage research by American pharmacists and at the same time be of direct value to the profession at large. His aim is to perpetuate the long established policies of the Journal and to keep sacred the splendid traditions which have obtained under the management of the eminent men who have preceded him.

#### Editors of the Journal (Biographies Under Chapter XI)

1. Daniel B. Smith, 1825-1828.
2. Benjamin Ellis, 1829-1831.
3. Robert E. Griffith, 1831-1836.
4. Joseph Carson, 1836-1850.
5. William Procter, Jr., 1850-1871.
6. John M. Maisch, 1871-1893.
7. Henry Trimble, 1893-1898.
8. Henry Kraemer, 1898-1917.
9. George M. Beringer, 1917-1921.
10. Ivor Griffith, 1921-



**Biographies of Business Managers**

Henry H. Wolle (1836-1898). Was born in the neighborhood of Bethlehem, Pa., and was the son of Bishop Wolle of the Moravian Church. In early life was engaged in the hardware business and the silk trade. In 1861 he accepted a position in the U. S. Post Office of Philadelphia, which he retained during the remainder of his life. His efficiency in such work was duly recognized and in 1876 he was appointed postmaster of the Centennial post office. His work with the Journal was performed with devotion and care.



FLORENCE YAPLE

Florence Yapple (1865-1912). Was born in Hallsville, Ohio. Early education in public schools, later a teacher in the district school. Soon relinquished teaching to study pharmacy. Matriculated (1888) at Cincinnati College of Pharmacy, taking one course of lectures. Became assistant to Susan Hayhurst at Woman's Medical College of Philadelphia (1891-1893), then with David F. Swisher, of Darby (1893-1894). Graduated from College in 1895, subject of thesis being "Some Commercial Cocoas." Became business manager of Journal (1894); member of College (1903); member of Publishing Committee (1906); and member of Executive Board of Alumni Association for a number of years. Naturally a student, she took a deep interest in problems of education. Modest and retiring, her work was always done in the most careful manner, while by reason of her familiarity with the traditions of the College and her loyalty, her conscientious service inspired universal respect.

CHAPTER X  
CENTENNIAL YEAR

The first century of the existence of the College rapidly approached completion, and President Howard B. French tendered a dinner to the officers of the College, members of the Faculty and a number of distinguished guests at the Union League Club of Philadelphia on February 23, 1911, in commemoration of the ninetyeth anniversary. There was a beautifully illustrated menu bound in leather given to each one present, as a memento of the occasion. John E. Reyburn, then Mayor of the city, made an address. Near to this man's heart was a Boulevard or Parkway to extend from the center of the city to Fairmount Park, and other plans for the beautification and advancement of Philadelphia. As the College had reached a realization of the need of further enlargement of its buildings not to be brought about on Tenth Street, many now looked hopefully to a site for a new edifice worthy of the institution upon the new Boulevard. Sister colleges had their representatives at the table. Henry F. Walton, President of the Medico-Chirurgical College, was present and spoke. Dean J. W. Holland bore the congratulations of the Jefferson Medical College. Other speakers, in addition to President French, were Vice-President Lemberger and Professors Remington, Sadtler, Kraemer and Moerk.

An outgrowth of the anniversary was the presentation to the College of a portrait of President French at a testimonial dinner which was tendered him at the Union League on April 4, 1911. The painting was the work of Hugh H. Breckenridge, the well-known artist. The presentation was accompanied by a number of speeches which took the form of personal tributes. Professor Remington, very expert in such matters, acted as toastmaster. George M. Beringer, chairman of the Portrait Committee, as well as the chairman of the Board of Trustees of the College, made the presentation speech on behalf of the members, and the alumni, in all some 1,200 persons, who were contributors to the fund.

"It came from the graduates," said Mr. Beringer, "who are praying that a better location and more ample facilities may soon be at the command of the College," that "with enlarged opportunities still greater achievements" may result. "We ask," he continued, "that this portrait be preserved and safeguarded, and trust that it may be but another inspiration to the members for the perpetuation of that integrity, sincerity, fidelity and adherence to principles that have always characterized the management of the institution. May the sentiments promulgated with its inception and associated with this movement live forever. May the portrait as it hangs on the College walls prove a silent, yet effective, example, worthy of emulation, that shall stimulate the coming generations of students to their highest attainments, and maintain the Philadelphia College of Pharmacy in the lead of all in pharmaceutical education."

Dr. Richard V. Mattison, first vice-president, made the speech of acceptance of this gift in tribute to the "thoughtful, clear-sighted, far-reaching and most unusual labor upon behalf of the Philadelphia College of Pharmacy," by President

French. Again Mayor Reyburn spoke. Dr. Nathan C. Schaeffer, State Superintendent of Public Instruction, E. J. Cattell, and Judge Isaac Johnson, also made addresses.

Already, ten years before the event, the College had a Committee on Centenary Celebration, consisting of George M. Beringer, chairman, Joseph P. Remington, Henry Kraemer, Samuel P. Sadtler and Martin I. Wilbert. The Alumni Association now bent its efforts towards assembling a building fund for suitable new edifices to be placed upon a proper site, when it should be obtained. Money was subscribed and many hoped that the College might be put in the possession of substantial sums when it should have reached its Centennial Year.

### Committee on Centennial Celebration

In 1920 when the centenary was but twelve months away new groups were organized for giving direction to the anniversary-activities of the College. At the annual meeting of March 29, 1920, followed by the special meeting of April 26, 1920, plans were made for the publication of an anniversary volume which should include "a complete historical account" of the College and its development, with a report of the exercises attending the celebration of the centennial and biographical data concerning the founders, officers, professors and graduates of the institution.

It was resolved that there should be a General Committee on Centennial Celebration. The committee was to be divided into sub-committees. One of these, of ten members "residing in Philadelphia or within easy access of the city," should concern itself with the "organization" of the work, which should be directed by an executive-secretary. To this committee President French appointed Dr. Richard V. Mattison and Aubrey H. Weightman to represent the College; George M. Beringer, William L. Cliffe and Joseph W. England, the Board of Trustees; Charles H. LaWall, E. Fullerton Cook and F. P. Stroup, the Faculty; and Otto Kraus and R. P. Fischelis, the alumni. E. Fullerton Cook was made executive-secretary.

The slogan for 1921 was "New Charter, New Site, New Buildings, Academic Standard, Enlarged Faculty, Increased Activities." Already the new charter had been secured, authorizing the use of the title Philadelphia College of Pharmacy and Science, with the right to confer upon students advanced degrees. A site on the Parkway would be found. Tentative plans were shown during Commencement Week in 1920 calling for six buildings—an Administration Building, a Lecture Hall, and Laboratories of Pharmacy, Chemistry, Botany, Biology, Bacteriology and Research. It was resolved that Commencement Week in the following year should be devoted to the Centennial Celebration. The alumni in all parts of the world would be addressed and asked to return to the College at this time. A hope was held out that a very large proportion of the old graduates would respond by their presence on this occasion. Another movement of the year was directed toward an increase in College membership. Hundreds not yet members of the corporation would be invited to join it for the honor of having their names on the roll of the oldest pharmaceutical organization in the country with the privilege of sharing in its control. Other pharmaceutical associations, it was suggested, should be asked



to hold their meetings in Philadelphia during Centennial Week and to send delegates to the College Celebration.

To keep the College upon a high educational plane, abreast of all the modern movements in its special field, a fund of \$2,000,000 should be raised to be devoted to three purposes:

- A. Endowment to support Fellowships, Professional Research and Library.
- B. Buildings.
- C. Maintenance and Development.

The General Committee on Centennial Celebration authorized by the annual meeting of the College, and appointed at the special meeting, consisted of the officers of the College, members of the Board of Trustees, the Faculty and officers of the Alumni Association. The President of the College was made chairman of the committee.

Sub-committees were authorized, also, the chairman of these constituting an Executive Committee, as follows:

- Site—President Howard B. French, 1920-1921; Samuel P. Wetherill, Jr., 1921-
- Contributions—Richard V. Mattison, M.D.
- Historical Data and Centennial Volume (Historical Volume)—George M. Beringer, 1920-1921; Joseph W. England, 1921-
- Plans for Centennial Celebration—Charles H. LaWall.
- College Membership—Josiah C. Peacock.
- Publicity—Robert P. Fischelis.
- Executive Secretary—E. Fullerton Cook.

There were appointed, also, special committees representing different pharmaceutical interests, as follows:

- Men Pharmacists—Milton D. Allen, Chairman.
- Women Pharmacists—Mrs. Charles H. LaWall, Chairman.
- Wives of Graduates Group—Mrs. Nellie F. Lee, Chairman.
- Army—
- Navy—W. T. Minnick, M.D., Chairman.
- Physicians—William Duffield Robinson, M.D., Chairman.
- Wholesale Druggists—Walter V. Smith, Chairman.
- Chemical Manufacturers—George D. Rosengarten, Chairman.
- Pharmaceutical Manufacturers—Milton Campbell, Chairman.
- Editors and Journalists—E. G. Eberle, Chairman.
- Analytical Chemists—Charles E. Vanderkleed, Chairman.
- Members of State Boards of Pharmacy—Lucius L. Walton.
- Salesmen—A. J. Staudt, Chairman
- Students—F. P. Stroup, Chairman.

These committees rendered most valuable and efficient service.

### Founders' Day Exercises

While the principal ceremonies attending the Centennial Celebration were not to occur until June in connection with the Commencement, Founders' Day, February 23, 1921, would not be allowed to pass unnoticed. Carpenters' Hall, where the sixty-eight apothecaries had met one hundred years before, was thrown open to visitors, as were the College buildings. In the afternoon, at two o'clock, the officers, Faculty and members of the College, accompanied by some of the de-

scendants of the founders, among them Charles Marshall, a great grandson of the first president, Henry Troth and William Shewell Ellis, grandsons, respectively, of Henry Troth and Charles Ellis, original members who had gathered in the library of the College, proceeded in motor cars to the historic place. President Howard B. French called the meeting to order, and read the preamble and constitution which had been adopted by the College from a copy printed in 1821. Dr. Charles A. Weidemann, the recording secretary, read from the original minutes the transactions in Carpenters' Hall, of February 23, 1821, and the subsequent meetings held on March 13, 1821, and March 27, 1821, at which the first officers and trustees of the College were elected. George M. Beringer, chairman of the Board of Trustees, made a brief historical address, and all present, before leaving the hall, as a permanent record of the attendance, signed a roll book.

In the evening the main commemorative exercises were held in the College Auditorium, which was crowded with members, alumni and guests, many from distant places. President French presided and welcomed the guests, the Mayor of the city, Hon. J. Hampton Moore, spoke, pledging his aid to the plan to secure a suitable site for new buildings for the College. "It is wonderful to think," he said, "of the world-wide influence of this institution from whose walls have gone forth not only men, but thoughts, the contributions of genius. The College should not have remained in its present environment so long. It should have been moved years ago. I can only hope that in some way the Mayor, long before his retirement from office, may be able to assist in having this institution housed in a building more suitable for a school of its dignity and service. This is due the College for the work it has performed and for the sake of its splendid student body."

Congratulations poured in by post and telegraph from the University of Pennsylvania, the St. Louis College of Pharmacy, the University of Michigan, the University of Wisconsin, the Massachusetts College of Pharmacy, the Medical College of Virginia, Purdue University, the Cincinnati College of Pharmacy, and many other institutions and individuals. In other cities, too, "Founders' Day" was observed by meetings and dinners of alumni of the College, attesting the loyalty of the graduates. Not the least acceptable of the tributes at this time, was a gift of \$20,000 from Miss Mary A. Dobbins, in memory of her brother, Edward T. Dobbins, a graduate of the class of 1862, for a library fund of the College.

In addition, the membership of the College was being largely increased. For many years it had been a group of but few more than 100 active members; it was now a body of 1,200 members.

Formal addresses were then made as follows:

### **The Founding of the Philadelphia College of Pharmacy and Science**

CHARLES H. LAWALL, PH.G., PH.M.

Dean and Professor of Pharmacy, Philadelphia College of Pharmacy and Science

We of the present are met together upon this Centennial occasion to do homage to those of the past. The debt to the Founders of the Philadelphia College of Pharmacy and Science is not ours alone. It is society's debt which we, as co-sharers in the benefits which have resulted from that act, are privileged to repay in part by ceasing from our present labors for a time in order that we may bring proper tribute to the memory of those men and do justice to their accomplishments.

America one hundred years ago was a sparsely settled country, with few and difficult means of intercommunication between distant points, neither railways nor canals having yet appeared.

Philadelphia one hundred years ago was the largest and most important city in these United States, which had yet to celebrate their semi-centennial as a nation.

To properly appreciate the atmosphere in which these men lived and the difficulties under which they labored we must refresh our minds regarding some of the material changes that have taken place since that time.

A glimpse at a Philadelphia city directory for 1821 will give us an impression of the period through certain occupations which are listed with frequency, and which are missing in a directory of today. *Bleeder and Barber* is one of the noteworthy instances of a peculiar occupation which continued even beyond that period, reminding us that the surgeon was not necessarily a medical doctor, nor even a person of education. This is perpetuated in the red and white striped barber pole of today, then the advertising sign of the bloodletter.

*Sea Captain, Mariner, Shipwright, Sailmaker* are redolent of the days of wooden sailing ships, then supreme upon Poseidon's realm and just beginning to be displaced by steamboats upon the inland waters of our eastern coast.

*Chimney Sweep, Sweep Master, Tallow Chandler* are reminiscent of the open hearth wood fires and the meager illuminating facilities of a period antedating the use of coal or kerosene for heating or lighting.

*Carter, Cordwainer, Fishmonger, Ostler, Scrivener, Soapboiler, Tavern Keeper, Victualler, Whitesmith and Woodsawyer* each carry evidence of the close association of the language of that time with the mother tongue of England.

*Pepperpotmaker* is an occupation confirming the early origin of Philadelphia's gastronomic distinctiveness which is still acknowledged in some directions.

Friction matches had yet to be invented. Daguerre had not yet practiced his art of reproducing likenesses, hence the only pictures we have of the founders who died before 1840 are from oil paintings or miniatures. Gold had still to be discovered in California, and oil in Pennsylvania. Elias Howe had not yet invented the sewing machine.

Letter postage ranged from six cents to twenty-five cents for a letter of a single sheet of paper, depending upon the distance it was carried.

The first train of railway cars had yet to run, while the telegraph, telephone and typewriter were in the dim and misty future. Percolation had not been suggested for drug extraction. Alkaloids were of such recent discovery that they were still called vegetable alkalies.

The work of Liebig, Berzelius, Wöhler and Pasteur was still to be done.

Heat was discussed as a material substance in the works in physics and was usually called caloric.

Professional and scientific interest and education was just awakening along certain lines.

The University of Pennsylvania had established its Medical School a bare half-century before and was then conducting a three-year course, attended by several hundred students, and numbered among its professors such distinguished men as Dr. John Redman Coxe, Dr. Robert Hare, Dr. Philip S. Physick and Dr. W. C. P. Barton. The course in Natural Sciences at this same Institution had not yet emerged from the difficulties which attended the teaching of science at a time when science and irreligion were looked upon as synonymous by many. In that department the professors received no salaries and were required to furnish their own apparatus and specimens and were not considered members of the faculty.

There was no distinct department of Chemistry at the University, the instruction in that branch being given in connection with medicine. A memorial which had shortly before been presented to the Trustees of the University of Pennsylvania, signed by Drs. Rush, Wistar, Barton and Physick, is worth quoting in full to illustrate the field which chemistry was then supposed to cover:

"It is peculiarly expedient that the Professor of Chemistry should have a full and extensive knowledge of medicine, because very many valuable articles of the *materia medica* are derived from chemistry and the nature of these articles can only be understood by a person who has a competent knowledge of both chemistry and medicine. The students of medicine



who almost exclusively support the Professorship of Chemistry are induced to do so in consequence of its application to Pharmacy and the different branches of medicine. No man can teach Pharmacy unless he has some knowledge of the practice of medicine and the application of chemistry to physiology and the other branches of medical science can only be taught by a chemist who understands them."

The chair of *Materia Medica* in the University was changed in 1818 to the chair of *Materia Medica* and Pharmacy, which was continued unchanged in title for many years. A similar change had occurred some years before, but had been abandoned. All final examinations for a doctorate degree were conducted orally and often before the Trustees of the Institution. Each applicant was required also to publicly defend his thesis, which was an original dissertation required as part of his collegiate work.

Text books and reference books on Chemistry were fairly numerous even then, but none had appeared in which the use of chemical symbols simplified the teaching of reactions. Some of the most popular treatises of the day on Chemistry were in the style of "conversations," a stilted and prolix form which has no counterpart today. "Chemical Amusement" was the title of another book of the period. This was written by Frederick Accum, who is noted as the author of "A Treatise on Adulterations of Food, and Culinary Poisons" published in Philadelphia in 1820, one of the earliest books of its kind.

James Cutbush, concerning whose work and character Dr. Edgar Fahs Smith has contributed a most interesting monograph, was an early Philadelphia Chemist and Apothecary who published many articles of interest and value upon chemical subjects beginning with 1808.

He was in business at 25 South Fourth Street in 1819, and as early as 1812 had advertised a course of "Evening Lectures on Chemistry" and also "Lectures on Theoretical and Practical Pharmacy." For this latter course a fee of twenty dollars was charged. This course was evidently neither popular nor successful, for no further reference is found relating to it, although Mr. Cutbush attained the distinction of being appointed Assistant Apothecary General in the U. S. Army on August 12, 1814. The duties of this office must have kept him busy in this vicinity for in the Philadelphia Directory of 1821 he is listed as "Assistant Apothecary General of the U. S. Army, residing at 207 South Fourth Street."

Conditions in Pharmacy at that period had not been satisfactory to many of the medical practitioners of the period, nor to the leading apothecaries, as they were then officially termed. The practice of writing prescriptions had been established in Philadelphia about 1765 by Dr. John Morgan, who, upon returning from the completion of his medical studies in Europe, had been accompanied by an accomplished apothecary from Great Britain, named Leighton, who brought with him a large assortment of medicines. This first prescription store in Philadelphia did not long survive the antagonism of local physicians and pharmacists, and it is stated that even at the close of the American Revolution there were only three medical practitioners in Philadelphia who confined their practice to prescription writing.

An unsuccessful attempt was made in 1789 to interest American medical men in the establishment of a national Pharmacopœia in which Dr. Samuel Powell Griffiths, of the University of Pennsylvania, took a prominent part.

Through ignorance and carelessness certain abuses crept into the early drug business primarily because there was neither control from without nor inspiration from within. Patent medicines became numerous, most of them being founded upon the prescriptions of successful physicians, for it must be remembered that a prescription was at that time believed to be a combination of medicaments satisfactory for the relief of disease without the necessity of modification or alteration to suit the particular individual as is the scientific and approved practice today.

Indeed, at that time, the most eminent of medical practitioners allowed their names to be attached to "Formularies" which purported to contain the successful recipes and prescriptions from the most celebrated physicians of this country and Europe. Many of our official compound preparations of today, still widely used, are prescriptions of illustrious practitioners of the past. Among these are Dover's Powder, originated by Dr. Thomas Dover, of England, about 1725; Huxham's Tincture, by Dr. John Huxham, of England, in 1755; Fowler's

Solution, by Dr. Thomas Fowler, of England, in 1786; Blaud's Pills, by Dr. J. Blaud, of France, in 1831; Coxe's Hive Syrup, by Dr. John Redman Coxe, about 1810; and Jackson's Pectoral Syrup, by Dr. Samuel Jackson, about 1835; and many others might be given. One of the serious conditions which occurred at that time was the prevalence of adulteration of drugs and medicines, and of substitutions. Indeed, one earlier authority published an entire work upon the latter subject called "*Quid Pro Quo*." Another in an American work published in 1818, justified substitution in certain cases as follows:

"First, for persons who haggle over price and care not for quality, and  
Second, for those who are bad pay, to compensate for the risk of loss," and accompanied this advice with an approved list of substitutes for certain drugs.

The culmination of the feeling regarding this condition was reached early in 1821, when the University of Pennsylvania took steps leading toward the establishment of a course in pharmacy, at the request of the medical faculty.

Resolutions were passed by the Board of Trustees of the U. of P. on February 6, 1821, in which announcement was made of the intention to establish a course of instruction in pharmacy and to confer the honorary degree of Ph.M. upon certain prominent apothecaries of the city at that time.

Prior to this, however, the Trustees of the University had received an application in 1816 from Dr. James Mease, a Philadelphia physician, to conduct a course of lectures in Pharmacy. This permission had been granted, but it is probable that no applicants appeared to take the course, for no further mention was ever made of it.

The Philadelphia apothecaries learning of the action of the University Trustees, on February 6 had their self-respect challenged by the move to conduct a course in Pharmacy without first consulting the apothecaries themselves, and as tradition has it, the two individuals directly responsible for the protest which was voiced at the meeting held in Carpenter's Hall, on the day whose centennial we are celebrating, were Peter K. Lehman and Henry Troth, the former a retailer, the latter a wholesale druggist of prominence at that time.

On February 23 the initial meeting of the Founders of this College was held. We do not know the complete list of those in attendance, but we know that Stephen North was made Chairman, and Peter Williamson, Secretary, and resolutions were prepared and offered, and after some debate were adopted and referred to a committee, who were given power to call a subsequent meeting "at such time and place as they deem proper."

This special committee was noteworthy for the character and standing of its members. The names are as follows:

Samuel Jackson, M.D.	40 N. Fourth Street
Daniel B. Smith	33 High (Market) Street
Robert Milnor	161 S. Second Street
Peter Williamson	Second and Almond Streets (below Bainbridge Street)
Stephen North	14 N. Second Street
Henry Troth	222 High (Market) Street
Samuel Biddle	142 High (Market) Street
Charles Allen	160 S. Second Street
Frederick Brown	with Charles Marshall, 56 Chestnut Street

These street numbers are under the former system and bear no direct relation to present locations.

SAMUEL JACKSON was then 34 years of age, and had been associated with his father and brother in the drug business. He became the first Professor of *Materia Medica* and Pharmacy, resigning in 1827 to take a similar chair later at the University of Pennsylvania, where he continued until his death in 1872. He was one of the most illustrious of practitioners and teachers of medicine of his time. He was President of the first Philadelphia Board of Health, which had as its secretary the renowned Franklin Bache, later Professor of Chemistry in our College. It was Dr. Jackson who first suggested the present name of the Phila-



delphia Academy of Natural Sciences, and that organization celebrates its Founders' Day on the anniversary of the date upon which this name was adopted, the previous meetings having been informal gatherings. It is a curious commentary on the period that Dr. Jackson was not at the time a member of the group of men who formed the Academy, because being a rising young medical practitioner he could not afford the inference of irreligion which attached to those who were too deeply interested in natural science.

DANIEL B. SMITH was a young man of 29 at the time of this meeting. He had learned the drug business with John Biddle, of Philadelphia, and had entered business for himself at Sixth and Arch. Later the firm name was Smith and Hodgson, who were subsequently succeeded by Bullock and Crenshaw. In 1820, he aided in the establishment of the Apprentices' Library. He was the Chairman of the first publication committee of the *American Journal of Pharmacy* and a frequent contributor of valuable papers. He was one of the original members of the Franklin Institute, and one of the incorporators of the Pennsylvania Historical Society. He was one of the incorporators and an early manager of the Philadelphia Savings Fund Society. He helped to establish the House of Refuge. In 1834, he became Professor of Moral Philosophy, English Literature, and Chemistry at Haverford College. He returned to Philadelphia twelve years later and re-entered business. He became the first President of the American Pharmaceutical Association in 1852. In 1853, he retired from business and lived in Germantown until his decease in 1883.

ROBERT MILNOR was a druggist at 161 South Second Street. He was long connected with the College and continued as a member until 1841 without ever taking an active part, so far as the records show.

PETER WILLIAMSON was a youth of 24 in 1821. He was the presiding officer at the semi-centennial in 1851. He was connected with the establishment of many charitable and philanthropic organizations and was later grand master of Free and Accepted Masons in Pennsylvania. He established the first free scholarship for tuition in the Philadelphia College of Pharmacy, was the Founder of the Southwark Dispensary and a Warden in the Episcopal Church in Southwark.

STEPHEN NORTH was a wholesale druggist at 14 North Second Street, of whom we know but little, as he was evidently but a young man and died in 1826, but a few years later. He was second Vice-President of the College from 1821 to 1824, and first Vice-President from 1824 until his decease.

HENRY TROTH was a young man of 27 when the Carpenters' Hall meeting was held. He learned the drug business with Jeremiah Morris in the store on Market Street, near Seventh. He aided in the establishment of the Philadelphia Literary Association, afterward including a noteworthy group of men prominent in civic and educational affairs. In 1815, when he was but 20 years of age, he formed a partnership with his brother-in-law, Edward Needles, another druggist, under the name of Henry Troth & Co., wholesale druggists. He was one of the originators of the House of Refuge, a manager of the Schuylkill Navigation Company, and was connected prominently with many other philanthropic, business and scientific organizations. He was a member of the Philadelphia Councils for nine years, part of which time he presided over that body. He was a trustee of Girard College, and a Director of the Bank of the United States. He was one of the first to burn anthracite coal in a grate and he was one of those who urged and aided in the introduction of illuminating gas. Besides being one of the founders of the Philadelphia College of Pharmacy, he was its Vice-President for thirteen years, and presided over many of its meetings. He was chairman of its Board of Trustees for many years, and died in 1892.

SAMUEL BIDDLE was a druggist of 142 High Street, concerning whom we know little, as he, too, died a few years after, in 1824.

CHARLES ALLEN was a druggist at 160 South Second Street, resigned in 1827 and removed from the city.

FREDERICK BROWN was another young man of 25, who learned the drug business with Charles Marshall, beginning with 1812, and was associated with him for a number of years



subsequently. He was in business for himself at Fifth and Chestnut Streets for many years. He, too, was prominently identified with the development and work of many Philadelphia institutions, was manager of the Pennsylvania Hospital for a time, and one of the founders of Laurel Hill Cemetery.

These brief sketches show the type of men who founded this great Institution. It was an enterprise of youth, for the average age of the five whose ages we know, was but 28 years at the time of the founding, the oldest being Samuel Jackson, who was 34, and the youngest, Peter Williamson, who was but 24.

We owe a debt of gratitude, too, for the selection of Carpenters' Hall for their initial meeting. It is in harmony with the high ideals subsequently displayed in handling the affairs of the College.

This Committee called their associates together on March 13, at which time they recommended the establishment of a College of Apothecaries and the erection of a School of Pharmacy. There were sixty-eight charter members of this proposed college. Their names and addresses at that time are as follows:

Charles Marshall	56 Chestnut Street
Jeremiah Morris	293 High (Market) Street
William Heyl	35 High Street
John Elliott	60 South Front Street
Peter K. Lehman	320 High Street
Daniel Elliott	60 South Front Street
Wm. Revoudt, M.D.	Wood Street and Old York Road
Mathias Pleis	461 North 2nd Street
Edmund Pryor	373 North Front Street
Thomas Wiltberger	169 North 2nd Street
Jacob Bigonet	158 Lombard Street
Frederick Klett	261 North 2nd Street
Thomas Cave	298 High Street
Caleb Ash, Jr.	66 North 9th Street
Thomas A. Mason	183 South 6th Street
Alexander Fullerton, Jr.	33 Filbert Street
Edward Needles	222 High Street
Charles Thomson	34 Sassafras (Race) Street
George Glentworth	Chester and Race Streets
Daniel Thatcher	2nd and High Streets
Thomas Evans	3rd and Spruce Streets
Anthony H. Morris	45 North 3rd Street
Jeremiah Emlen	6 North 3rd Street
William Lehman	76 South 2nd Street
Stephen North	14 North 2nd Street
Charles Allen	160 South 2nd Street
Warder Morris	45 North 3rd Street
Edward B. Garrigues	6 North 6th Street
Robert Milnor	162 South 2nd Street
James W. Simes	459 High Street
James S. Ewing	221 Chestnut Street
George D. Wetherill	16 Arch Street
Isaac Thompson	2nd and High Streets
James L. Smith	134 Chestnut Street
Anthony Ecky	83 Union Street
Charles Ellis	56 Chestnut Street
Mordecai L. Gordon	66 North 2nd Street
Algernon S. Roberts	76 South 2nd Street
John P. Wetherill	65 North Front Street

Daniel Laws	5th and Spruce Streets
Edward Lowber	144 North 3rd Street
Charles Yarnall	24 North Front Street
Henry M. Zollickoffer	6th and Pine Streets
Samuel Biddle	142 High Street
Charles Treichel	99 Walnut Street
Daniel B. Smith	33 High Street
Charles Marshall, Jr.	310 High Street
Samuel Jackson, M.D.	40 North 4th Street
Henry Troth	222 High Street
Thomas McClintock	107 South 9th Street
Elisha Crowell	2nd and Shippen Streets
Samuel P. Wetherill	65 North Front Street
William Baker	6 North 5th Street
Joseph Allen	202 South 3rd Street
Peter Williamson	2nd and Almond Streets
William C. Poole	62 North 2nd Street
Richard Jordan	3rd and Coates Streets
Frederick Brown	56 Chestnut Street
Thomas Oliver	Front and Catharine Streets
George H. Burgin, M.D.	55½ North 3rd Street
Solomon Temple	121 High Street
Eleazer L. Cohen	239 Market Street
John J. Smith, Jr.	121 High Street
Charles Wetherill	65 North Front Street
George Babe	Front and Cedar Streets
Charles Rizer	5th and Passyunk Avenue
Wilson Jewell, M.D.	
Peter Thomson, Jr.	

These charter members, by their support and guidance, likewise deserve credit in the founding of the College, for from their ranks came the officers and workers of many subsequent years of activity, and among them were individuals of great prominence in city affairs later.

On March 27, 1821, scarcely five weeks after the initial meeting on February 23, the Philadelphia College of Apothecaries was duly organized with the following officers, concerning each of whom a monograph might be written if space and time afforded.

Charles Marshall, President  
 William Lehman, First Vice-President  
 Stephen North, Second Vice-President  
 William Heyl, Treasurer  
 Daniel B. Smith, Secretary

MEMBERS OF THE BOARD OF TRUSTEES

Charles Allen	Henry M. Zollickoffer
Samuel Biddle	Samuel P. Wetherill
Daniel Thatcher	Warder Morris
Samuel Jackson	Daniel Elliott
Peter Williamson	Jeremiah Morris
Charles Marshall, Jr.	Henry Troth
Peter K. Lehman	Thomas Wiltberger
Thomas McClintock	Frederick Brown

The Trustees promptly met and organized by drafting by-laws, appointing committees, etc., and the committee appointed for that purpose reported on plans for instruction.

Early in April, Samuel Jackson, M.D., was elected Professor of *Materia Medica* and Pharmacy, and Gerard Troost, M.D., was elected Professor of Chemistry.

Samuel Jackson's career has already been described. Of that of Gerard Troost much might be written. He was a native of Holland who had but recently settled in America, who, during the few years he resided in Philadelphia, identified himself with much that was important in its scientific development. He was the first President of the Academy of Natural Sciences, later removed to Nashville, where he associated himself with the State University, and still later, becoming State Geologist, made an illustrious name for himself as paleontologist.

These original professors were the first of an illustrious line, of which not only our Institution but American Pharmacy and American Medicine may be justly proud. During the first half century of the College, the following names are those of professors of pharmacy, *materia medica* and chemistry: Jackson, Troost, Ellis, Wood, Bache, Griffith, Fisher, Bridges, Carson, Thomas, Parrish and Procter.

In addition to inaugurating the course of instruction which was planned to start the following November the members of the College established rules and regulations for the conduct of the business on the part of the members of the College, which later developed into the earliest code of pharmaceutical ethics established in America.

It is interesting to observe from newspaper advertisements published shortly before the course of lectures started how explicitly all of the details are discussed and how frankly the reasons for founding the College are stated.

From Poulson's *American Daily Advertiser*, Monday, October 29, 1821:

"COLLEGE OF APOTHECARIES

"In the division of the sciences that characterizes the philosophy of the present age, and which has so much tended to their improvement, Pharmacy has been withdrawn from the charge of the Physician, and consigned to the care of the Apothecary. In Europe, this division has long been recognized and sanctioned by the Medical Profession. Colleges of Apothecaries, and other similar institutions, have been established, devoted expressly to instruction in Pharmacy and its subsidiary sciences. On the continent, most of the respective governments have prohibited, under heavy penalties, any one from selling or preparing Drugs and Medicines for administration, who has not passed through a course of instruction, and become practically acquainted with the business. In Great Britain, most Apothecaries are regularly instructed, by attendance on the lectures of the Colleges of Apothecaries of London and Dublin, and are associated as members, while abuses in the business are guarded against by severe penalties, enacted by Parliamentary statute.

"In this country, Pharmacy has been entirely neglected, as a science. Previous instruction has not been considered indispensable, in order to capacitate an Apothecary for pursuing his profession, while very few practitioners of Medicine possessed more than a superficial acquaintance with the principles and details of Pharmaceutical knowledge. From this state of things, many evils, some of a serious and aggravated nature, have flowed, urgently requiring correction.

"Many Apothecaries of this city, have long been sensible of the necessity of taking some efficient measures, by which the irregularities and abuses that have crept into their business, should be abolished; and that their profession should be placed on that respectable footing to which it is entitled, by its usefulness to society, and as an important branch of the science of Medicine. With these views, they have founded the Philadelphia College of Apothecaries.

"This institution has already established many wholesome regulations for the government of its members, calculated to inspire confidence in all those who are attached to it; and has provided for a course of public instruction, under its auspices, in *Materia Medica* and Pharmacy, and Pharmaceutical Chemistry, with the intention of adding, ultimately, other collateral sciences. A Cabinet is also forming of choice and selected specimens of Drugs and Medicines, of the best qualities.

"An institution embracing so many subjects of high importance and utility to the Medical Profession, and the public generally, and so well calculated to perfect those objects, cannot fail to meet the approbation and support of the liberal and well-informed practitioner, and every member of society.

"The College announces, that the Courses of Lectures will commence in the first week in November, and will be delivered three times a week, in the evening, during the winter, in the Hall of the German Society, South Seventh Street.

"Lectures on *Materia Medica* and Pharmacy, by Dr. Samuel Jackson.

"Lectures on Pharmaceutical Chemistry, by Dr. Gerard Troost.

"By order of the Board of Trustees.

"PETER WILLIAMSON,  
"Secretary."



From Poulson's *Daily Advertiser*, Tuesday morning, November 6, 1821:

"PHILADELPHIA COLLEGE OF APOTHECARIES

"The Introductory Lecture to the course on *Materia Medica* and Pharmacy, will be delivered by Samuel Jackson, M.D., on Friday evening, November 9th, in the German Society's Hall, in South Seventh Street, between Market and Chestnut; and

"The Introductory Lecture, to the course of Pharmaceutical Chemistry, will be delivered by Gerard Troost, M.D., on Saturday evening, November 10th, at the same time and place."

In the following year, 1822, when the College was incorporated, the name was changed from the "Philadelphia College of Apothecaries" to "The Philadelphia College of Pharmacy." This advertisement of several years later will also be found to be of interest.

From the *National Gazette and Literary Register*, Philadelphia, Saturday afternoon, November 13, 1824:

"PHILADELPHIA COLLEGE OF PHARMACY

"The Lectures in this Institution will commence about the middle of the ensuing month (November), at the Hall occupied by the College, in Seventh Street below Market.

"The Course on *Materia Medica* and Pharmacy will be delivered by Samuel Jackson, M.D. It will embrace a concise History of the Articles used in, or connected with Medicine; and an exposition of their sensible and medical qualities; their various official preparations, and the modes of detecting spurious, or sophisticated varieties.

"The course on Chemistry, will be delivered by George B. Wood, M.D., and will, in addition to the application of this science, to Pharmacy, comprehend a complete series of popular Lectures on Chemistry, illustrated by numerous Experiments, with an extensive Apparatus.

"There is belonging to the College, a large collection of superior Specimens of the various articles comprised in the *Materia Medica*, which will be exhibited by the Professors to their classes, and are well calculated to add to the interest and instruction of the Lectures.

"Tickets of Admission to be had of William Heyl, Treasurer, No. 215 Market Street, or Daniel B. Smith, Secretary to the College, corner of Arch and Sixth Streets, Price \$5.00 each course, and a matriculating fee of \$2.00 to be paid by all except apprentices to members of the College.

"By order of the Board of Trustees.

"HENRY TROTH, *Chairman*,  
"WILLIAM BAKER, *Secretary*."

The apparent discord or opposition between the University of Pennsylvania and the Founders of the College has occasionally been magnified and distorted by those unfamiliar with the facts as indicating a long continued and bitter enmity between the University of Pennsylvania and the Philadelphia College of Pharmacy.

Nothing could be further from the truth. It is a matter of record that the University of Pennsylvania, in partial pursuance of its original plan did confer the degree of Master of Pharmacy as an honorary degree upon sixteen Philadelphia Apothecaries in April, 1821. It is illuminating to note that of these sixteen who were so honored, seven were charter members of the newly formed College.

It is also of interest to learn that very soon after the active functioning of the College began, when the members showed the breadth of their aims by conferring honorary membership upon such international authorities as Paris, Chapman, Silliman, Vauquelin, Derosne, Robiquet, Virey, Pelletier, Farraday, Torrey, Nuttall, Brandes, Dobereiner and Trommsdorff, that there was also included the name of Dr. John Redman Coxe, who is credited in the memoirs of Edward Parrish as having been the leading spirit in the original movement by the University of Pennsylvania.

Of interest in this same connection, too, are the tributes of some of the University's own teachers.

In the "Early History of the University of Pennsylvania," written by Dr. George B. Wood, in 1834, he states:

"The degree of Master of Pharmacy was instituted a few years since with the very laudable view of improving the profession of the apothecary, which, in the city, has assumed an importance far beyond what it possesses in other parts of the United States. Any person is entitled to the degree who shall have served an apprenticeship of at least three years with

a respectable apothecary, and attended two courses of lectures on Chemistry and *Materia Medica* in the University. Advantages would no doubt have accrued from this accession to the original plan of the medical department had it not been superseded by the establishment by the apothecaries themselves of a distinct school, which being under their own management, and directed to the one object of advancing the usefulness and respectability of the profession, is naturally more popular, and at least equally efficient."

Later, Dr. Joseph Carson, in his "History of the University of Pennsylvania," published in 1859, says:

"This procedure on the part of the University, in the matter of improving and elevating the practice of pharmacy, aroused the enterprising spirit of the druggists and apothecaries of Philadelphia, and incited them to found the College of Pharmacy, an independent institution, which, through the instrumentality of its school, and of its journal, and by its vigilance with reference to the conduct of its members, has been of incalculable service to the profession of pharmacy, not only in the city of Philadelphia, but throughout the United States."

And now in our own time comes this congratulatory tribute from the one who has guided the destinies of the University of Pennsylvania for the preceding decade and who has been associated with its work for more than thirty years:

"The 100th birthday of the College of Pharmacy is now here. My congratulations are herewith extended to the College and its many children. It is pleasant to recall that from its beginning the University of Pennsylvania and the College have sustained the most cordial relations. Sons of the University and many of its professors worked in the ranks of the College.

"I think it is conceded that this harmonious co-operation has redounded to the good of each institution. The eminent Botanists and Chemists of the two foundations have mutually sustained and encouraged one another in their several efforts to advance the interests of their respective sciences.

"For myself, I can only say that the career of the College of Pharmacy during my intimate knowledge of it has been most inspiring. It has stood for the best in every direction. The glories of its past I shall not dwell upon. Others will do that. Its advancement is surely a joy to its many friends in this city and to the active promoters of science everywhere. I'm certain the University of Pennsylvania joins me in its well wishes for a still more glorious future.

"Rejoicingly and faithfully yours,  
"EDGAR F. SMITH."

And now, as the time comes for me to close, with the inspiration which comes from such surroundings and such glorious traditions and records I can think of no more appropriate lines than those of Kipling in his "Fathers of Old," for he has crystallized for all time the thought that is uppermost in our minds and hearts—reverence for the past and inspiration for the future.

#### OUR FATHERS OF OLD

Excellent herbs had our fathers of old—  
 Excellent herbs to ease their pain—  
 Alexanders and Marigold,  
 Eyebright, Orris and Elecampane,  
 Basil, Rocket, Valerian, Rue,  
 (Almost singing themselves they run)  
 Vervain, Dittany, Call-me-to-you—  
 Cowslip, Melilot, Rose of the Sun.  
 Anything green that grew out of the mould  
 Was an excellent herb to our fathers of old.

Wonderful tales had our fathers of old  
 Wonderful tales of the herbs and the stars—  
 The Sun was Lord of the Marigold,  
 Basil and Rocket belonged to Mars.  
 Pat as a sum in division it goes—  
 (Every plant had a star bespoke)—  
 Who but Venus should govern the Rose?  
 Who but Jupiter own the Oak?  
 Simply and gravely the facts are told  
 In the wonderful books of our fathers of old.

Wonderful little, when all is said,  
 Wonderful little our fathers knew.  
 Half their remedies cured you dead—  
 Most of their teaching was quite untrue.  
 "Look at the stars when a patient is ill,  
 (Dirt has nothing to do with disease),  
 Bleed and blister as much as you will,  
 Blister and bleed him as oft as you please."  
 Whence enormous and manifold  
 Errors were made by our fathers of old.

Yet when the sickness was sore in the land,  
 And neither planets nor herbs assuaged,  
 They took their lives in their lancet-hand  
 And, oh, what a wonderful war they waged!  
 Yes, when the crosses were chalked on the door—  
 Yes, when the terrible dead-cart rolled,  
 Excellent courage our fathers bore—  
 Excellent heart had our fathers of old,  
 None too learned, but nobly bold  
 Into the fight went our fathers of old.

If it be certain, as Galen says,  
 And sage Hippocrates holds as much—  
 "That those afflicted by doubts and dismays  
 Are mightily helped by a dead man's touch,"  
 Then, be good to us, stars above!  
 Then, be good to us, herbs below!  
 We are afflicted by what we can prove,  
 We are distracted by what we know.  
 So—ah, so!  
 Down from your heaven or up from your mould,  
 Send us the hearts of our fathers of old!

### Pharmacy, 100 Years Ago

H. V. ARNY, PH.G., PH.M.

Professor of Pharmaceutical Chemistry, New York College of Pharmacy

Henry Vinecome Arny was born in Philadelphia (1868).—Education in public schools of New Orleans, La. Entered drug store of F. C. Godbold, New Orleans, March 1, 1884. Student at the P. C. P., 1887-1889, graduating 1889 with the grade "distinguished." In drug business with F. C. Godbold, New Orleans, 1889-1892. Student at Universities of Berlin and Göttingen, 1892-1896. Ph.D., (Göttingen) 1896 with grade "magna cum laude." Chemical consultant in New Orleans, 1896-1897. Professor of pharmacy, Cleveland School of Pharmacy (Dept. Pharm. Western Reserve University), 1897-1911. Dean of C. S. P., 1905-1911. Professor of pharmaceutical chemistry, New York College of Pharmacy (Columbia University College of Pharmacy), 1911—Ph.M. degree, P. C. P., 1919. Remington-Medallist, 1922. Secretary Louisiana State Pharmaceutical Association, 1897. Reporter on the Progress of Pharmacy, A.Ph.A. (1916- ). Author of "Principles of Pharmacy" and many scientific, historical and general papers. Research worker in phytochemistry and in colorimetric tests and color standardization. Founder of American Metric Association. Member, Committee on N. F., 1908- . Member of Revision Committee, U. S. P., 1910- .

All hail! Alma Mater, upon this thy Centennial! Permit one of thy children in the midst of this distinguished assemblage of thy sons and thy daughters to offer a tribute of affection, of esteem and of gratitude. For a century, those entrusted with thy affairs have maintained a great ideal; the conducting of a college of pharmacists, for pharmacists by pharmacists. May this ideal, successfully maintained for one hundred years, actuate thy disciples during the hundreds of years to come.

### AMERICA, 100 YEARS AGO

Eighteen twenty-one, the year that James Monroe began his second presidential term, the Era of Good Feeling, after an election in which he secured all of the electoral votes save one; the term that brought into being the Monroe Doctrine (1823).



Eighteen twenty-one, when John Quincy Adams was Secretary of State, the very year he issued his Report on Weights and Measures, in some respects the most remarkable dissertation on metrology ever written.

Eighteen twenty-one, when John Marshall was Chief Justice of the Supreme Court and was clarifying the Constitution by his illuminating decisions.

Eighteen twenty-one, when John Adams and Thomas Jefferson were living in distinguished retirement awaiting the Final Summons, which, when it came to both of them upon the Semi-Centennial of the signing of the Declaration of Independence (July 4, 1826), created the most interesting coincidence in American history.



HENRY V. ARMY

Eighteen twenty-one, when Philadelphia was the largest city in the United States, a thriving place of over 137,000 inhabitants; when New York ranked second, with over 123,000 inhabitants; when New Orleans, the delightful city depicted in Cable's *Grandissimes*, had over 40,000 inhabitants; when Cincinnati was a recently incorporated city of 10,000 inhabitants; when Cleveland was a frontier post of 500 souls; when Chicago was merely a few shacks around Fort Dearborn; when San Francisco was "a vast solitude" as found by Dana in 1835, with its Presidio six miles from the landing place of occasional ships and with its nearest mission four miles away.

Eighteen twenty-one, when it took two days and a good part of one night, by stage and boat and a night of rest en route, to travel from New York to Washington; and when the "Fast Post Coach" from New York to Philadelphia meant taking a steam ferry at the former city at 6 A. M., riding over to Elizabethtown, and from thence across New Jersey and down the Delaware to Philadelphia, which was reached at 4 P. M.; when steamboat traffic was only fourteen years old; when the Erie Canal (a marvel in those days) was being con-

structed; when the only railroad in America was a short gravel-carrying concern near Boston; when the first passenger railroad in America (Baltimore & Ohio, 1829) was merely dreamed of; when illuminating gas was merely an experiment in private establishments, such as the Gas Light Tavern, Second and Walnut, Philadelphia, some years before the New York Gas Company (1823) and the Philadelphia Corporation (1836) obtained their franchises.

Eighteen twenty-one, when Washington Irving, aged 38 years, was sojourning abroad after the successful publication of "The Sketch Book"; when George Bancroft, just back from the famous Georgia Augusta University in Göttingen (the first American to win a Ph.D. degree from that institution), had started in as tutor in Greek at Harvard; when Cooper had just published his first novels, the now forgotten "Precaution" and the still famous "The Spy"; when the youngster Poe was at school in Baltimore; when Longfellow, a lad of 14, entered Bowdoin College, after the publication of his first poem (1820); when another boy of 14, Whittier, was attending district school in New England and had been introduced to the beauties of poetry by his teacher, Joshua Coffin, through the medium of a volume of Burns; when Emerson had just graduated from Harvard.

Eighteen twenty-one, when Daniel Webster was at the beginning of his brilliant career, the orator of the two hundredth anniversary of the Landing of the Pilgrims; when Henry Clay had temporarily stepped out of the speakership of the House of Representatives after successfully getting through the Missouri Compromise (1820); when John C. Calhoun was Secretary of War; when DeWitt Clinton was Governor of New York and was directing the construction of the Erie Canal; when Lincoln, Lee and Jefferson Davis were lads of from 12 to 14, unconscious of their future rôle in the sombre drama of 1861-65; when John Jacob Astor and Peter Cooper were amassing those fortunes that were to bring into being the Cooper Institute and the Astor Library.

Eighteen twenty-one, when Audubon was gathering material for his great work, "The Birds of North America" (published in 1827); when Nuttall, the Anglo-American botanist and erstwhile Philadelphian, published his book, "Travels in Arkansas in 1819"; when Benjamin Silliman, founder of the *American Journal of Science* (1818), was professor of chemistry, *pharmacy*, geology and mineralogy at Yale College.

#### PHILADELPHIA IN 1821

As mentioned above, in 1821, Philadelphia was the first city of America in population, and a glimpse of the City of Brotherly Love a century since may be worth while. As to topography, it is interesting to note that Southwark seemed to be the southern edge of the city, while we read that in 1826, when Edward Needles started his store at Twelfth and Race, he was called "the frontier apothecary," since across the street was a large field enclosed in a post and rail fence; that in 1829, Wm. Biddle opened a store at Eleventh and Arch Streets, and feared he was making a mistake in going so far into the suburbs; that in 1821, Farr and Kunzi built their new factory at Ninth and Brown, then the outskirts of the city, and that for years after D. B. Smith opened his store at Sixth and Arch, the neighbors took chairs out into the street and sat under the shade of the trees, all of the morning, without being disturbed by a passing vehicle. In appearance it evidently still resembled the quaint town of 1795, so charmingly described by S. Weir Mitchell in his "Red City"—"the single spire of Christ Church rising high over the red brick city . . . the town stretching north and south along the Delaware, and beyond it the woodland . . . Westward on Chestnut Street, pastures, cows, country, and to the north a fine forest known as the Governor's Wood. . . A mile further . . . a river flowing slowly by." A town where chains were still put across the streets in front of the four score of churches during service time, to prevent traffic from interfering with worship.

Considering that a city is what its inhabitants make it, a mention of some of its leaders may be in order. There were the four Biddles, Nicholas, the financier; Clement C., the lawyer; James, the naval officer; and Richard, the writer. Nicholas, then a man of 35 years, within two years of his selection as president of the United States Bank, which made him America's foremost financier, until the unfortunate quarrel between President Jackson and

the bank officials in 1836. Then there were Stephen Girard, the business man of Philadelphia and New Orleans, who in 1821, was 61 years old, and William Bartram, the famous son of the famous John, still living at the advanced age of 81. Dr. Caspar Wister, the founder of the famous Wister Parties, had been dead three years; Benjamin West, the first American artist, had died in London the year before (1820); while Edwin Forrest, a boy of 14, had already made (1820) his theatrical debut as Douglas in a popular play of that time.

Scientific Philadelphia was as much in the fore then as it had been in the days of Franklin, Rittenhouse and Bartram, and as it is today. The University of Pennsylvania was then in its first flower, and among its faculty of 1821 we note Dr. Robert Hare elected professor of chemistry in 1818, the great experimenter, the inventor of the oxy-hydrogen blow pipe, the great thinker, who, in the light of a disparaging remark made in a certain one of his obituary notices, may have been a century ahead of his time as far as psychic phenomena are concerned; Dr. John Redmond Coxe, professor of *materia medica* (1818-1835), known to all of us as the author of Coxe's American Dispensatory and curiously embalmed in the literature of pharmacy as the deviser of Coxe's hive syrup; Dr. George B. Wood, lecturer on medical chemistry, destined to become the second professor of chemistry at the Philadelphia College of Pharmacy (1822-1831), and one of the founders of "the druggists' Bible," the United States Dispensatory; and Dr. Samuel Jackson, professor of the institutes of medicine (in 1835), first professor of *materia medica* at the Philadelphia College of Pharmacy (1821-1827), author of "Principles of Medicine" (1838), deviser of Jackson's pectoral syrup, eminent physician, whose intimacy with the French pharmacist, Durand, caused many heart burnings among the other druggists of the period. Among the other scientists of Philadelphia in 1821 were Dr. Franklin Bache, who in 1819, at the age of 27, published his "System of Chemistry," who was chosen as professor of chemistry at Franklin Institute upon its organization (1824), who was professor of chemistry at the Philadelphia College of Pharmacy from 1831 to 1841, who was Dr. Wood's associate in founding the United States Dispensatory, and who was professor of chemistry at Jefferson Medical College from 1841 until his death in 1864. Then there was Dr. Gerard Troost, who, we glean from the scanty material at our disposal, was manufacturing ferrous salts at Cape Sable, Md., in 1817, who had a chemical factory in Philadelphia in 1820, who was professor of chemistry at the Philadelphia College of Pharmacy during the first year of its existence, and who a few years later moved to Tennessee, where he became one of the founders of the University of Nashville.

#### PHARMACEUTICAL AMERICA IN 1821

Very elusive is the biographical data concerning the druggists of a century ago. The first American pharmaceutical publication, the venerable Journal of this College, which has taken a new lease on life under the editorship of Mr. Beringer, did not appear until 1825, and the first volume includes eight fascicles published between that date and 1830. Of the Founders whom we are here gathered to honor, there are three of whom no biographical record has been found. As to the others, from obituaries and from other sources, we glean the following information:

**HENRY TROTH:** "The Founder of the Philadelphia College of Pharmacy," as Professor Remington has called him, had in 1821, a wholesale drug store at Seventh and Market. A capable and progressive man he was, one of the first Philadelphians to burn anthracite coal (which cost \$8.40 a ton in 1818), in his open grate; one of the members of the Common Council, from 1827 to 1836, making a vigorous fight for the granting of a gas franchise from 1833 to 1836.

**PETER K. LEHMAN,** whose conversation with Mr. Troth as to the proposition of the granting of the Master of Pharmacy degree by the University led to the historic meeting at Carpenters' Hall a century since, had, in 1821, a drug store at Tenth and Market Streets.

**CHARLES MARSHALL,** the first President of the Philadelphia College of Pharmacy, descendant of a distinguished line of Philadelphia apothecaries, in 1821, had a drug store at 56 Chestnut Street, which he, a man of 77 years, conducted with the help of his remarkable daughter, Elizabeth, who when her father lost his first modest fortune in 1804, encouraged



him to start anew with the front room of their house converted into a little shop, which by 1821 had grown into a highly prosperous establishment.

WILLIAM LEHMAN, elected first vice president at the Philadelphia College of Pharmacy organization meeting, had a drug store on Second Street, between Arch and Race. He was a member of the Legislature from 1814 until his death in 1829, when he willed \$10,000, a considerable sum in those days, to the Philadelphia Athenæum, inaugurating a custom, followed by too many wealthy pharmacists since that time, of bestowing their largess upon worthy objects outside of the institutions of their own calling.

STEPHEN NORTH was chairman of the Carpenters' Hall meeting and was elected second vice president at the organization meeting of the Philadelphia College of Pharmacy. All that has come to light concerning him is that he was a wholesale druggist and that he died in 1826.

PETER WILLIAMSON, the secretary of the Carpenters' Hall meeting, in 1821, was a partner in the drug store of Klapp and Williamson, Second and Almond Streets. In 1874 he founded the Peter Williamson scholarship, which has been of great service to many young men since. He died in 1886 at the advanced age of 91 years.

DANIEL B. SMITH, the first secretary of the Philadelphia College of Pharmacy, in 1821, was a partner in the firm of Smith and Hodgson, Sixth and Arch, a store that eventually developed into the business of Bullock and Crenshaw. Mr. Smith is one of the numerous illustrations of the scholar in pharmacy that gives the lie to the flippant opinion handed down in 1912 from the Federal Bench in New York, in which occurred the phrase "druggists all over the country: men of no great learning." Besides his activity in the Philadelphia College of Pharmacy, he became, in 1834, professor of moral philosophy, English literature and chemistry at Haverford College.

FREDERICK BROWN, one of the Founders, in 1821, was a drug clerk, employed by Charles Marshall. In 1822, he started his own successful business, which he continued until his death in 1864.

Among the other Philadelphia druggists of 1821 and shortly thereafter we note the following:

BENJAMIN ELLIS, originally a druggist at Muncy, Pa., in 1821, was studying medicine at the University of Pennsylvania. In 1827 he became professor of materia medica at the Philadelphia College of Pharmacy.

FRANKLIN SMITH, in 1821, or shortly thereafter, had a drug store at Eighth and Walnut. He was the preceptor of Henry C. Blair, who in 1829, bought the Smith drug store and thus established the historic Blair pharmacies.

GEORGE GLENTWORTH, in 1821, conducted, at Sassafras (now Race) and Chester Streets, the pharmacy, the fixtures of which are now exhibited in the College Museum.

ELIAS DURAND, in 1821, was a clerk in Ducatel's famous French pharmacy in Baltimore. In 1825, he opened his pharmacy at Sixth and Chestnut, Philadelphia, which for many years was the most renowned drug store in the city. He was vice-president of the Philadelphia College of Pharmacy in 1844 and contributed numerous papers to the Journal.

As to pharmacy in Boston in 1821, a delightful series of thirteen papers, by W. A. Brewer that appeared in the *Pharmaceutical Record* in 1884, gives the most vivid picture of the time that has as yet been found. The series tempts one to make numerous quotations, but at this time it can only be stated that Mr. Brewer began his pharmaceutical apprenticeship in June, 1821, in the wholesale drug store of Bartlett and Brewer on Washington (then Cornwall) Street, Boston. He states that at that time the wholesale firm of Rice, Henshaw and Company was the largest drug distributors in the United States; that David Henshaw later became Secretary of the Navy; that in 1821, there were in Boston seven wholesale and twenty-three retail drug stores, among these being those of George Brinley, Robert Fennelly, Charles Nolan, John I. Brown (of bronchial troches fame), Maynard and Noyes, Love and Reed; Dr. Ballard, Cyrus Holbrook, Charles White, Ephraim Elliot and Thomas Greenleaf.

As to the New York druggists in 1821, those whom we still recall are Schieffelin and Company, then a firm of twenty-seven years standing; John Milhau, who in 1823, retired, spent several years abroad and then returned to open the famous Milhau Pharmacy on Broadway; and Benjamin Quackinbush, Greenwich and West Tenth, whose store is still run by his descendants. From the city directory of 1821 and from other sources we learn that among the other New York apothecaries of that time were Peter B. Brown, Grand and Cannon Streets; Hull and Bowne, 146 Pearl Street; J. H. and W. B. Post, 41 William Street; James Seaman and Company, 49 Fulton Street; and Isaac See, 325 Greenwich Street.

For information as to the druggists of Cincinnati of 1821 we are indebted to an interesting historical sketch by Joseph Feil, in which are given from the newspapers of 1818 and 1819 advertisements of T. W. Dyott, wholesale drug and medicine warehouse; Caleb Bates, Lower Market Street; and Hallam and Clark. Of the other American cities the information is only fragmentary. Thus we learn from obituaries and from patent medicine advertisements that Ducatel's pharmacy was one of the leading drug stores of Baltimore; that William Gunton was established in Washington; that E. and R. H. Stabler conducted the drug store in Alexandria, from which sprang R. H. Stabler, the eighteenth president of the American Pharmaceutical Association; that William McKean was established in New Orleans.

As to the actual drug business of 1821, we have a mirror of its materia medica in the United States Pharmacopœia of 1820. The druggist made almost all of the medicines that he dispensed. Thus the U. S. P., 1820, provided recipes for such chemicals as prussic acid, sulphuric ether, silver nitrate, bismuth subnitrate, calomel, corrosive sublimate and zinc oxide (flowers of zinc), and record shows that independent chemical works were just in the process of organization (*e. g.* Farr and Kunzi, 1818; Rosengarten and Zeitler, 1822). All pharmaceuticals were prepared by the apothecary except some special ones, mainly of French origin, as at that time the French were the premier pharmacists of the world. Testimony to this effect is given by D. B. Smith concerning Charles Marshall, while it can be added that the tremendous vogue of Elias Durand was due to the fact that he was a French-trained pharmacist and could prepare pharmaceuticals of an elegance almost equalling that of the French preparations. In a curiously fragmentary contribution from S. F. Troth, he brings out that the first really nice Epsom Salt was brought from England to Philadelphia in 1821; that the first sodium bicarbonate purchased by Henry Troth, in 1821, cost \$1.25 a pound; that tartaric acid was a novelty in 1821, and cost \$1.25 a pound; and that about that time druggists had their English magnesium carbonate calcined to the oxide in the furnaces at Abram Miller's pottery on Zane Street. From an advertisement of a Cincinnati druggist we learn that in 1819, beeswax cost 20 cents a pound; cassia, 70 cents; ginger, 30 cents; and sugar, 28 cents. Another Cincinnati advertisement of 1819 announces the receipt from Philadelphia of a consignment of Milnor's Acid Lemon for making lemonade, and of Farr's Soda Powder for making soda water. In passing it might be stated that the first American quinine was made in 1823 by Farr and Kunzi, the firm that eventually developed into Powers and Weightman.

#### PHARMACEUTICAL THOUGHT IN 1821

To discuss the general trend of science in 1821 would exceed the limits of this paper, so there is no need of going further in this direction than to cite what Edward Parrish said fifty years ago today, in effect, that in 1821 the labors of Davy, Ampere, Dalton, Berzelius, Faraday, Oerstedt and Arago had reached their culmination, thus laying the foundations of modern chemistry.

William Procter pointed out the difficulty in making a history of pharmacy of the 1821 period, since the only pharmaceutical journals then reaching this country were French. It has been the privilege of the writer of this paper to scan the *Journal de Pharmacie* for 1821, and also two German year books of pharmacy of the same period, Kastner's *Berlinische Jahrbuch* and the *Scheidekunstler und Apotheker Almanach*. From these sources considerable interesting information has been obtained; among it the fact that in France, the available journals of science, besides the *Journal de Pharmacie*, numbered seventy. Of these only one



was pharmaceutical (Trommsdorff's *Journal der Chemie and Pharmazie*) and only one came from America (*Journal of the Philadelphia Academy of Sciences*). In the two German Year Books are lists of books and periodicals received by the editors during the year. Among the periodicals we note Trommsdorff's *Journal der Pharmazie* and Buchner's *Repertorium*. As to books, over eighty titles are given.

Turning to the problems under discussion it is plain to see that 1820-1821 were alkaloidal years. Sertürner's discovery of morphine, the first isolated plant base (1816), had stimulated research in that direction and as a result we find in the periodicals of a century ago, first of all, the classic paper of Pelletier and Caventou on quinine, a dissertation covering forty-eight printed pages; a paper from the same authors on veratrine, and one from them on strychnine; Meissner's article on sabadilline; Brandes on daturine, on delphine and delphinine and on atropine; Pelletier on veratrine; Oerstedt (son of a Danish apothecary, the great electrician and chemist), on piperine; Desfosses on solanine; Thomsen on the combustion assay of morphine, and Brandt and Meissner on atropine. As novelties in the way of elements we note cadmium, thorium, lithium and selenium. As new drugs, are described *Asarium Canadensis* (used then in the United States for tetanus), guarana, arrow-root, *scutellaria* (used then in the United States for hydrophobia), *lactucarium*, Borneo camphor, *chiretta* and *pareira brava*. Then there are given, among other analyses, that of *krameria* by Gmelin; of *ambergris* by Pelletier and Caventou; of *Tonquin musk* by Blondeau and Guibourt; of *cubeb* by Pelletier; of *Fucus vesiculosus* by Coindet (pointing out that its medical action in goiter is due to its iodine content); of *serpentaria* by Chevallier; of *saffron* by Henry (noting presence of polychroit); of *santonica* by Boullon-LaGrange (describing its volatile oil); of *cochineal* by Pelletier and Caventou (giving method of preparing carmine); of *yellow wax* by Buchholz and Brandes; of *colocynth* and *star anise* by Meissner; of *myrrh* by Brandes; and of *saffron* by Aschoff. An unexpected paper is one on the "Atech-Gab" of Baku, in which the words "petrol" and "naphthe" are used, and in which it is stated that the "petrol" is used by the poorer classes of Persians as a lamp oil. Some forty years later (1859) Pennsylvania petroleum became the great commodity which has made it world-famous ever since.

Of papers published by Americans we find four; one by Spalding (the *scutellaria* article cited above), one by Hare on a theory of galvanism, one by Rafinesque on atmospheric dust, and one by John Gorham, professor of chemistry at Harvard, on the constituents of maize.

There are some unusual items, including a complaint concerning a blind prescription written by a Parisian oculist which could be compounded at only one pharmacy. The prescription called for 6 grains of "purified salt of cadmium" in 6 ounces of orange flower water. Because of the extreme rarity of the cadmium compound, the pharmacist charged 4 francs 50 and then, alas, dispensed 6 grains of zinc sulphate. So some of our pharmaceutical predecessors were not so guileless, after all. Another writer rails against factory-made pharmaceuticals, pointing out that one firm sold *Baume Tranquille* (infused oil of *hyocyanus*) for 1 franc 20 a pound, whereas the oil of which it was made, when of proper quality cost 1 franc 60. It is also interesting to note that while the metric system was supposedly adopted in France in 1793, thirty years later (1821), practically all matters concerning weight were expressed in pounds, ounces and grains. This should show us metric advocates that it takes a long time to teach a people new ways; it should also show us that patient and persistent effort finally brings a people to the new and better way.

There are two interesting papers which discuss the pharmacists of the past. One calls attention to the fact that the fern genus *Darea* is named after the English pharmacist Dare; in the other mention is made of Apothecary Rouvier as author of a book of voyages; of Apothecary DeMach, as a poet; of Apothecary Guairet as a Latin versifier, and of Apothecary Baumé as the author of a grammar. All of these worthies (all forgotten except Baumé) are discussed in a review of a book on metaphysics published in 1821 by Apothecary Opoix. Here is a good lead for the pharmaceutical historian.

In another paper we find a complaint that works on pharmacy are being written in the vernacular rather than in Latin, a really valid reason for the objection being that when written in the vernacular any charlatan can read the various recipes and thus become druggists, whereas when in Latin, only the truly educated can become apothecaries.



As to books, the first national pharmacopœia, the French Codex, had appeared in 1818, followed toward the end of 1820 by the first United States Pharmacopœia. The great book on pharmacy of the day was by the French pharmacist, Virey, who interestingly enough had been accused by the Government of appropriating too freely material found in the Codex. At his trial, however, he was acquitted of the charge. The great book for American druggists was Thatcher's American Dispensatory; our present classic, the United States Dispensatory, not appearing until 1833. The most important book on general chemistry was Thomson's "System of Chemistry," an English work in four volumes, that was first published in America in 1818. Another classic was Ure's "Dictionary of Chemistry," the first American edition of which (edited by Robert Hare and Franklin Bache) appeared in 1821.

"The Medical Botany of William P. C. Barton," a handsome volume with beautiful colored illustrations of medicinal plants drawn by the author, appeared first in 1818, with a second edition dated 1825. It is interesting to note the 1818 edition was published by M. Carey and Son, while the 1825 issue was distributed by Carey and Lea, the predecessors of the present firm of Lea and Febiger.

A remarkable book, published around 1821, is a neatly bound volume of 161 pages, extolling the virtues of "Swaim's Panacea." After a description of this marvelous concoction by Swaim (a Philadelphia bookbinder), the rest of the volume is taken up with testimonials written up as "reports of cases" from physicians, including such celebrities as Drs. Valentine Mott, Parke (both delegates to the Pharmacopœial Convention of 1820), Dewee and Hall, the latter a member of Congress from North Carolina. There was evidently no Council on Pharmacy and Chemistry in 1821.

#### PHARMACY OF 1821 AND PHARMACY OF 1921

A comparison between the pharmacy of today and the pharmacy of a century since would constitute a paper in itself, so merely as summary it may be here stated that while pharmacy of 1821 was the art of compounding medicaments and the sale thereof; the retail pharmacy of 1921, the age of the machine-made goods, is largely the art (or science, if you will) of salesmanship, the distribution of the products of other men's hands. Deplore it as we will, the machine has largely replaced the man in our calling as in many others. The druggist of 1821 was a merchant of standing, who served his customers with products made in his back room of his store, and in many cases that back room between now and then has grown into a huge factory. The pharmacist of 1921 has four ways in which he may utilize his training: (a) he may be a clerk in a corporation drug store; (b) he may be a proprietor of a commercial store, where salesmanship is the keynote, even as it is in the corporation store; (c) he may become a prescription specialist, to whom physicians turn for expert advice, even as the physicians of 1821 turned to Marshall, to Milhau, to Durand and to Ducatel; (d) he may be a trained pharmaceutical chemist or pharmacognosist employed in a manufacturing plant. This is not the time to discuss these phases of modern pharmacy beyond the bare statement that the options may be best expressed by the French saying, *chacun à son goût*.

#### CONCLUSION

In 1821 the Founders of the Philadelphia College of Pharmacy began this great institution for the purpose of training apprentices to become honest and efficient druggists. It was an organization of pharmacists for pharmacists, and this ideal has been faithfully upheld for one century. It is not improper to say that whatever faults may be found in the century of stewardship have been due to the faithful execution of this principle. Designed originally to train retail pharmacists, as the decades have rolled by, the College has met changing conditions in such a manner that it continues to be of the greatest and broadest service to all phases of American pharmacy. Thus when the time was ripe, laboratory courses of instruction were instituted, courses that brought inspiration as well as knowledge to those who were fortunate enough to take the work. Thus when the old-time apprenticeship system began to break down, when the retail druggist became unmindful of his duty as preceptor, when the commercialization of pharmacy in the modern sense, was at its beginning, the College was the first to start a commercial course that even to this day reflects credit upon its originators. And now at the dawn of the new century of its existence, the Philadelphia Col-

lege of Pharmacy has become the Philadelphia College of Pharmacy and Science. To its old graduates the College will always remain the beloved "Philadelphia College of Pharmacy," but the new name possesses a striking significance. During the last half-century the university movement in pharmacy has brought about the anomalous condition that its exponents seem at times ashamed that they are pharmacists, and manifest an apparent desire to make pharmacy a minor topic in a course supposedly designed to train a young man or woman to be a pharmacist. It is on a par with certain phases of medical instruction where the aim seems to be to teach the student how to diagnose a disease and then let him flounder around as to a remedy. The very title, the "Philadelphia College of Pharmacy and Science," puts the proper emphasis upon the valuation that should be placed upon instruction in this and other schools of pharmacy. Pharmacy should be the foremost consideration. A knowledge of other sciences is essential for the trained pharmacist, but, whether retailer, wholesaler, manufacturer or teacher, the graduates of our pharmacy colleges should realize that they are first, last and at all times, Pharmacists.

### Influence of Pharmacists on the Development and Advance of Modern Chemistry

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Pharmacy as an art antedates modern chemistry by several centuries.

Following the era of the alchemists, and at about the end of the fifteenth century, a different turn was given to the study of alchemy, and under the general influence of Paracelsus, experimentation was turned to the study of new medical qualities in various natural substances, and the projects of transmuting the baser metals into gold and silver were practically abandoned for the time. Paracelsus and his immediate followers made many medical and drug discoveries. Indeed, it has well been said that "the apothecary shops of Europe became research laboratories, from which many valuable medical discoveries emanated."

This was the era of the iatro-chemists. Among these names we have, besides Paracelsus, Libavius, in 1595; Glauber, from 1603 to 1668, whose name still remains a familiar one to the chemist of today, and others.

We are accustomed to think of Priestly, who discovered oxygen, in 1774, as one of the founders of modern chemistry, but Priestly contributed far less to the advance of chemistry than a Swedish apothecary named Scheele, who had discovered oxygen two years before Priestly, although he had not published his discovery until after Priestly's announcement. Scheele also discovered the important element, chlorine, in 1774, and many others of our most important and valuable chemical substances, such as tartaric, oxalic, citric, gallic and lactic acids, as well as glycerin and many other substances. In fact, the work of this Swedish worker, an apothecary during the whole of his career, represents one of the most conspicuous contributions to the advance of chemistry.

If we take one country after another, and look at the records of discovery of the latter part of the eighteenth century, we will find repeated illustrations of the contributions of pharmacists to the stock of chemical knowledge.

For instance, in Germany, Marggraf who, in 1747, discovered beet sugar, and may be said to have been the founder of the beet sugar industry of the world, was a Berlin apothecary, and made many other chemical discoveries. Klaproth, who is credited with the discovery of four of our chemical elements, started as a pharmacist. Heinrich Rose, one of the great mineral chemists, and later Professor in the University of Berlin, began as a pharmacist, and his father and grandfather before him were pharmacists. Poggendorf, Professor of Physics in the University of Berlin, and a name well known in the literature of chemistry, was for eight years a practicing pharmacist.

Turning to the French list, we have the names of Vauquelin, a discoverer of several of our chemical elements, who was connected with the Paris School of Pharmacy, and Pelletier and Caventon, the discoverers of quinine, and Labarraque also actively engaged in pharmacy. The great Pasteur, whose services to chemistry and preventive medicine are universally



recognized throughout the world, was an apothecary and not a chemist in the beginning of his career.

Two of the most eminent chemists of our own day, namely, Berthelot and Moissan, were both professors in the Ecole Supérieure de Pharmacie in Paris.

Similarly, one of the great lights of English chemistry, in the beginning of the last century, Sir Humphrey Davy, who is credited with the discovery of some seven or eight of our chemical elements, was an apothecary's clerk in the beginning of his career.

Indeed, in both France and England, the recognition of pharmacists as investigators has been notably greater than in any other country. The finest chemical laboratory in London, namely, that of the Imperial College of Science and Technology, had as its first professor of chemistry, one who had the responsibility of constructing the newly established laboratory, the late Sir William Tilden, who began as an apothecary, and for many years was connected with the chemical laboratory of the Pharmaceutical Society of Great Britain. He published, in 1916, a most interesting and valuable book covering the whole range of chemical activity, the title of which is "Chemical Discovery and Invention in the Twentieth Century," which book is one of the most suggestive and readable books to those desiring to get the survey of the broad scope of chemistry and its applications that can be found at the present time.

With this survey of the history of the relations of pharmacists to the development of chemistry in earlier times, as well as in recent times in Europe, we can now come to consider how far this relation has existed in this country.

Speaking in this hall of the Philadelphia College of Pharmacy, and in connection with an anniversary of the founding of this institution, it seems very proper for us to consider what illustration of our subject we may find right here in our past history as an Institution.

Among the most cherished memories of this Institution are those of some of its earliest workers, and in that connection we may call attention to the fine record of one of the earlier professors of this Institution, namely, William Procter, Jr., who, though a busy practicing apothecary and a teacher, yet found time to carry on many investigations which advanced chemical knowledge very notably. The value of these was also recognized in much wider circles, and gained for him recognition on the part of foreign chemical authorities. His discovery of the composition of wintergreen oil, and of the characters of the salicylic acid derived from the same, were recognized as furnishing the earliest knowledge on this subject.

We may also refer to the long series of contributions to chemical knowledge that have appeared in the *American Journal of Pharmacy* published by this College for nearly a century past.

Coming down to the present time, we still have very active workers from the ranks of pharmacy, whose present contributions to chemical science are cordially recognized. While it would be invidious to attempt to select names in this connection, I will only mention two, both of whom are well known to us, namely, Professor John U. Lloyd, a recognized authority on plant chemistry, and more recently upon colloid chemistry reactions, and Frederick B. Power, a graduate and former instructor in this College, who is recognized both in England and in this country as probably the first authority upon the subject of essential oils. He is still active in the Government service at Washington on this subject.

The direct influence of pharmacists on the creation of chemical industries is, however, most readily illustrated by a study of the history of the development of manufacturing chemical industries in this city of Philadelphia, which has been known for many years as a great chemical manufacturing center, and I will therefore in some detail review the development of Philadelphia's chemical industries.

"Probably the first to inaugurate the manufacture of chemicals, as such, in this country, was the firm of Christopher, Jr., and Charles Marshall, sons and successors of Christopher Marshall, an early druggist and one of the original 'fighting Quakers' of Philadelphia. This firm had, as early as 1786, entered quite extensively into the business of making muriate of ammonia and Glauber's salt. The factory is described by Watson, in his 'Annals of Philadelphia,' as being a grim and forbidding-looking building on Third Street, near the stone bridge over the Cohocksink Creek. This firm is said to have developed an annual output of upwards of 6,000 lbs. of muriate of ammonia; quite an achievement for that time."



Let us now take up the beginnings of the manufacture in Philadelphia of one of the fundamentally important chemicals, viz., sulphuric acid. This substance is recognized as the basis of all chemical industries and its manufacture must precede that of most other chemicals. The theory of the lead-chamber process was already understood by chemists, by the middle of the eighteenth century. Ward had made it in England in 1740 on a large scale in glass vessels, and Dr. Roebuck first used leaden chambers instead of glass in Birmingham in 1746. The first leaden chamber was erected in France, at Rouen, in 1766.

John Harrison, the son of Thomas Harrison, a member of the Society of Friends, was an early Philadelphia druggist who had completed his education by spending two years in Europe, in part under the instruction of Dr. Joseph Priestly, the famous English chemist. Upon his return he began, in 1793, the manufacture in Philadelphia of various chemicals, and notably of sulphuric acid. He had at first a lead chamber capable of producing 300 carboys of acid per annum, and his laboratory at this time was on the north side of Green Street, west of Third. In 1804, he established a new factory at Second and Huntingdon Streets, near Frankford Road, Kensington, but continued for a time the work on Green Street. In 1807, he built what was for that time quite a large lead chamber; it was 50 feet long, 18 feet wide, and 18 feet high, and capable of making nearly 500,000 lbs. of sulphuric acid annually, the price of which was then as high as 15 cents per lb.

"As is well known, acid produced in lead chambers is not the Oil of Vitriol of commerce, and the only method known at that time to concentrate it to the required strength was by boiling it in glass retorts—a very precarious and dangerous process. The constant breakage of the glass largely increased the cost of the concentrated acid and the danger of the work. To obviate this great trouble, Mr. Harrison, in 1814, introduced the use of platinum for the manufacture of sulphuric acid, for the first time, at least in this country. In the previous year, 1813, Dr. Eric Bollman, a Dane, had come to Philadelphia. Dr. Bollman was familiar with the metallurgy of platinum, and a highly scientific man. He brought with him from France Dr. Wollaston's method for converting the crude grains of platinum into bars and sheets. About the first use that Dr. Bollman made of these platinum sheets was the construction early in 1814, of a still for the concentration of sulphuric acid for the Harrison works. It weighed 700 oz., had a capacity of 25 gal. and was in continuous use for fifteen years. This early application of platinum for such purposes was highly characteristic of the sagacity and ingenuity of the American manufacturer. At the time the use of this rare metal was a novelty in Europe and known only to a few persons and certainly entirely unknown in this country. It follows, therefore, that John Harrison was not only the earliest successful manufacturer of sulphuric acid in America, but the first in this country to concentrate it in platinum."

Farr and Kunzi were next in Philadelphia to follow the lead of Harrison in making sulphuric acid, which it is stated they did in 1812, and shortly thereafter Wetherill and Bro. also began the manufacture of sulphuric acid on the east bank of the Schuylkill River. Chas. Lennig, the founder of the present firm of Chas. Lennig and Co., Inc., also began the manufacture of sulphuric acid in 1829, Rosengarten and Sons shortly thereafter, and Carter and Scattergood in 1834, also were early manufacturers of sulphuric acid.

Nitric acid, under the name of *aqua fortis*, is mentioned in Scharf and Westcott's "History of Philadelphia" as made by Christopher Marshall, Jr., a Philadelphia druggist, at the close of the last century. A communication from Thos. Skelton Harrison says his grandfather, John Harrison, began to make both nitric and muriatic acids in 1804. Carter and Scattergood had it on their list of manufactures in 1834. Muriatic acid is also mentioned as made by this latter firm in the year 1834, as were tartaric acid and citric acid.

#### MANUFACTURE OF PAINT COLORS

The first white lead factory of Samuel Wetherill and Sons was built in 1804 at the corner of Broad and Chestnut Streets, but it was burned down a few years later, and in 1808, they erected a new factory at Twelfth and Cherry Streets.

"His son, Samuel Wetherill, Jr., was the active man of the concern, and assisted his father in all business matters. The enforced experience which was pressed upon them during

the revolution, concentrated their attention upon the manufacture and sale of chemicals, and they went into the drug business. In 1785, Samuel Wetherill and Son were located in Front Street, above Arch. Here, for many years, 'Wetherill's Drug Store' was an old landmark, and the place at which sons and grandsons were brought up to the business. The Wetherills were the pioneers in the manufacture of white lead. They established it before the year 1790. They erected extensive white lead works near Twelfth and Cherry Streets, which were burnt down in 1813, but afterwards rebuilt.

"The fire which destroyed the white lead works proved to be incendiary and started by a young English officer the day before he sailed for England.

"In October, 1811, Samuel Wetherill, Jr., obtained patents for a new mode of washing white lead and for screening and separating metallic from corroded lead in the process of making red lead, and using the first machine ever used for manufacturing purposes in the United States. This method has been generally adopted and used by all makers of lead.

"The name of the first white lead firm was Samuel Wetherill and Son, Samuel Wetherill, Jr., evidently being the active member. After his father's death, in 1816, Samuel Wetherill, Jr.'s sons joined the business and the firm became Samuel Wetherill and Sons. After the death of Samuel Wetherill, Jr., in 1829, it became Wetherill Brothers. The store of the firm was at 65 North Front Street; the warehouse and mill of the old establishment were on Coomb's Alley, back of Second Street.

"When the residence part of the city spread to Twelfth and Cherry Streets, Samuel Wetherill, having bought ten acres of land on the bank of the Schuylkill River, below Chestnut Street, moved there in 1847; his sons (Wetherill and Brother) built the white lead and chemical works and continue to this day."

John Harrison also began the manufacture of white lead in 1806. The firm of Mordecai and Samuel N. Lewis, which afterwards became John T. Lewis and Brothers, also began the manufacture of white lead in 1812, making three Philadelphia firms manufacturing paint colors at that time. These three earliest manufacturers of white lead and paint colors or their lineal successors have continued in business to the present time, for considerably over a century, and have done much to give Philadelphia its long-continued prominence as a chemical manufacturing center.

One of the lines of manufacture that contributed to make Philadelphia a great chemical center early in the last century was that of the yellow and red prussiates of potash. I have been furnished a private memorandum concerning the activities of the firm who began this industry and were active in it for many years.

"Under the firm name of Carter and Scattergood, a profitable chemical manufacturing business was conducted from 1834 to 1911; and was absorbed in the latter year by The Henry Bower Chemical Mfg. Co.

"John Carter and Joseph Scattergood bought out the old-established business of 'John and Daniel Elliott' founded in 1754 by their grandfather, John Elliott.

"Jos. Scattergood graduated P. C. P., 1829.

"The Elliotts' place of business and factory was originally on Front Street, between Chestnut and Walnut Streets, but in 1812, the manufacturing work was transferred to a new factory which they erected at Nineteenth and Pine Streets, John Carter becoming their apprentice January 1, 1816.

"The list of chemicals produced by Carter and Scattergood was an extensive one, John Carter being the manufacturer and Joseph Scattergood, the business man of the concern. It included citric, tartaric, oxalic, nitric and sulphuric acids, bichromate and prussiates of potash and many other articles, but their operations during the first ten years of their business were on a scale which in this day would be considered quite small.

"Yellow prussiate of potash was first made by them in 1834 (that being, so far as known, the first production of the article in America), but the demand was very small, only 472 lbs. being absorbed by the market in that year. In 1835, the sales increased to 6,443 lbs. but it was not until 1843 that the demand became large, the sales amounting in that year to 69,470 lbs. and rapidly increasing in the next two years, the sales in 1845 being 207,522 lbs.



"The high price, over 50 cents per lb., and the keen demand, of course, resulted in active competition, and the market for many years was over-supplied.

"In the year 1846, Carter and Scattergood began to produce red prussiate of potash, being the first in America. This was a highly profitable branch of the business until the introduction of coal-tar dyes, as substitutes for prussiate colors on woolen goods, gradually displaced it in the most important field of consumption. Except for the manufacture of *Blue-Print Paper*, there is now very little demand for it."

Potash and ammonia alums were first made in Philadelphia by Chas. Lennig in 1837, and by Harrison Bros. in 1840.

Coming now to the early manufacture of medicinal or pharmaceutical chemicals which has long made Philadelphia famous, we find that George D. Rosengarten and Charles Zeitler, as Rosengarten and Zeitler, began the manufacture of chemicals in St. John Street, Philadelphia, about 1822. They were the first to manufacture the alkaloids of cinchona and opium in this country, having begun the manufacture of sulphate of quinine in 1823, of sulphate of morphine in 1832, and strychnine in 1834. The salts of quinine were also manufactured by John Farr in 1825.

These two firms and their successors have had much to do with the establishment of Philadelphia as a chemical manufacturing center. After the withdrawal of Mr. Zeitler, which took place within a year, Mr. Rosengarten continued alone, later taking in a Mr. Dennis. When this partner withdrew some twenty years later, the firm became Rosengarten and Sons, which business continued until the formation of the present combination with the other large Philadelphia manufacturer of medicinal chemicals, Powers and Weightman.

Farr and Kunzi began the manufacture of chemicals about 1818. Abraham Kunzi, a Swiss by birth, retired in 1838, and the senior partner, John Farr, who had been born and brought up in England, associated with himself Thomas H. Powers and William Weightman, two young Philadelphians who had been in the employ of the firm for some time. The new firm name was John Farr and Co. This was later changed to Farr, Powers and Weightman, and on the death of the senior partner in 1841, the firm name was again changed; this time to the title—Powers and Weightman, by which it was so long known throughout the entire country.

These two firms, in 1905, united under the name of the Powers-Weightman-Rosengarten Company, and continue as probably the best-known manufacturers of general and medicinal chemicals in the United States.

The history of the commercial production of pure glycerin is also of interest in this account of Philadelphia's chemical achievements.

The late Robert Shoemaker, while making medicinal plaster, had his attention directed by Professor Wm. Procter to the residuum liquid which was obtained. From this he prepared the first glycerin made in this city, if not in America, in 1846, and this was exhibited by Professor Procter to his class at the Philadelphia College of Pharmacy at that time. Mr. Shoemaker manufactured it for sale, according to his statement, for some years in connection with the manufacture of lead plaster.

The later development of the refining of waste lyes containing glycerin was also a Philadelphia achievement and was worked out by the late Henry Bower. By the courtesy of his son, W. H. Bower, I am allowed to quote from a private letter, which gives the account of his work, in his own words:

"Quite early in life, say in 1857, my attention was keenly directed to some mode of purifying these waste liquors of the stearine candle factories, and in that year I could have purchased the entire product of crude glycerine of the United States for a sum not exceeding \$5,000, although the manufacture of it was nearly if not quite as large then, as now.

"I commenced work in earnest to experiment in purifying glycerine in 1858—and expended long and weary efforts, all my earnings, as well as some borrowed money. I at first succeeded in producing an article sufficiently pure for use in gas meters (in place of alcohol) to prevent freezing and stoppage of the instrument—it was not however until about the middle of 1860 that I succeeded in making and placing in the market a 'pure inodoruous glycerine,' even then the amount sold was quite insignificant. Inferior grades made their appearance about the same time in the West. The bland and neutral nature of the article, and the discovery of various uses for it, soon increased the demand to a marked extent; I was enabled



from time to time to increase my works, and in increasing them was making steady inroad into the supply of the crude article. At this period, say in 1863, the business of refining glycerine was scarcely known on the continent of Europe, and I exported small quantities to Hamburg paying a profit; Belgium, France, Germany and Austria were immense producers of crude glycerine, but like its sister product here in previous years, it only found its way to the sea. As before stated, the use and sale of the refined continued to improve, the crude growing more scarce each season, until a point has been reached when every available pound is worked into a valuable product. It would not be out of the way to place the total value of all the glycerine sold in the United States at this time at \$500,000. This sum could never have been reached had it not been for the discovery of a mode for refining to which, so far as this country is concerned, I lay claim; by a careful management of my business for some years I kept the process a secret; but in time some portions of it came to the knowledge of other persons, who have been enabled to produce very fair articles. There are besides myself, here two refiners in Cincinnati, one in Chicago, and one in New York."

There were, of course, other drug and chemical firms who were well and favorably known in the early half as well as the later half of the nineteenth century.

We have already mentioned the name of Christopher Marshall, Jr., who was active in Revolutionary days. Himself the son of a druggist, he was succeeded by his son, Charles Marshall, and his grandson, Charles Marshall, Jr., who in 1814, established himself in the wholesale business at 310 Market Street.

With this Charles Marshall, Jr., entered as an apprentice, Geo. W. Carpenter, who later became one of the most prominent as well as successful of wholesale druggists in Philadelphia. The old store of Carpenter and Henzey at Eighth and Market Streets, I remember quite well as it stood about forty years ago.

A very well-known drug firm of the latter half of the nineteenth century was that of Bullock and Crenshaw. They were the successors to Smith and Hodgson, who established themselves as druggists at the corner of Sixth and Arch Streets in 1819, where they continued until 1849, when they disposed of their drug business to two of their employees, who then formed the firm of Bullock and Crenshaw. This firm carried on not only a wholesale drug business but handled fine chemicals and chemical apparatus, supplying many colleges and schools throughout the country. In September, 1868, they moved to 528 Arch Street, where in larger quarters they carried on a flourishing business until the death of Charles Bullock, the surviving partner.

The firm of French, Richards and Co. was for many years one of the best known of Philadelphia drug firms at its centrally located store, Tenth and Market Streets. The founder of this firm was Clayton French, who, in 1840, entered the drug business as an apprentice with Dr. Edward S. Wilcox. This firm was disbanded in 1890 on the death of its founder, but in the meantime its extensive cement and plaster department, which was started in 1852, at Callowhill Street and York Avenue, had been erected in 1883, into a separate business under the name of Samuel H. French and Co. This has since developed into a very extensive cement, plaster and dry color firm, now under the leadership of Howard B. French, a son of Samuel H. French of the original French, Richards and Co. firm.

### Centennial Celebration Week

The Centennial Celebration Week of the College (June 12-15) began with the baccalaureate sermon to the graduates on Sunday, June 12, 1921, by the Rev. Dr. David M. Steele in the Episcopal Church of St. Luke and the Epiphany on Thirteenth Street near Spruce Street. Monday, June 13, was Alumni Day at the College. The Alumni Association, in annual meeting assembled, gave its unqualified endorsement of the selection of Rear-Admiral Braisted as president of the College. It elected its officers for the ensuing year. Dr. William Duffield Robinson retired as president of the Association and Russell T. Blackwood succeeded him.

E. Fullerton Cook then gave a lecture upon the history of the College, illustrating his remarks with lantern slides of much historical interest. The evening was devoted to the usual annual banquet to the graduating class in the College Auditorium.

### Centennial Exercises

The next day, Tuesday, June 14, was particularly set aside for the Centennial Exercises. At ten o'clock in the morning the alumni, the invited guests and other friends of the College, assembled in the Ball Room of the Bellevue-Stratford Hotel. So many congratulatory messages had been received, that it was deemed inexpedient to introduce them as a part of the exercises. President William C. Braisted appeared for the first time as the presiding officer.

Dr. William H. Carpenter, Provost of Columbia University, from which Admiral Braisted had graduated, was present and spoke as follows :



WILLIAM H. CARPENTER

### The Significance of Education

WILLIAM H. CARPENTER, PH.D.  
Provost of Columbia University

William Henry Carpenter was born in Utica, N. Y., July 15, 1853. Son of William Penn and Sarah A. Carpenter. Educated at Utica Academy, Cornell University and University of Freiburg, Germany (Ph.D., 1881). Instructor in rhetoric and North European Literature, Cornell University (1883). Instructor in German and Scandinavian Languages, Columbia University (1883-89); Assistant Professor of same (1889-90); Adjunct Professor of Germanic Languages (1890-95); Professor of Germanic Philology (1895-02); Villard Professor of Germanic Philology (1902- ), and Provost of Columbia University (1912- ). Trustee

and Secretary of Columbia University Press. Author of numerous articles in magazines, reviews, encyclopedias and works of reference.

In a search in the Columbia University Library recently for material bearing upon the early history of medical education in New York, we came across a pamphlet containing the address delivered at the Commencement, in 1819, of the College of Physicians and Surgeons, now of Columbia University, at that time under the temporary jurisdiction of the University of the State of New York, by Dr. Samuel Bard, President of the College. Dr. Bard, who was born in your good City of Philadelphia in 1742, had been Professor of the Practice of Medicine in old King's College before the Revolution; he had become in due time the chief practitioner of medicine in the City and Province of New York, and had the distinction of being the family physician of George Washington. The address, which is a truly remarkable one both as a statement and a prophecy, begins with the following sentence: "A sound mind, in a sound body, constitutes the principal happiness and perfection of man; the means, therefore, by which such great and essential benefits are to be secured, have ever been the object of his solicitude, and most anxious inquiry." The statement, made a hundred years ago, was not new, nor in its main thought original. It is in reality but a paraphrase of what the Latin poet, Juvenal, said eighteen hundred years before him in that often quoted Latin phrase: "Mens sana in corpore sano," as constituting the ideal possession of a Roman youth.

The statement has appealed to me for the universality of its application. It would be quite impossible at the present time, or it will be impossible through the long years of history yet to come, better to formulate the matter, either in its original epigrammatic form eighteen centuries ago, or in its paraphrase a century ago, as the essential fact in the existence of the individual, both for himself and for the part that he performs must play in the social complex of his day and generation—for I take it as a self-evident truth that no man stands for himself alone in his out-goings and his in-comings, in his opinions and his prejudices, in his joys and his sorrows, in the manifold actions and reactions of human contact in the relationships of life, and that his mind and his body in their balance are a fundamental fact in the greater balance of the world of men beyond him.

If this fact then remains, as it seems to me to remain almost an eternal verity, that a "sound body" is an essential factor, and let us even say the essential factor of successful living, it is, after all, but a general statement that like such statements elsewhere is in need of what is sometimes called a definition of particulars to make it directly intelligible and applicable to any particular time. In point of fact, it has had at one time a meaning very different from what it has had at another, and while in a broad sense it has been always true, in a narrow sense of the actual accomplishment of result in the light of the understanding of a particular time, it has swayed backward and forward as the ideas of life and living have advanced or retreated on the long highway of human history. What I mean to say is that while the attainment of a sound mind in a sound body has been the educational ideal of the centuries—for it is a true definition of the purpose of education, as it has ever been—the means to attain it and the real results that it has been desired to attain have been as different as has been the whole varying course of human civilization. The serious ideals of one age have been at times the ridicule of the next, and the little-regarded of one generation have been not seldom advanced by its successors at other times to positions of supreme importance as matters of belief, and it has even gone so far in history that the sins of one generation have been the virtues of the next.

The history of education, accordingly, as I desire to use the term, shows a constantly changing concept, even generation after generation, of the means of attainment and of the actual ultimate result to be attained, to accord with the time and place, which shall constitute a man in the eyes of his generation as one with a sound mind in a sound body, or, as we may choose to phrase it, with an education that shall fit him to play his part on its recognized stage of action.

In a recent English essay on the need of educational reform, although in a wholly different connection, I find this matter stated much more clearly and concisely than I have done. "A new age," it says, "postulates a new education," and it is explained that "the traditions



which have dominated hitherto must one by one be challenged to render account of themselves; that which is good in them must be conserved and assimilated, that which is effete must be scrapped and rejected." An education, I would add, that does not fit into the life of the time, not necessarily to subordinate itself supinely to it, but at least to recognize in its content and in the organization of its methods the inherent necessities of the day, is useless where it should be most useful as the very foundation of an advancing civilization.

If all these things are true, and I think in the main they are, the thought that readily occurs is what should be the nature and content of education at the present time, and what is its true significance in the life of the individual and in that of the community of which he, whether he will or not, is a constituent and participating part. For my present purposes I shall assume that a system of formal education that has any just claim to recognition as logically conceived and consistently carried out takes due account of a sound mind and a sound body as coincident factors of educational development. One of my colleagues at Columbia University a number of years ago wrote a book with the somewhat amazing title of "Why the Mind has a Body," and he went on to question the rather natural inference that mind and body are, in respect of action, on a footing of equality; in other words, that the temptation lies very near the surface to set up the claim that every fact which shows the influence of body upon mind can be matched with a fact showing the influence of mind upon body. His ultimate conclusion, however, is that the dependence of mind upon body in the long run is only apparent, and that as an actual fact of existence the mind dominates the body, which is, after all, but the seat of organic life. Whichever is true—and such speculations run far afield—is beyond my present purpose. We must presuppose, I think, that it is an intention of education to secure by its processes the sound body that alone can support in its processes the sound mind, and that the school and the college, however imperfectly the results may actually be attained, are as alive today to the necessity of the correlation as were any of our forbears in the past. I hold no special brief for the particular form which the training of the body should take in the school or the college, since the matter must often be considered from the point of view of opportunity and environment, but that it should have a place, and a well-recognized place, as a fact and factor in any scheme of formal education is beyond argument. What I should have in mind, however, in school and college, is participant athletics—not the kind where the conscientious objectors sit comfortably on the bleachers and let the football team do all the rest. Even the professional school, where notably the work is intensive and the time is short, should find at least a modicum of space for athletic exercise, for a man who goes out to the practice of a profession with an ill-equipped body, however his mind may function, is handicapped from the start.

What, then, from the point of view of the mind—and of the soul—is the real significance of education, at the present time, not only to my generation which began with widely different ideas, and in some respects with very different ideals, from those of today, but to the generation that is now taking possession of the field as our successors in the activities of life; and what shall it be in its character and content to function, as needs must be, as a controlling impulse to lead not only the heads, but the hearts of men? "How can a man," says Carlyle, "without clear vision in his heart, first of all, have any clear vision in his head?" And long before him, it was pointed out that: "As a man thinketh in his heart so is he."

In making any definition of education, or in attempting any predication of its purpose and results, we must, of course, at the beginning fully recognize the fact that in the life of the professional man, the lawyer, the physician, or the pharmacist, there are two elements involved, his education in his profession, on the one side, and his liberal education on the other, or what we might properly call, at least from a certain standpoint, his special and his general education. My contention is that not for a moment is there any actual line of demarcation between the two. They are like two states of matter in flux that flow into each other until the whole is permeated by both and a new compound is formed that partakes of the nature of both elements, but yet in the end is neither. The lines of a professional education at the present time in its narrow sense of a special training for the practice of some one of its many phases are as a general thing well laid down, and the professional schools of the country of the best sort are more adequate in their equipment of men and methods

and more reasonably sure of the competency of their professional product to understand and to cope with the problems of practice than ever before in our history. This is, however, but one part of the problem of education, for a man, and, we must now be careful to say, in her share in the practice of the professions, a woman, who is trained in a profession alone, and no matter what that particular profession may be, is only half educated, for another half essentially important has been neglected. I should greatly doubt, however, when all is said, that any one of the good professional schools now walks consciously into such a slough of despond as to make its courses of instruction purely professional and nothing else, or at least does not base its professional training as a climax of formal education upon a basis of general culture. There are, nevertheless, from the very nature of the case, temptations to do so that must be borne in mind in the organization and conduct of every professional school, whether pharmacy, law, or medicine, or any other, that must be counteracted and discouraged. There is an insistent demand in an age that is distinctly materialistic for material results, and, in the characteristic hurry of the time, for their rapid production, and the young men and young women who are to go out into the world in the practice of a profession for themselves are confronted with a period of preparation, if care is not taken, too prolonged in age and expense to make it possible of accomplishment. These are real difficulties that confront every professional school in the proper carrying out of a scheme of education, and yet they must be rationally met or else that school has only half done its duty to those whom it has stamped with its approval at the end of its teaching. It may be true that the school in question has prepared its graduates to make a living, which, to be sure, is one of the ends of existence and a very important end indeed, since a good deal depends upon it for the part you play or even whether you are alive or dead, but in the more perfect equipment for life, and that is what we are considering, the fact of merely being able to make a living, although it is essential to most of us, or the acquisition of wealth which is but its sublimation, is but one element and not the only one in the whole plan of existence, for the end of all real education is not to make a living, but to live!

And what about this other half in a scheme of education, concerning which we have been talking with such confidence as an element of human life? A wise man has said that "the aim of education is the knowledge not of facts, but of values," in the sense that "values are facts apprehended in their relation to each other, and to ourselves." The matter could not have been better stated, for it is certain that the mere accumulation of facts, whatsoever kind they may be, does not constitute an education, or knowledge of them an educated man. It plays no part to you or to me as a criterion of education, as it is sometimes made to appear, whether we know any part or all of a long list of what is, after all, but the uncorrelated material of education, and not the thing itself in its relationships and its proper adjustments into a body of knowledge which shall constitute a cultural whole. A man may have read through the whole *Encyclopedia Britannica* and have remembered its facts, and yet have failed wholly in securing an education in any real sense. Facts are no doubt the basis in essential ways of education. This is particularly true of the strictly professional part of education, where of necessity facts are the very bricks and mortar on which the superstructure of professional knowledge is built, but this presupposes no heterogeneous collection of the odds and ends of knowledge, but of the evaluation of the many facts with which a profession is necessarily concerned in their relation to each other and their fusion together into a connected product of immensely increased importance because of its cumulative force.

As to the true content of what is usually called a liberal education, although only too often it is illiberal in nature and amount, I again hold no specific brief. I have, however, a very definite opinion of what should constitute in the end that education which it is desirable to attain in order to give it its true significance in a scheme of living. Herbert Spencer's famous definition of biological life: "The continuous adjustment of internal relations to external relations," is much more widely applicable than to the mere functional existence of the body, for it applies alike to the mind and soul of man, and it is the great and transcendent purpose of a true education to awaken the mind and soul and to bring them into harmony and adjustment with the conditions of life.



Education, then, is not mere instruction in the subjects of the school or college curriculum, whatever they may be, science, the classics, mathematics, literature, or history. These in proper balance are no doubt, in some measure or other, the legitimate means to an end, but they are that only in their proper function as factors in a combined result more important than any one of them. And just where the emphasis in subject instruction should lie I do not know, and the schoolmen themselves who are most directly concerned with this phase of formal education are by no means agreed as to what the ultimate worth to a trained mind this or that subject should be. The field is so broad that it is only possible to delimit and choose, but the choice need not necessarily be in every instance the same, and doubtless at the best, and whatever has been chosen, it will only partially accomplish its object. I am not like the Scotchman of ancient memory who was open to conviction, but would like to see the man who could convince him, or the man who liked any color so long as it was red. My own preference would be the classics, for I am old-fashioned, a science, because I believe in the new, English language and literature, a modicum of mathematics and a good deal of history, but I am open to conviction that that is not the only way to state the case, and that under the special circumstances at hand other subjects, in other proportions, might be selected as well.

The end, however, of a formal education is clear. It is so to train the mind and the soul that there shall be a foundation at least of the true appreciation of the values of the things of life. No one is, of course, educated in school or college,—for education never ceases, now or at any time, in the normal existence of the individual. The student in the story that I have always considered somewhat apocryphal who rushed out of his college Commencement waving his diploma in the air and shouting: "Thank God, I am educated!" was entirely too sanguine of the actual result that had been attained even by a college course. The story does not tell of his future history, but I greatly fear that it was one of disillusionment, for he surely must soon have realized that he was only at the beginning and not the end of an unceasing quest.

It is the province of education to point out the direction of the quest for knowledge and for the truth that ages ago it was said "shall make you free"—free to discriminate between the true and the false wherever they may appear, in the narrower ethics of the practice of a particular profession as well as in the broader affairs of civic and national life; free to discover and to understand the false claims of charlatanism in all phases of life and in whatsoever guise, or disguise, they may clothe themselves for the befoolment of the crowd; free to value at their real worth the passing fads and foibles of the moment that are but the froth borne along on the top of the wave that presently will recede and leave the wider surface unruffled as before; in other words, free to recognize that truth, and truth only, is eternal, and that all else sooner or later in God's good time disappears wholly from the sight of men, that it ultimately vanishes—an intangible shadow without substance or reality—back into the infinite space from which it momentarily has emerged and is forgotten!

There has been no greater need at any time of the educated man, and no time like the present time to keep these things in mind. I have always remembered a phrase used by President Butler in the address delivered at the Columbia Commencement of 1917. At that time, the Great War was still in its throes of death and destruction, but it was pointed out by the speaker that the world was more than a world at war, it was a world in ferment. What he meant was that the political and social conditions that always follow in the wake of war, and as a consequence of it, were like the chemical decomposition of an organic compound, and veritably were in a state of fermentation.

What was said then in the midst of the mighty struggle that was still going on is unfortunately as true today as upon the day on which it was spoken. The world is still in ferment. Old standards of conduct have been obscured, and sometimes forgotten. Old ideas of duty have apparently been laid aside. Old traditions of righteousness have been displaced in high places. New ideas of individualism and self-determination have swept away the multitude, and a new world, in many respects unlike the old, has taken its place. In spite, however, of all that is new and disturbing in conditions of the present which have followed as a natural consequence the destructive forces of the war, destructive to human conditions as well as



to human life, there are still, however, in the new world that has come about, the same fundamental standards of life and living. Whatever has been installed and whatever has been lost, there are still as deeply entrenched as ever the eternal verities that are the basis of human action. Truth may be obscured, but it is not destroyed; honesty may be in eclipse, but it is only hidden; personal conduct that controls the souls of men remains as it ever was, the fundamental fact of human and social existence. However much things seem to be in disorder and standards appear to be destroyed, at the bottom there is still the same basis of human action—action *as* an individual in living his own life for himself, action *in* the individual as he is a constituent and component part of the nation in which he lives. However the world may change, and however it has changed within your memory and mine, this is the fact that must remain still firmly fixed in our minds, that the old rules of conduct in the things of the mind and the soul are still always as they have been, and that these new conditions that confront us are often but the froth of the ferment, and the real, the fundamental facts of existence still remain, and will always remain the same. Life, as we have said, is infinitely more than organic existence. The life of all who are living today to enter into its fullest appreciation is not only the life of the body, but it is the life of the soul of man with its aspirations, its longings for results, its sacrifices and its achievements, and the men and women who go out into this new world from the professional schools to take their place in it should be equipped not only with a knowledge of the profession which they may have chosen for their own, but equipped also, as I think, with a knowledge of the value of the things of life to themselves as individuals, and to the society in which they are to live and to act as its responsible members, and it should not be forgotten that these fundamental things that I have called to mind are the real conditions of a rational existence.

An individualism that thinks only of self and a determination that has only self for its object is, however, but half of the duty of man. A thought of self is necessary for self-preservation as a fundamental fact of existence, but the mind that stops there has only realized a part of the supreme significance of life, which not merely takes account of the individual to himself, but also in a broad and enlightened spirit makes him to himself a constituent and militant part of his environment and of his place in human society. In the background of it all is still, of course, the professional calling of the individual. A great philosopher, Francis Bacon, three centuries back expressed this matter in terms that cannot be better stated today: "I hold every man a debtor to his profession, from the which, as men of course do seek to receive countenance and profit, so ought they of duty to endeavor themselves . . . to be a help and ornament thereunto." There can be, however, no thought to live for it alone, because, in the end, it is only one of the manifold parts of life.

A real education is more than a special equipment in any single direction of human energy, and its intention is to unfold to its highest potentiality the nature of man. The best definition that I have ever read of the true significance of such an education to the man who wears it as his crown of accomplishment is that contained in Huxley's "Essays," from which I copied it many years ago and have kept in sight as a precious possession. It is only a part of a longer statement of the position of man in the universe and his relation to it, but it bears directly on the present case, and this is what he says:

"That man, I think, has had a liberal education, who has been so trained in youth that his body is the ready servant of his will, and does with ease and pleasure all the work that as a mechanism it is capable of; whose intellect is a clear, cold logic engine, with all its parts of equal strength, and in smooth, working order; ready, like a steam engine, to be turned to any kind of work, and spin the gossamers as well as forge the anchors of the mind; whose mind is stored with a knowledge of great and fundamental truths of nature and of the laws of her operations; one who, no stunted ascetic, is full of life and fire, but whose passions are trained to come to heel by a vigorous will, the servant of a tender conscience; who has learned to love all beauty, whether of nature or of art, to hate all vileness, and to respect others as himself."

Such a man, it seems to me, has realized to the full the significance of education as I have wished it to appear in these remarks, fitted in his mind and soul to serve at least in partial fulfillment of the purpose of what long ago was called "the great appetites of honor."

Dr. S. Solis-Cohen, Professor of Clinical Medicine, Jefferson Medical College, then spoke as follows:

**The Relation of Pharmacy to Medicine**

SOLOMON SOLIS-COHEN, M.D.

Professor of Clinical Medicine, Jefferson Medical College

Solomon Solis-Cohen was born (1857) in Philadelphia. Son of Myer David and Judith Simiah (Solis) Cohen. Graduated from Central High School (1872), and from Jefferson Medical College (1883); Clinical lecturer on medicine (1888-1902); Professor of clinical medicine (1902- ), in Jefferson Medical College. Professor of clinical medicine and therapeutics at Philadelphia Polyclinic and College for Graduates in Medicine (1887-1902). Lecturer on



DR. S. SOLIS-COHEN

materia medica and therapeutics, Dartmouth Medical College, 1888-1890. Physician to Philadelphia General, Jefferson, Rush and Jewish Hospitals. Consulting physician to State Hospital, Norristown, Pa. Trustee of Gratz College, Philadelphia, and Jewish Publication Society of America. Member of Committee of Revision of U. S. Pharmacopœia (1910); member of Board of Trustees of U. S. Pharmacopœia (1920); President Philadelphia County Medical Society (1898), Fellow College Physicians, Philadelphia; member Association of American Physicians; active and honorary member of many city, state and national medical and scientific bodies. Author of "Therapeutics of Tuberculosis" (1891), "Essentials of Diagnosis" (1892-1900). Editor of "System of Physiologic Therapeutics," 11 volumes (1901-1905). Has contributed largely to medical journals and published original verses, translations of medieval Hebrew poems and essays on historical, literary and economic topics.

Let me congratulate you, not personally only, but as one speaking for the medical profession—and although I have no official commission from my professional colleagues, I know that I voice their feeling—let me, on behalf of the physicians of Philadelphia and of the United States, and of the world, congratulate you and the institution you represent, upon its hundred years of youth; its hundred years of high aspiration; yes, its hundred years of honorable achievement.

One hundred years! One hundred steps leading upward to a platform, on which we may, for the moment, stand, looking back on the way of ascent, looking forward and upward to the next hundred steps now to be essayed; and beyond those, an hundred and an hundred, and other hundreds, leading ever upward, ever onward.

But you have not merely climbed. As you have toiled up the hill, you have carved the road by which to go; you have built the very stair by which you have ascended; you have planted grass and tree and flower, to beautify the way; you have digged wells for the refreshment of them that follow; you have ploughed the hillside and sown it with grain, whose abundant harvests have been life and healing to multitudes.

If you have failed in aught, it is a fault of modesty. You have not claimed your rightful position as an institution of learning; your graduates have not demanded their rightful place as members of a learned profession.

Once the physician gathered and prepared the drugs that he administered; but in the progress of science, pharmacy has become a specialty, demanding certain kinds of knowledge and certain expertness of manipulation, which the physician, busy with the problems of health and disease, cannot stop to acquire. But the pharmacist's art is as important as that of the diagnostician, for of what avail is the mere recognition of the evil, when the remedy is lacking? It is as important as that of the therapist, for of what avail to know the remedy, if that remedy cannot be obtained?

Pharmacy and medicine are sister professions, and physician and pharmacist must work together to the common ends of preserving life, of restoring health, of mitigating distress.

It is not alone for members of my profession to recognize this, but for your profession to live up to it. You must advance your standards of study and of practice. The mere commercial drugstore has its place, as the physician of merely technical training has his place—but neither is the highest place. We need a greater number of pharmacists who—like those of your alumni with whom it has been my privilege to work in the revision of the U. S. Pharmacopœia—and like those of your alumni to whom I frequently turn, in the course of my daily work, for suggestions as to the practicability of certain associations of remedies or as to the best form in which to use certain agents—recognize, and in their work exemplify, the professional character of their calling. We need a greater proportion of pharmacists who are not content to be merely merchants in drugs and nostrums—much less merchants in candy and hardware—but who feel themselves to be, and conduct themselves as, practitioners of an ancient and honorable art, based on many sciences; whose thought is first of the service that they can give—and only after this, of its incidental rewards.

As a type of the kind of man I have in mind, let me cite one whose memory you hold in grateful esteem and whose friendship I held and hold as one of the honors and treasures of my life. One whose ideals were of the highest, yet who never lost sight of practicality. One who was willing to accept gradual progress, if the goal were not attainable at a bound, but who would not yield a principle, deny a conviction, or compromise with an evil. One who ranked high as a master of science and art—known and honored as man, as teacher, as author, the world over—yet who never condescended; meeting, as on equal ground, those who had yet to achieve eminence. One who served this College devotedly and well, leaving it as his most precious legacy worthy successors of his own training. Your minds have leaped to anticipate the name—Joseph Price Remington!

This is the type of pharmacist your College must produce. This is the ideal it must hold before its students. The broader their preliminary education, the better; but do not set up artificial and arbitrary standards. It is not the number of years a man spends in college, that measures the extent of his knowledge or the worth of his judgment; it is not the number of hours spent in the laboratory, that measures his skill in devising or perform-



ing instrumental manipulations. It is indeed well for him to know Greek and Latin, and to be familiar with Shakespeare and Dickens; but it is imperative for him to know physics and chemistry and to be familiar with the appearance of foxglove and cinchona. Make your obligatory qualifications high, but keep them relevant; and then encourage your students to enlarge in every way possible, their mental outlook.

Your distinguished president—whom not alone the two professions, but the whole country, honors—realizes the need and is pledged to meet it. He is a man who does things; and in this thing I am happy to promise him the sympathy and support of his medical brethren.

But it may be asked, Why is it necessary today to train students in the recognition and preparation of drugs? Has not medical science so advanced that drugs are obsolete, that hygiene, diet, physical measures, psychic methods, are all that the physician need employ—except perhaps the specific vaccines and serums and endocrine extracts? Or if drugs are occasionally needed, are they not supplied by manufacturers—so that all that is required of the man in the drugstore, is to fill the bottle or box with the quantity prescribed?

The answer is, first, that pharmaceutic education is more necessary today than ever, because of the very multiplication of the resources of medicine. No longer are we confined to the mineral, the vegetable, the animal worlds as they exist, but the minds of chemists devise new combinations of elements, new arrangements of molecules, and give us substances that were not before in being. But if these synthetic drugs are powerful for good, they are also potent for evil—even as the older drugs, such as opium and alcohol and arsenic are powerful both for good and for evil. The druggist who is ignorant of the evil potentialities of substances like antipyrin, phenacetin, acetanilid, aspirin and the like, and carelessly hands them out over the counter to whomever may ask for them, is doing a greater harm than he realizes. These drugs have their legitimate uses; but while quick to relieve certain kinds of pain and to reduce temperature, they are likewise powerful depressing agents, especially to the cardiac mechanism. Altogether apart from the question of home-made, ready-made, and often false, diagnosis, the long continued use of these synthetic coal-tar products for "colds," for headaches, for so-called "neuritis" and the other conditions in which people have acquired the habit of self-medication with such agents, may so weaken the heart that even under the strain of normal child birth, or still more likely, in the struggle against some infectious malady such as pneumonia or influenza, death may occur from heart-failure. Not because of any drug administered at the time, and not because of any condition inseparable from either the physiological process or the maladies mentioned, does this happen; but simply because the long continued weakening of the neuro-muscular structure of the heart brought about by the habitual resort to coal-tar products, renders it incapable of adequate response to the stimulus of the emergency.

It is true that the retail druggist is not the only sinner in this matter. Advertisements are made by manufacturers of some of these products which lead the public to believe that they are harmless, and that they are actual remedies for various common ailments; both of which assertions are untrue. For they do not cure, they only give a dearly bought temporary relief from migraine or other forms of pain and distress; and they do work harm, not only by increasing the liability to return of the symptoms, and not only by inducing a drug habit, as bad as any other drug habit, but also, and importantly, by depressing the vital centers. Let me hope that instead of dispensing these drugs to all comers, your alumni—acting as scientific pharmacists, members of an honorable profession, and not as mere traders concerned only with profits—will advise customers not to take them.

I must reluctantly admit that physicians also share in whatever blame attaches to the abuse of the synthetic drugs. Some practitioners prescribe drugs of this character altogether too freely. I might justifiably say—recklessly. Thus, in the great pandemics of influenza during the late 80's of the 19th century, foolish doctors resorted to antipyrin, because it smothered pain and reduced temperature—the results being as disastrous as those which, in the recent pandemic, followed the equally unscientific and unwarranted resort to aspirin and acetphenetidin. Concerning antipyrin, in a warning given to my students at the time, I thus paraphrased the biblical passage anent Saul and David: "Influenza has slain its thousands,

but antipyrin its tens of thousands." A similarly emphatic warning should be given today concerning the danger attending the use of aspirin—acetylsalicylic acid—and similar compounds, in pneumonia, in influenza, in any depressing infection.

But to return to the future of the scientific pharmacist. It may be that a time is coming when pharmacists will have to be dietetic aides, supplementing the deficiencies of the market by supplying in measured proportions the vitamins, salts and other substances necessary to the metabolic balance of the human organism. As to the endocrine extracts and serums and bacterins—and let us take all these for the good they can really do and forget the nonsense talked about them—it is true that they are now generally available only because the large manufacturing houses have made them so; but the staffs of these great pharmaceutical enterprises are made up of individual men and women—and these men and women are trained biologists, trained botanists, trained chemists, trained pharmacologists, trained pharmacists.

Here let me digress a moment to make acknowledgment of the great change that has come about during my medical lifetime in the relations between large scale manufacturing pharmacy and the medical profession. In no city is it so well illustrated as in Philadelphia. In the World War, a large part in safeguarding the welfare of our armies must be attributed to the tetanus antitoxin, the typhoid bacterin and similar products produced by a member of your Board of Trustees; and back of that lies the pioneer work of such men as Dr. Joseph McFarland, who was willing to direct a commercial laboratory when that direction involved some risk of misconstruction by medical men; and, in especial, the work of another of your officers, Dr. Frank E. Stewart, pharmacist and physician, who more than any other individual in either profession, has inspired manufacturers to conform to scientific and ethical standards, and helped to obtain from his medical confrères the manifestation of confidence which that conformity deserves and has now received.

It is true that diet and physical measures and psychic methods are today receiving more generally the attention that should be theirs, and that the real leaders of medicine have always given to them. But they alone do not suffice. Malaria cannot be cured by diet; it demands quinine. Not only its cure, but its prevention, will require the use of the drug, until the whole race of mosquitoes of the hematozoön-carrying type has been exterminated. Decomensation in heart disease calls not only for rest and regulated exercise, but frequently for digitalis as well. Mercury and iodides and arsphenamin cannot be replaced by homilies or exhortations. Needless to multiply examples—both kinds of preventive and remedial agencies have their uses; neither can take the place of the other.

But the real importance of pharmacy and medicine—of the healing arts—is something more than I have yet touched upon. We realize that they tend to preserve the human race, to increase its vigor. We must further recognize that in so doing, they are contributing their part to the great purpose for which man was brought into being.

We confess our inability to view the height, to measure the breadth, to fathom the depth of that purpose; and our scientific training may have led us to place a new interpretation on the ancient legends, poems, speculations, concerning the method of creation and the coming of man upon earth.

Yet no man of science can doubt that the world owes its being and its maintenance to Wisdom, Might, Beneficence, Infinite in degree, Unique in kind—transcending man's power to describe or even to name. Chance, surely, has no place in the scientific envisagement. Chance is the antithesis of Order; and Order is the very foundation of scientific thought, as it is of the phenomenal universe which that thought—albeit so imperfectly—apprehends. Man is a part of that order—the highest part that we know. But if, as science tells us, man has come up through a vast series of material changes, from the inanimate chemical elements or their constituent electrons, to a being who thinks, who seeks, who knows, who aspires, who is moved to deeds of heroism, of sacrifice, of devotion—shall anyone say that he has now reached the utmost limit of his development? Into the dust of the earth, the ancient record tells us, was breathed a spark of the Divine Spirit; and that animating soul, carrying the body with it, moves on, moves up—with many a failure, with many a falling back—yet ever with a renewal of high idealism in purpose, of noble endeavor in action.



At no period in the world's history has it been more necessary than now, with civilization in peril, with society again in the crucible, for all men to realize that they indeed have souls, and that because of this, they have duties to their fellows and responsibilities to their God.

Of all the terrible things that characterized the World War, the most disheartening was the diabolical prostitution of their knowledge by godless men of science. It is ours, as part of the scientific world, to resolve that this shall not happen again; that schools of science shall teach, and that men of science shall preach, the new-old doctrine that with every addition of knowledge, there comes a more imperative obligation for the right use thereof; that with every step upon the ladder of man's ascent from dust to spirit, he approaches nearer and nearer to—and must become more and more worthy of—his high destiny as the Vicegerent of the Creator upon earth. Many years ago, I gave expression to that doctrine, thus:

Out of the beast have we risen; but mark, we have risen  
 Out of the beast! Who goes out from the darkness, the prison,  
     Back turneth never.  
 Out of the beast, and out of the law of the beast-kind forever,  
     Mark, we have risen.

Nature, through ages of travail, gave birth to the human.  
 Brute all she bare before; now, on the earth, man and woman  
     Upstood, upgazing!  
 Thrilled and rejoiced all her worlds with the pang of that wondrous, upraising,  
     Birth to the human.

Not all a dream is the ladder whose top reaches heaven;  
 Hid in the deeps though its base, shall we stop, that have given  
     Foot to toil highward?  
 Stop, to gaze down, till made dizzy we fall—while who mounts to the skyward  
     Top, reaches heaven?

Preach not alone what we were, O ye wise men, but tell us  
 What we may be, if we will. Yet to rise, show, impel us—  
     Man shall be angel!  
 Brute that was, man that is, God-like can strive—and be! This new Evangel,  
     Wise men but tell us!

Professor Charles H. LaWall was the next speaker and addressed the meeting as follows:

### Constructive Public Service in Pharmacy

CHARLES H. LAWALL, PH.M.

Dean and Professor of Pharmacy, Philadelphia College of Pharmacy and Science

During the several thousand years through which the profession of pharmacy may be historically traced, it has undergone many interesting changes and vicissitudes. Its evolution has been irregular and in some respects disappointing. The reason for this is found in its lack of uniformity. It has always been heterogeneous, and its heterogeneity has been variable.

The physician-pharmacist was successively replaced by the alchemist-pharmacist, the grocer-pharmacist, the chemist-pharmacist, and later by the merchant-pharmacist. Through all these metamorphoses there has, however, remained a distinctiveness of service which has been obscured at times, but which in its fundamentals has retained one important phase of public contact and service—the preparation and sale of medicines.

From the most primitive beginnings, in which mysticism and credulity prevailed, and in which empiricism held full sway, down to the present time, when a highly specialized technical and scientific training is required by the State for the protection of the public which pharmacy serves, the dominating purpose has been to assemble, identify, select, preserve, prepare and standardize remedial substances, which in the hands of the careless or unskilled might prove detrimental instead of beneficial.



The history of this famous art is a fascinating chapter of human progress and endeavor. It has its roots in the misty ages of the Orient and among the races of mankind contributing to its improvement were the Babylonians, Egyptians, Greeks, Romans and Arabians.

Differing in detail as to its practical application, the landmarks are shared by its practitioners in all lands and under various designations. Every civilized country has its pharmacopœia, the *vade mecum* of the pharmacist, and largely the result of his labors and researches. The United States Pharmacopœia, now undergoing its tenth decennial revision, is the second oldest of these national authorities (the *Codex Medicamentarius* of France being the oldest), and in its technical details is a monument to American Pharmacy, which has largely been entrusted with its preparation.

Pharmaceutical education was inaugurated in America by the apothecaries of the City of Brotherly Love when they founded the Philadelphia College of Pharmacy, one hundred years ago. Since that time it has undergone many improvements and changes, as have all other fields of education, but its progress has been retarded largely because of the lack of supporting legislation in many of our States. After many years of waiting we may say with confidence that pharmacy is now on the verge of a great advance in this respect and that in the next ten years more progress will be made than has taken place in the last half century.

There has been no lack of appreciation of what has been needed, but there have been certain forces to combat and prejudices to overcome and much preparatory work to be done. In this connection, credit must be given to the constructive efforts of the American Conference of Pharmaceutical Faculties, composed of representatives of over forty leading colleges of pharmacy of the United States, which has labored unceasingly for twenty years for the adoption of higher standards and the elimination of schools operated for profit alone and not for service to the community.

There has been no failure on the part of the colleges, meanwhile, to educate the students to properly qualify under the State registration laws. The shortcomings have been in not recognizing the necessity of a broader cultural education to accompany the scientific and technical training. The pharmacist of a decade hence will be on a par as regards his preliminary education and cultural training, with the members of other learned professions and insensibly and automatically many of the inconsistencies and evils of the present practice will disappear for all time.

More and more pharmacists each year are fitting themselves for wider public service by taking special courses in bacteriology, clinical chemistry, technical analysis and sanitation, and are becoming valuable aids in public health work and analysts and experts in their respective communities. The stimulation in this direction has been especially noticeable since the close of the war, for it was during that period that many came to realize the value of scientific training and the opportunities which are open to one who qualifies along such cognate lines of study.

The interdependence of pharmacy and medicine was never more in evidence than at present, for with the introduction of biological preparations, including sera and vaccines, and the discovery of new methods of preparing and standardizing long used drugs, the physician is more than ever compelled to rely upon pharmacy for distinctive and important scientific assistance. Pharmacy and medicine have common battles to fight in combating the manufacture and sale of worthless nostrums, and in educating the public along correct scientific lines of hygiene and health conservation.

They are co-sharers, under the law, of certain compelling responsibilities which have to do with the control, regulation and distribution of drugs which are known to be habit-forming, and of alcoholic preparations. It is a gratifying fact that the large majority of the members of both professions are true to their trust and worthy of the confidence reposed in them.

The opportunities for advancement, therefore, on the part of a great institution like the Philadelphia College of Pharmacy and Science, which serves pharmacy primarily and medicine indirectly, are convincing in their evident necessity. Among the more important phases of this advanced work are the following:

1. The conducting of popular scientific lecture courses, in which the public shall not only be given correct concepts of the scientific facts of importance in connection with pharmacy and the allied sciences, but the combating of error and superstition, which will also be an important part of this constructive work.

2. The development of research service to the medical profession. Medicine is already indebted to pharmacy for much constructive help in the scientific preparation of effective remedial agents and their standardization, thus allowing uniform results to be obtained under specific conditions. None but physicians and pharmacists realize how much of this work yet remains to be done. The lack of constructive, co-operative work in this direction has been productive of much of the therapeutic nihilism of the recent past.

3. The institution of research departments which shall aid the manufacturing interests allied to pharmacy. While a number of the larger pharmaceutical manufacturing establishments have well-equipped and efficient research departments, there are hundreds now without such service. It is to supply this evident need and to supplement existing work that such departments are to be instituted and maintained.

4. The founding of laboratories for the express purpose of serving the City and State in an impartial solution of problems such as the quality of supplies, the wholesomeness and purity of foods, the purity of drugs and chemicals, and other scientific questions affecting the public welfare.

These proposed benefits are self-evident. It is of tremendous value to any community to have available a corps of scientific workers capable of helping to solve routine problems. Such an organization in times of stress and emergency, as of war or epidemic, might be invaluable as an insurance against calamity due to lack of scientific preparation.

5. The development of pure scientific research. The lessons taught during the World War, as regards the value of pure science, were tremendously convincing. Pure science is only relative. The pure science of today becomes the applied science of tomorrow, and the nation that falls behind in pure scientific research will surely perish, if there ever comes another world war, which God forbid.

6. The development of a public museum of drug and chemical products and pharmaceutical and chemical manufacturers, which will be distinctive for its breadth and modernity, as well as unique in its exhibits of historic value, for the College collections are especially rich in illustrative material of this kind, which now lack space for exhibition. With our present collection as a nucleus, adequately housed and under efficient full-time curatorship, such a museum could be made the Mecca for scientific workers in our particular field, as some of our exhibits are very complete and are now frequently consulted by those searching for type specimens, or those illustrative of a certain period.

7. The creation of a botanical garden particularly devoted to plants of medicinal and economic importance, in order to stimulate and develop our national resources along new lines and to supply material for medical, chemical and pharmaceutical research.

8. The proper housing of our present library of upwards of twenty thousand volumes of scientific works, frequently consulted by scientists from afar on account of the rarity of some of its volumes.

In partial furtherance of these laudable ambitions there has been planned a series of courses leading to the degree of Bachelor of Science in Pharmacy, in Chemistry, in Bacteriology and in Pharmacognosy. These courses have been outlined and curricula prepared under the approval of the Pennsylvania Department of Education, so that there is a proper balance of cultural and technical subjects, making them equal in this respect to the Bachelor courses of any college of arts and sciences.

These courses will be inaugurated at the beginning of the next scholastic year and have been especially planned so as to cover the subjects required for entrance to the study of medicine. It is believed that they will be particularly acceptable to medical colleges as pre-medical courses, for what better preparation for medicine could there be than a four-year course based upon one of these scientific branches?



A course of fifteen popular lectures upon scientific subjects, to be given by members of the Faculty of the College, has also been planned for the next College year. These include a great variety of timely topics and will doubtless be well attended and much appreciated.

With such a program of disinterested and constructive public service, we feel that the Philadelphia College of Pharmacy and Science is entitled to the support and approval of the profession which it represents and the community which it serves, and that the close of its second century will find it in the front rank of institutions venerated for their history and acclaimed for their achievements and the excellence of their work.

When we pause to survey the new vista and see the wider horizon, we feel that the measure of our opportunities is well expressed by Rosetti:

"Nay, come up hither, from this wave-washed mound unto the furthest flood brim look with me. Then reach on with thy thought 'till it be drowned; miles and miles further though the last line be, and though thy soul sails leagues and leagues beyond, still leagues beyond those leagues there is more sea."

As the exercises of the morning came to a close the "old grads," gathered together in their classes under banners, with now and then a class yell or a class song, and sat down to luncheon. There were no speeches, only informal intercourse and a renewal of old acquaintance. It is believed that upwards of one thousand were present, some of them coming from places as far away as the Pacific coast. The events were also participated in by the more than two hundred members of the graduating class. The celebration culminated in the evening with the Centennial Banquet and Reception to President Braisted.

### Centennial Reception and Banquet

Again the Bellevue-Stratford was the gathering place. The reception to President Braisted was held in the Clover Room. The alumni were arranged in class groups. After all had met President Braisted, and had taken him by the hand, the column, formed in order of age, and headed by Samuel Garhard of the class of 1854, the oldest graduate present, entered the ballroom which was set with tables for the dinner. "Age is opportunity no less than youth itself, though in another dress," was the appropriate "Centennial Theme." Portraits of sixteen professors who had served the College during its first century were reproduced upon the program of toasts and the menu, "in tribute to their memory"—Jackson, Troost, Wood, Ellis, Bache, Griffith, Carson, Fisher, Bridges, Robert P. Thomas, Parrish, Procter, Maisch, Bastin, Trimble and Remington.

Dean Charles H. LaWall was the toastmaster and called upon the new President—Rear-Admiral William C. Braisted, as the guest of honor. President Braisted said:

"A pharmacist should employ much of his time in research work, so that he may fit in with the general advance in dignity and importance that is coming to pharmacy. Each man should have in the back of his drug store a laboratory where he could devote hours to experimentation and research, where he could test the purity of water and of milk, where he could be of assistance to the community doctor, and make himself a valuable aid to the public. This work would be useful in large cities, and it would be invaluable in small centers of population, where at present there are no laboratories. It would be a big step toward the coming co-operation of medicine and pharmacy.

"My whole effort will be devoted toward making the Philadelphia College of Pharmacy and Science a larger and better institution. I want to help to bring about the co-operation



between medicine and pharmacy. I wish, by means of this fine institution, to produce the super-pharmacist of the future.

"We are going to start next fall with an increased personnel and enlarged facilities. We must stay in our old building at 145 North Tenth Street for three or four years more, and this summer it will be renovated and improved in many ways. But the plan to secure funds with which to construct a new building has not been abandoned; it has been merely postponed.

"There are men now looking for a site in this city, and I am sure that they are going to find an extremely good one. I hope that when we do decide to locate at a certain place, the site will be given to us by the citizens of Philadelphia in recognition of one of its oldest and most famous educational institutions. I am also sure that there are at least one or two wealthy men here who will come to our aid; there is no doubt in my mind that we will get all of the money that we need."

Following the President, Joseph W. England, Vice-Chairman of the Board of Trustees, spoke as follows:

### High-Lights in the History of the Philadelphia College of Pharmacy

JOSEPH W. ENGLAND, PH.M.

Vice-Chairman of Board of Trustees, Philadelphia College of Pharmacy and Science

The history of the Philadelphia College of Pharmacy—the first college of pharmacy in the New World—covers practically the history of pharmaceutical education in this country. From the time of its institution as the Philadelphia College of Apothecaries in 1821, and its incorporation as the Philadelphia College of Pharmacy in 1822, it has exerted a potent influence in developing pharmaceutical education, initiating many of its most forward steps, while indirectly, through the daily work of its thousands of graduates, it has rendered a nation-wide service for the relief of human suffering and the conservation of public health.

The College was founded by sixty-eight druggists and apothecaries of the City and Liberties of Philadelphia on February 23, 1821, the result being crystallized by the decision of the Board of Trustees of the University of Pennsylvania on February 6, 1821, to institute a course of instruction for students in pharmacy leading to the degree of master of pharmacy, which decision, however distasteful to the druggists and apothecaries, had a certain ground of reasonableness, and aroused their dormant pride and self-respect, compelling them to take action for the protection and advancement of their profession; and I am told by Dr. Edgar Fahs Smith, of the University of Pennsylvania, that "the University-pharmacy-course was never given"—which is to the everlasting credit of that great institution—although on April 5, 1821, the University did, indeed, proceed so far as to confer the honorary degree of master of pharmacy upon sixteen apothecaries of Philadelphia, the first granting of a pharmaceutical degree in this country.

The College was founded in historic Carpenters' Hall, a building occupied in 1774 by the Provincial Assembly which recommended a general Congress of all the American Colonies, which Congress also met in this hall, and within it inaugurated those measures which led to the Declaration of Independence, and terminated so favorably for civil liberty in America and throughout the world; and so, within this hall the "sixty-eight druggists and apothecaries" met and wrote a new declaration of independence: That pharmaceutical education shall be of pharmacists, by pharmacists and for the public welfare.

Prior to 1821, "in this new country with its sparse population and vast territorial extent—its few small but growing cities scattered along the seaboard—the occasion had scarcely arisen to put into practice the obvious educational means fitted to meet these requirements; but now the time had evidently come. Every intelligent druggist and apothecary felt that the instruction which might be suitable for the student preparing himself for the duties of the physician would be only partially fitted for one who was to assume the widely different responsibilities of the drug store and dispensary." (Historical Memoirs of the Philadelphia College of Pharmacy, Edward Parrish, *Amer. Journ. Pharm.*, 1869, 97.)



JOSEPH W. ENGLAND

Joseph W. England. Born in Philadelphia. Son of Robert and Louisa R. England. Forbears of father of Swedish descent, settling at Swedesboro, N. J., in 1682; mother's ancestors, Huguenots of Alsace (France) who settled among the Pennsylvania Germans in Lancaster County, Pa., in 1728. Early education in public schools. Learned drug business with father. Graduated from College in 1883, winning the Henry C. Lea Prize for most meritorious thesis of his class. Elected (1886) Chief Druggist of Philadelphia Hospital (Department of Charities and Correction). Editor of Philadelphia Hospital Formulary. Head of Pharmaceutical Department of H. K. Mulford Co. (1900-1902). Director of Research Laboratory of Smith, Kline and French Co. (1902- ). Elected Curator of Museum of College (1887-1920), and a member of the Board of the Trustees (1892- ). Elected to the Publishing Committee of the *American Journal of Pharmacy* (1893- ), and served as its secretary. Member of Pennsylvania Pharmaceutical Association (1887- ). Active in Alumni Association of College; corresponding secretary in 1888-1889, second vice-president in 1889-1890, first vice-president in 1890-1891, and president in 1891-1892, and since 1904 recording secretary. Editor of Alumni Report of the Alumni Association from 1891-1901. In 1903 his Alma Mater conferred upon him the degree of master in pharmacy, *honoris causa*. Elected member of American Medical Association (1904- ). Member of American Pharmaceutical Association (1893- ); in 1901 and 1902 was secretary of section on scientific papers; in 1905 and 1906 was secretary of section on education and legislation, and in 1907 and 1908 chairman of the same. Was secretary of the Council of the Association from 1909-1920. Acting-editor of "Bulletin of American Pharmaceutical Association" in 1910 and 1911, or until the "Bulletin" gave place to the "Journal of the American Pharmaceutical Association," for the founding of which latter he was largely responsible. In 1911 was made chairman of the committee on publication of the Association, which published the "Journal" of the Association, its "Year

Book," and its "National Formulary," resigning in 1920. Was a member of the Committee of Revision of the Pharmacopœia (1910), serving on three sub-committees. Elected secretary of the Philadelphia Drug Exchange in 1912. Was president of Philadelphia Branch, American Pharmaceutical Association (1921-1922). Elected vice-chairman of the Board of Trustees of the College in 1921. His researches cover a wide field in pharmaceutical science and he has been a contributor of several hundred original articles to pharmaceutical organizations and periodicals. He is a thirty-second degree Mason, being a member of University Lodge, No. 610, F. and A. M., University Chapter, No. 256, R. A. M., Mary Commandery, No. 36, K. T., and Philadelphia Consistory, S. P. R. S.

Furthermore, the founders of the College realized that their responsibilities were not only to provide pharmaceutical education, but also to protect the public against the adulteration and misbranding of drugs; thus, at the second meeting of the College (March 13, 1821), a committee appointed at the first meeting reported that abuses had crept into the drug and apothecary business; instances had occurred of deteriorated drugs being introduced into the shops and valuable remedies in daily use being adulterated and sold of inferior quality and that such abuses were attributable in part "to want of proper pharmacological information on the part of some druggists and apothecaries who vend and of physicians who buy," and it was recommended, with the establishment of the College, that its "attention be constantly directed to the quality of articles brought into the drug market, subjects relating to the business and its objects be discussed, and information beneficial and instructive to the trade communicated."

It is of interest to note that "the first years of the College were marked by great activity. Committees of inspection were appointed to examine drugs introduced into the market, and to expose adulteration and sophistication. Latin labels were printed, carefully adapted to the official standard of nomenclature. Formulas were published for the old English remedies called 'patent medicines,' then very extensively sold, with a view to greater uniformity in their composition and properties; and the absurdly-worded wrappers in which these were enveloped, giving false or exaggerated accounts of their virtues, were measurably superseded by more sensible and truthful 'directions.' Meanwhile, a library was being formed, a cabinet of specimens collected, and the various improvements in chemistry and pharmacy suggested from time to time were investigated and reported upon" (Edward Parrish).

In this way the College sought to prevent the manufacture and sale of adulterated or misbranded or deleterious drugs and medicines, thereby anticipating in a sense the enactment of the Federal Food and Drugs Act of nearly one hundred years later, but the influence of the College was wholly educational and moral, and no adequate protection was given to the public until the enactment of the Federal Food and Drugs Act of 1906, one of the most righteous laws ever passed by the United States Congress.

And the work so auspiciously begun by the College one hundred years ago has been continued through the century with ever-increasing vigor and efficiency.

The College has achieved its unusual success as an educational institution because it has been built upon the bed-rock of character. The sixty-eight men who instituted the College were mostly members of the Religious Society of Friends, commonly called Quakers, who believed in the homely virtues of modesty, thrift and wisdom, and love of peace and simple honor, and practiced these; men of plain living and high thinking, men of strong and positive opinions, and men of practicality, thoroughness and love of humanity.

And it was this love of humanity, doubtless, that inspired their love of education. As William Penn, the founder of Pennsylvania, wrote: "Friends consider education as a right and a privilege, to the end that the poor as well as the rich may be instructed in good and commendable learning, which is to be preferred before wealth." The aim of the Quaker founders of the College—and their influence persists to this day—was to give to the youth of the land the most practical and thorough collegiate pharmaceutical education at the lowest possible cost. The intent was not to build up a money-making institution, but to train men and women in pharmacy, and the original charter contained the provision (later eliminated) that the annual income of the College from all real and personal estate should not exceed five



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thousand dollars. And who shall say that there is not wisdom and truth in this Quaker philosophy of simplicity and thrift in education; because, it is *not* bricks and mortar that make an educational institution great—it is the brains within the bricks and mortar—the brains of earnest, able and devoted teachers reacting with the brains of youth, eager to learn, to think and to do!

During the first fifty years (1821-71) the instruction of the College was in *materia medica*, pharmacy and chemistry, and in the last four years of that period, in botany, also; and it was wholly didactic.

In 1846 an epoch-making advance was made, when pharmacy was recognized as a distinct branch by the establishment of the chair of theory and practice of pharmacy, and the chair of pharmaceutical and general chemistry was changed to chemistry. In 1867, the chair of *materia medica* was changed to *materia medica* and botany, and field work in botany was begun.

During the past fifty years (1871-1921) many additions to the curriculum have been made, such as analytical chemistry, practical or operative pharmacy, pharmaceutical chemistry, commercial pharmacy, pharmaceutical jurisprudence, chemical control in manufacturing pharmacy, scientific research, bacteriology and hygiene, Latin and pharmaceutical arithmetic, as well as special courses in technical chemistry, applied bacteriology, technical microscopy, physiologic assaying, clinical chemistry, advanced pharmacognosy, and perfumery, and the post-graduate courses leading to the degrees of bachelor of science in pharmacy, chemistry, pharmacognosy and bacteriology.

In 1897 the chair of *materia medica* and botany was divided into *materia medica*, including physiology, and into botany, including pharmacognosy.

When the College moved to its present site in 1868, it had three instructors; today it has twenty-three, then 146 students, today more than 600; then, no women students, today fifty; then, no laboratories, today six; then, no post-graduate courses, now four leading to degrees.

In 1920, in order to expand its courses of instruction, the charter was amended and the title changed to the Philadelphia College of Pharmacy and Science.

It is impossible at this time to more than briefly mention the teachers of the past, but during the first twenty-five years those who deserve especial mention are Samuel Jackson, George B. Wood, Joseph Carson and Franklin Bache, all of whom exercised potential influence during this formative period of American Pharmacy.

During the next fifty years the list embraced such widely known authorities in pharmacy as Robert Bridges (1842-79) whose lovable character and long years of unselfish devotion to the College has enshrined him in the hearts of all; Edward Parrish (1864-72), an exceedingly able and inspirational teacher, and the author of the first distinctively American textbook on the practice of pharmacy; John Michael Maisch (1866-93), whose constructive work for the upbuilding of pharmaceutical botany, *materia medica* and plant-chemistry will last as long as the name of pharmacy endures; and William Procter, Jr. (1846-66, 1872-74), whose researches in pharmacy gave a wonderful impetus to the growth and development of American pharmacy, made it known the world over, and won for himself the name of "The Father of American Pharmacy."

And William Procter, Jr., was succeeded by one who lived in our own time—the "noblest Roman of them all," one who as pharmacist, teacher, educator, author and executive—especially as the Chairman of the Committee on Revision of the U. S. Pharmacopœia for two successive decades—was the outstanding figure of American pharmacy in his day, the teacher of teachers, and the genial warm-hearted, inspiring friend of us all—Joseph Price Remington. "And we ne'er shall look upon his like again."

And then there was one who stood next to Remington, who was most largely instrumental in making the course of commercial training of the College (established in 1899), the first of its kind in the country, so successful, who became one of the foremost figures in American industrial pharmacy, and who loved his Alma Mater and never forgot her, even unto death—Frank Gibbs Ryan.

Motives of delicacy preclude my saying much of those who are still living, honored representatives who have done yeoman service in the upbuilding of our institution, but the present

sketch would be most incomplete did I not refer to one who has borne the heat and burden of the day for the past forty-three years as a teacher in our institution, one who has won national and international renown as a master-mind in pharmaceutical and industrial chemistry—our own, our honored, and our loved Samuel Philip Sadtler.

Quizzing was early instituted at the College and was conducted first by the professors themselves, and in the late 70's, by quiz-masters approved by the Committee on Instruction. In 1880, quizzes were authorized by the Alumni Association, and this constitutes the cornerstone of the system of quizzing reviews. Later (1886) these were combined with the College reviews and made compulsory (1895), the College assuming full charge.

In 1821, the conditions of the practice of pharmacy were primitive. As Edward Parrish (*American Journal of Pharmacy*, 1871, 481) stated, in 1871, in an introductory lecture to the fiftieth course of the Philadelphia College of Pharmacy:

"Fifty years ago when the College was established, almost every considerable drug store had something like a laboratory attached, where some of the few chemicals then in use and all the galenic preparations were made, and where nearly all the crude drugs were assorted, garbled and packed. The apprentices then enjoyed a wholesome development of muscle through wielding the ponderous pestle, handling the sieves and working the screw-press. He learned how to make pills by the wholesale, to prepare great jars of extracts and cerates, to bottle castor oil, Turlington's Balsam and opodeldoc by the gross, and what he lacked in the number and variety of articles he dealt in, was made up by a greater extent of his operations and the completeness with which, in a single establishment, all the then-known processes were practiced. Very many physicians then dispensed their own prescriptions, drawing the supplies from the druggists, but gradually the separate prescription counter was added to the drug stores, and the dispensing stores, as we now call them, became numerous, and the wholesale druggists gradually ceased to supply the public directly."

Our Quaker forbears realized that pharmacy was both an art and a science, and to be a master of the craft the pharmaceutical student must have practical instruction as well as theoretical, and from the first they required that the candidate for graduation from the College shall have a "practical experience of at least four years with a person or persons engaged in and qualified to conduct the drug business." Thus vocational training was first established in pharmacy as a prerequisite for graduation.

About the time of the Civil War, a radical change took place in the retail drug business. The manufacturing of drugs and chemicals were taken over by manufacturing houses, more and more, the old apprenticeship custom of legally indenturing youths to learn "the drug and apothecary business" rapidly fell into disuse and the character of practical experience in the retail drug store changed, becoming less and less adequate, so far as manufacturing was concerned; although the underlying principle of drug store experience, with its familiarity with work-a-day technique, continued fundamentally sound. Hence, it became evident, that the College should give laboratory instruction; but the means of the College were limited, and it could not see its way clear, at this time, to give such instruction, especially as it was contemplating the erection of new buildings in the near future.

Next to its teachers, the biggest asset of a College is its alumni, directly and indirectly—directly in exemplifying its teaching and indirectly by its work for the Alma Mater; and no college in any land has more earnest, loyal and enthusiastic alumni than has the Philadelphia College of Pharmacy, including those of the Medico-Chirurgical College merged with our College in 1916, and who, in season and out of season, are voicing their praises of its work and worth; and that their words are not idle words, is shown by the fact that probably 85 per cent of the matriculants of the College come through the influence of its alumni.

As Richard M. Shoemaker, fifty-nine years a graduate of this College and the first treasurer of the Alumni Association (1864), and beloved by all, writes me: "The Alumni Association of the College always has been and is the backbone of all the energies for the advancement of the institution."

And we cannot mention the Alumni Association without mentioning Edward C. Jones, '64, who with his classmate, Albert E. Ebert, '64, founded the Alumni Association, and worked indefatigably for the College and its students. The vessel of clay that held his soul may have failed perhaps to reflect its beauty, but his personality had a charm that endeared him to all; and the good he did lives after him.



And then there was Thomas S. Wiegand (1825-1909) typical of the old school Philadelphia druggist of the last century, who sought by precept and practice to establish pharmacy in this country on a scientific and professional basis; he was elected President of the Alumni Association in 1865, and re-elected for six consecutive terms, and was Actuary of the College for twenty-two years (1887-1909), and as the "Students' Friend" was ever "their very present help in time of trouble." Many of the alumni will recall how much they owe to the wise counsel of that dear spirit of college days whom they lovingly and with all respect called "Uncle Tommy."

In 1865 the Alumni Association began a movement for the raising of funds for the equipment of a pharmaceutical and chemical laboratory; by 1867 the subscriptions had amounted to nearly \$5,000, and in 1870 it established a laboratory for instruction in practical pharmacy and chemistry in charge of Prof. John M. Maisch, the first of its kind in America. In 1872 the laboratory was turned over to the College by the Alumni Association. In 1876 its two divisions of work were partially segregated, Prof. Remington giving a course in pharmaceutical manipulations, and in 1878 he assumed full charge of the pharmaceutical laboratory (or laboratory of operative pharmacy), while Prof. Maisch confined his instruction to the chemical laboratory. In 1903 an optional course in dispensing was inaugurated, and the following year it became a part of the regular course.

In the chemical laboratory, Prof. Maisch was succeeded as director by Frederick Belding Power (1881-83), whose famous research work, later, in phytochemistry in the Wellcome Research Laboratory of London is known to all, and he by Henry Trimble (1883-98), whose research work on the tannins is classic.

The microscopical laboratory was originated also by the Alumni Association, commencing with 1882-83, the Association controlling the instruction in this department until 1894, when the College assumed charge of it as the botanical and microscopical laboratory.

In 1899 optional laboratory courses were established in bacteriology, the study of powdered foods and drugs, fungi and fungous diseases, morphology and physiology, and systematic botany, and in 1913 bacteriological laboratory work became a part of the regular course.

With the enactment of the Federal Food and Drugs Act of 1906, it became apparent that skilled food and drug technicians would be necessary to ensure the proper enforcement of the law, and in 1907 the College secured, largely through the personal solicitations of the late Mahlon N. Kline and Joseph P. Remington, contributions of some thousands of dollars with which it was enabled to erect a food and drug laboratory building and inaugurate a course in food and drug analysis.

Equal in importance to pharmaceutical education is pharmaceutical research, because pharmaceutical practice is, in effect, applied education, and education is applied research; and upon the bases of research, education and practice rest the science and art of pharmacy.

Our Quaker forbears recognized the vital importance of systematized research and in 1825, 1826 and 1827 published irregularly a journal devoted to research under the name of the *Journal of the Philadelphia College of Pharmacy*. Beginning with April, 1829, the Journal was issued at regular stated periods, and in 1835, the title was changed to the *American Journal of Pharmacy*. It is not only the earliest periodical of its kind in the world, but it is recognized, at home and abroad, as the leading scientific pharmaceutical periodical of this country.

During the past century, the *Journal* has published 50,000 reading pages, the larger part of which has been research work in pharmacy, chemistry, pharmacognosy and science (Note, please, the significance of the initials of these—P. C. P. and S.!) by the faculty and members and contributors to the *Journal*. Thus, John Farr, of Farr and Kunzi (later Powers and Weightman), in a paper read before the Philadelphia College of Pharmacy, of which he was a member, at a meeting held December 27, 1825, on the subject of "Extract of Quinine" (*Journal of the Philadelphia College of Pharmacy*—later the *American Journal of Pharmacy*, Vol. I, No. 2, 43), made the following statement: "In the summer and autumn of 1823, a season peculiarly memorable to Philadelphians by reason of the alarming prevalence of intermittent and other fevers, sulphate of quinine was first successfully prepared here," three years after its discovery by Pelletier and Caventou; and it should be stated, also, that Zeitler



and Rosengarten (predecessors of Rosengarten and Sons), likewise made quinine sulphate in 1823, their first sale being in December of that year. And it may be added, that "morphine sulphate and morphine acetate were first manufactured (in this country), by George D. Rosengarten in 1832; and the mercurials and strychnine sulphate in 1834" (Rosengarten and Sons, by William McIntyre, *American Journal of Pharmacy*, 1904, 303). All of which activities were doubtless inspired by the spirit of original research developed by the College. And William Procter's discovery of the properties of the salicylates (1842) led to the manufacture of synthetic oil of wintergreen and the salicylates. Thomas J. Husband first developed (1837) the manufacture of heavy magnesia in this country. Robert Shoemaker first made (1848) glycerin commercially.\* Charles Shivers first developed the manufacture of adhesive plaster, making enormous quantities for the Government during the Civil War. William R. Warner first made (1857) sugar-coated pills. Alfred Mellor and Henry N. Rittenhouse first developed the manufacture of licorice extract. And C. Lewis Diehl and William Procter, Jr., first made the process of percolation commercially practicable.

The most important discovery of the Twentieth Century—as important as that of morphine, strychnine and quinine one hundred years ago—was that of diphtheria antitoxin by Behring in collaboration with Kitasato and Wernicke in 1890 and 1892. This discovery reduced the mortality of diphtheria from 40 per cent to less than 10 per cent and saved millions of lives. Tetanus antitoxin was discovered by Behring and Kitasato in 1892. During the World War its value as a life-saver was amply demonstrated. Ten per cent of the wounded on the battlefields of France were attacked by the tetanus bacillus and 90 per cent of these died of lockjaw. The call came for tetanus antitoxin and millions of doses were supplied to the armies of the Allies, resulting in the control of the deadly infection. These discoveries were speedily followed by others of equal value as life-savers. Typhoid fever, which hitherto had killed more soldiers than the bullets of the enemy was banished from the armies by anti-typhoid vaccination.

It is a matter of pride to us that these wonderful discoveries have largely been made available by our fellow alumni of the Philadelphia College of Pharmacy, as the H. K. Mulford Company, the earliest and largest producers of biologic products in this country, and who so promptly and successfully met, by means of an immense reserve stock, the call of the allied armies for such products during the World War.

And in the laboratories of the College many workers have solved many problems that have found important industrial applications, while from the faculty and alumni have come original papers of great practical value to medical and pharmaceutical science.

In this work the library of the College with its upwards of 20,000 volumes constituting the largest and most valuable pharmaceutical library in the United States, has been found to be of incalculable service; and next in importance has been its museum and herbarium with its many thousands of medicinal plants, its rare and typical exhibits of crude drugs, its raw materials, and its manufactured drugs from all parts of the world.

In the literature of pharmacy and allied science, the College has always been most actively represented, its faculty having issued nearly 200 volumes. Thus, the "U. S. Dispensatory" was founded in 1833, by George B. Wood and Franklin Bache, both of the faculty; John M. Maisch (with Alfred Stille, M.D.) founded the "National Standard Dispensatory" in 1879; Robert Bridges was the American editor of Fownes' "Chemistry" (1845-78), and of Graham's "Elements of Chemistry" (1852); William Procter, Jr., was the American editor of Mohr and Redwood's "Pharmacy" (1849); Edward Parrish wrote his first "Pharmacy" in 1855; Joseph P. Remington's textbook on "Pharmacy" has been the standard textbook on pharmacy since 1885, in this country and many foreign lands; John M. Maisch published in 1881 the first textbook on "Materia Medica" in this country; Henry Kraemer wrote his first "Applied and

\* Robert Shoemaker made glycerin experimentally in 1846, and began its commercial manufacture in 1848, the first sale, one quarter pound at \$4.00 per pound, being made to Edward Parrish at the northwest corner of Chestnut and Ninth Streets, on June 1, 1848. In 1849, Mr. Shoemaker made and sold 200 pounds, and after this the demand rapidly increased. (*Amer. Jour. Phar.*, 1879, 289.)

Economic Botany and Pharmacognosy" while at the College (1897-1917); Henry Trimble published his "Tannins"; Frank X. Moerk issued his "Qualitative Chemical Analysis"; Samuel P. Sadtler (with Virgil Coblenz) published his "Pharmaceutical and Medical Chemistry," and his own "Industrial Chemistry"; Heber W. Youngken issued his "Pharmaceutical Botany and Pharmacognosy"; John A. Roddy issued his "Medical Bacteriology," and Paul S. Pittenger published his "Biochemic Drug Assay Methods"; and with these should be included Julius W. Sturmer's admirable "Pharmaceutical Latin" and "Pharmaceutical Arithmetic," as he has been affiliated with the College since the Chi-merger of 1916. And there were many formularies and other textbooks published that are not now in general use.

Prior to the U. S. Pharmacopœial Convention of 1850, pharmacists had no active part in the revision of the U. S. Pharmacopœia, the work being done by medical men. But at the 1840 Convention the Philadelphia College of Pharmacy presented for consideration "a complete revised copy of the Pharmacopœia elaborated with ability and great industry, and the Committee accepted after deliberate examination, nearly all the suggestions" (U. S. P. IX, X); and thus was paved the way, logically, for the representation of pharmacists in all subsequent revisions, and in all of these the College has been most ably represented. Twelve of the thirty-three present pharmaceutical members of the Committee of Revision are P. C. P. men, and the last three Revision Committee chairmen—Remington, LaWall and Cook—have been (or are) members of the faculty of the College.

The American Pharmaceutical Association, which stands for the highest ideals of pharmaceutical practice, and is the backbone of professional pharmacy in this country, was organized in the Philadelphia College of Pharmacy in 1852, its first president being Daniel B. Smith, the then president of the College; and from the time of its organization, the members and graduates of the College have been so active in its work, occupying many important official positions, and in the various State and local pharmaceutical associations, in the State Boards of Pharmacy, and as teachers in many schools of pharmacy, that the College has often been referred to as the "The Mother School of American Pharmacy."

What of the future? The past is yesterday and the future is tomorrow! We have been given a glorious heritage and must maintain the traditions of the fathers and justify their faith in us. How can this best be done? It seems to me that five things, chiefly, are essential: (1) Better education; (2) better legislation; (3) better practice; (4) better relations with the medical profession; and (5) better research work.

We must have better education, that is, higher entrance requirements, better facilities for instruction, including a drug plant garden, and better courses of instruction. Beginning with 1923-24, the College will require high school graduation, or its equivalent, for entrance, and we are now working for better facilities and advanced instruction.

And it may be possible for the College to give a premedical course for medical students provided such course is organized on a scholastic basis and approved by the Association of American Medical Colleges. The number of medical students in the United States is rapidly increasing and it would seem that the College could readily teach premedical students physics, biology (embracing bacteriology), biological chemistry, and pharmacology, together with medical pharmacy, medical chemistry and medical pharmacognosy, and probably mathematics and languages. Such a course would form an ideal premedical course.

We must have better legislation, especially prerequisite legislation, and this need is vital, not only for the good of American pharmacy, but for the better service of the American people. Today, less than one-half of the forty-eight States of the Union have prerequisite laws, and the public will not be properly served until every State of the Union has such a law; and we must have universal reciprocity between State Boards of Pharmacy, or national licensure; and we must have simpler and more efficient pharmacy laws by State and nation.

We must have better practice along professional or technical lines that will be of direct value to the medical profession in the diagnosis and treatment of disease; there must be a sharper differentiation by the pharmacist, in his daily work, between legitimate commercial pharmacy and illegitimate, or real pharmacy will cease to be; and it may be that we will have in this country, in the future—two kinds of stores—pharmacies and drug stores, the



former for professional service and legitimate commercialism, and the latter crassly commercial.

We must have better relations with the medical profession by deserving it—by perfecting our individual abilities and directing our work primarily along professional and scientific lines that will appeal to the medical profession and win their sympathetic support. In the past we have not had this. Let us hope that under the inspiring leadership of our new President, William Clarence Braisted, the medical profession will come to realize the potential possibilities of pharmacy, acting in co-operation with medicine as a sister art.

Pharmacy is the study of the reaction of drugs without the human body, and therapeutics is the study of the reaction of drugs within the body, and the one cannot properly function without the other. In a word, pharmacy is the physico-chemistry of drugs, and therapeutics is the biochemistry; and practically pharmacy is as vital to medicine as therapeutics or any other medical art.

We must have better research work, because research is the life-blood of education and practice. As Dean Charles H. LaWall writes me, "The future development of pharmacy is largely dependant upon the stimulation of research, especially its inculcation in the student-body. The work of the College in the past in this direction has been of the highest character, but it has been done unsystematically, and was largely a matter of chance that it was done at all. Men like Maisch, Procter, Remington, Sadtler, Kraemer and others have simply bubbled-over with initiative, and their efforts have enriched pharmacy and made it better. Today, however, the output is limited, because every member of the faculty is driven full-speed in taking care of his teaching and accessory work. To overcome such a handicap, the teachers should have more assistants for instructional work. The progress of any department of the College could then be measured not only by its instructional results, but also by the quality and quantity of original work it turns out, and the College would have a standing among other scientific schools that instruction alone could not give. Furthermore, students, graduates, members of the College, and others, would be inspired to follow the example of the faculty, and the field of research would be developed and co-ordinated." And as if in anticipation of such a possibility, the Board of Trustees of the College has recently established a Subcommittee on Research of its Committee on Education to systematically promote research work in pharmacy and correlated science.

And the field of research is practically unlimited. As John Uri Lloyd, a Master in Pharmacy of this College (1897), and one whose research work in pharmacy for the past fifty years stands out like a beacon-light at home and broad, writes me: "In my opinion, the field of research is as yet scarcely invaded. Whoever enters it should, with each subject, as a foundation, have his feet on the work others have accomplished, then with open mind, raise his eyes to the blue sky above. He should start with a hypothesis gained from study or experience with related products, and yet expect to fail in whatever thought had speculatively advanced. Disappointment brings then no pain. He should be so bold as to question orthodox theoretical rules and formulæ, and in the face of 'authority' create images and plans of procedure of his own. And yet he should be so timid as to shrink from personal criticism of others, realizing that his own self will rise before him as perhaps the one most subject to criticism under the backward glance. If concerned in the exactions of science, he should expect resistance from those whose idols he touches with even the kindest intent. If conscious of the correctness of his views he should make no retort; *time* will care for *fact*. If he has indiscretely voiced false theories based on fallacious judgment, he should thank the man of the present for service rendered in his disillusionment, resting assured that *time* would later have served the same purpose. If given a moderate period of life the backward glance will surely show a pathway littered with his own broken vases, shattered into fragments by himself. The great charm of research may be defined as the construction of new edifices out of those demolished, and in plant research, the defining and describing of natural textures and plant structures. In this the doors to be opened by the systematically trained scientists of the near future will surely make the life-wanderings of empiricists, with whom this writer is to be classed, pioneer offerings serviceable perhaps mainly as an inspiration to those to follow."



What will the next one hundred years bring our Alma Mater? No man knoweth; time only can tell. And yet paraphrasing Longfellow, let us make our Alma Mater our Ship of State, so strong and great and cry to her: "Sail on! Our hearts, our hopes, our prayers, our tears; our faith triumphant o'er our fears, are all with thee—are all with thee!"

Dr. William Duffield Robinson then spoke for "The Alumni"; Prof. J. Julius W. Sturmer for "The Medico-Chirurgical College of Pharmacy Alumni"; Prof.



HENRY C. CHRISTENSEN

Eugene G. Eberle for "American Pharmacy"; Major A. P. Clark for the "Pharmacy of the U. S. Army"; and Prof. Theodore J. Bradley for "The Massachusetts College of Pharmacy."

H. C. Christensen, Secretary of the National Association of Boards of Pharmacy, spoke as follows:

### The Relation of Boards of Pharmacy to Colleges of Pharmacy

H. C. CHRISTENSEN

Secretary of the National Association of Boards of Pharmacy

Henry C. Christensen, son of H. F. Christensen, was born (1865) at Union Grove, Wis. Early education in Nebraska. Graduated from Northwestern University School of Pharmacy in 1893 and engaged in retail drug business in Chicago as manager and owner for seventeen years. Was appointed a member of the Illinois Board of Pharmacy in 1907, and has been reappointed with each successive term. Became active in Interstate Association of Boards of Pharmacy and chairman of the Advisory Examination Committee of the National

Association of Boards of Pharmacy in 1913; later was made Secretary of the Association. Suggested outlines for an ideal type of examination, which have been universally adopted. Member of the American Pharmaceutical Association and Illinois Pharmaceutical Association. His ambition, for which he has worked untiringly, is to secure universal reciprocal registration, and as a foundation for this, a higher and more uniform standard for examinations, together with higher educational requirements preliminary to the professional training.

That a member of The National Association of Boards of Pharmacy should be invited to address a gathering assembled to celebrate the centennial of one of our foremost—perhaps I should say the foremost—college of pharmacy, strikes me as a significant occurrence.

The time is easily within the memory of you—perhaps the majority of you—when colleges of pharmacy and boards of pharmacy went their separate ways ignoring the existence of each other. While their work was in related fields and their interests on parallel lines, they followed the law of parallel lines and crossed only at infinity.

Not only did they go their separate and distinct ways but it required no astute observer to discern evidence of dormant, if not active, aversion.

Boards looked upon colleges which were blazing the way into the pharmaceutical wilderness as an aggregation of finespun theorists whose domain was within the college walls, but whose work bore no relation to the practical hard-headed business of conducting a pharmacy.

The colleges from their side viewed the boards as an appendage to the prevailing political party and whose members were more noted for political prowess than pharmaceutical learning.

Now, we may admit there was an element of truth in the position taken by each side, but it strikes us now as strange that neither seemed to recognize that their interests were inseparably interlocked and that both aimed at the same goal, namely, to supply to the community pharmacists qualified to render to the people of the commonwealth the service to which they—the people—were justly entitled.

It was—and is—the function of the schools to train men and women to discharge the duties of the pharmacist, and the boards were created to see to it that none but the qualified were permitted to practice.

The conditions prevailing up to within ten or fifteen years ago are rapidly changing. With the organization of the schools into the American Conference of Pharmaceutical Faculties, the joining of the Boards in the National Association of Boards of Pharmacy, with the American Pharmaceutical Association co-operating with both, and with the State Pharmaceutical Associations lending a hand where a hand is needed, we are rapidly reaching the point where the relation of each to the other is fully recognized and where the part that each can play in pharmaceutical progress is plainly marked out.

The boards, examining as they do thousands of candidates each year, readily perceive that to be qualified for the pharmaceutical work of today the applicant for registration as a pharmacist should have the advantage of the training that only a thoroughly equipped and well-manned school or college of pharmacy can give.

The schools recognize that the boards, both by their examinations and by the influence they have in securing the enactment of progressive laws, are in a strategic position to force the elevation of our pharmaceutical standards to the level demanded by our national advancement.

While at present only about one-half of our states have enacted prerequisite laws, the boards have it easily within their power to enforce practically a prerequisite standard through the requirements of their examinations.

The schools on their part must of course, recognize the fact that the training they give their graduates should be consistent with the time and with the progress we as pharmacists are making, always, to be sure, keeping a little ahead of the standards of today and anticipating the requirements of tomorrow.

The enactment of prerequisite laws in the various states, the privilege of reciprocity in pharmaceutical licensure with forty-three states and the District of Columbia when registered as a pharmacist in one, the increasing difficulty of passing a state board examination unless

college-trained, the greater field open to the graduate in pharmacy have all combined to encourage young men and women to matriculate in the colleges of pharmacy and complete the prescribed course. This will increase rather than decrease and the time is not far distant when every man in pharmacy will be a graduate in pharmacy and when the casual customer to the pharmacy will look for the college diploma on the wall as readily as he now looks for the state board license. This time will be hastened to just the extent that board and schools recognize their mutual dependence, their duty to the public, and co-operate for the needed progress and advancement.

We are here to celebrate the centenary of a great educational institution. It is neither the time nor place for me to enter on a long dissertation on the relations of schools and boards. I am happy to be permitted to join you in celebrating such a noteworthy event.

I am proud, indeed, that you should remember our organization when issuing invitations for your jubilee. I am personally delighted, of course, to be the representative of our association to receive your invitation; and as the years roll on, and new milestones of progress are set up, you will be proud and our Association will be delighted, to recognize the fact that the Philadelphia College of Pharmacy and Science, ever a leader in its field, was in the advance-outposts, establishing mutual relations and good will in the organizations that make for progress in our chosen profession of pharmacy.

### Commencement Day

Next day, Wednesday, June 15, was Commencement Day. The graduating class assembled in the Academy of Music for the exercises, which included addresses by President Braisted and Professor Herbert W. Hess of the Wharton School of the University of Pennsylvania. Diplomas and certificates were awarded to 187 students; 68 more would receive their degrees upon reaching their legal majority or upon fully satisfying the practical experience requirement. The degree of master of pharmacy *honoris causa* was conferred on Rear-Admiral Edward Rhodes Stitt, Surgeon-General of the United States Navy, and a graduate of the College; Edward Kremers, Samuel L. Hilton and Josiah C. Peacock; the degree of master of pharmacy *in course* was conferred on Ivor Griffith, a member of the College Faculty and Editor of the *American Journal of Pharmacy*, and Ellery H. Harvey.

The celebration throughout was accounted on all sides to have been a pronounced success. It was the most brilliant event, as it was meant to be and as it deserved to be, in the annals of the institution.

### Endowment of the College

Reasons were given and arguments adduced for the endowment of the College in an adequate amount, but no statement in 1921 was so eloquent and clear as that made by Professor Joseph P. Remington in his address at the ceremonies which attended the opening of the new College building on Tenth Street of February 22, 1893, when he said:

"Pharmaceutical education has saved thousands of lives; it has stayed the hand of death untold numbers of times; it has not only stood between the physician and patient, and guided unerringly the hand of the pharmacist to safety, but it has been the effectual bar between the pharmacist and his poor frail self, with his tendency to err and fail; it has revealed to him the great gulf which yawned below him, into which he was about to plunge his patient, his reputation, aye, himself.



"The great educational centers of our country, of which we are all so justly proud, our own University, Harvard, Yale, Johns Hopkins, Princeton, Cornell, and lastly the University of Chicago, are names familiar to all. Scarcely an issue of a daily newspaper can be scanned without seeing a notice of some gift, bequest or endowment to them. Thousands of dollars are yearly pouring into the coffers of these worthy institutions. These have for their object the higher education of the talented youth of our land. For the education of the classes, who have not the means to spend in elaborate training, there stands our splendid system of public schools, and an education in the United States is denied to no one. In the case of the universities, the opulent from their abundance support them; for the public schools, rich and poor alike are taxed for their maintenance, but, when we come to Pharmacy, it will be seen that the highly favored of this land have entirely overlooked us. Pharmacy has no school tax on which to depend; she has never even applied to the Legislature for an appropriation. The treasury of the Philadelphia College of Pharmacy has been enriched by but one bequest in seventy-two years, that of a small legacy in 1865 for the purchase of books and scientific apparatus. . . . The public itself and those not directly interested in the technical work of pharmacy have stood entirely aloof, although no one can deny that the public has received the greatest advantages which flow from higher pharmaceutical education. Pharmacy's educational institutions have had to rely solely on her own votaries. Has not the time come for Pharmacy to make its appeal, to stand up, shoulder to shoulder, with the other colleges of our land, which are continually asking the public for the necessary sinews of war to carry on the work; and has she not a convincing argument when she points to the fact that 12,700 students have, up to this time (1893), received instruction in these halls—impelled here solely by the desire to improve themselves and fit them for better service to the public entirely at their own expense.

"If immense sums can be annually applied through gifts, bequests, endowments, appropriations from Legislature, and in other ways for the support of universities and colleges, which simply give a general education, will it be impossible to ask that a modest sum be set apart through these same agencies to aid in pharmaceutical education, whose importance to the general weal is far greater, for through it flow the issue of health or disease, safety or disaster, life or death."

### Official Statement by the Board of Trustees of the Philadelphia College of Pharmacy and Science

Following a Decision by Court of Common Pleas, No. 3, of County of Philadelphia

In view of the widespread publicity that had been given to certain administrative changes at the Philadelphia College of Pharmacy and Science, the Board of Trustees unanimously issued on November 21, 1921, the following statement:

The movement for the celebration of the One Hundredth Anniversary of the Philadelphia College of Pharmacy was officially initiated by the College on March 29, 1920, when a Committee on Centennial Celebration was authorized and appointed.

Plans for the extension and endowment of the College were adopted.

The Committee on Centennial Celebration engaged, on February 28, 1921, an expert organizer to aid in the contemplated drive for funds, a small group of alumni guaranteeing to pay the cost of such engagement so that the College would receive one hundred cents for every dollar contributed.

The annual meeting of the College was held on March 28, 1921, when Mr. O. W. Osterlund, a prominent alumnus, was elected President by a large majority. It was believed that a more progressive administrative policy should be followed.

Mr. Osterlund, upon his installation as President, immediately announced that he would occupy the position only until a successor of national reputation could be obtained.

The Board of Trustees organized shortly after the annual meeting and unanimously elected as its Chairman, Prof. Samuel P. Sadtler, for thirty-eight years a member of its

teaching Faculty and now Emeritus Professor of Chemistry, and placed in charge of most of its important committees, members who for more than twenty-five years had been actively identified with the work of the College.

In the meanwhile, the field was thoroughly canvassed for a successor to President Osterlund, and the position was tendered, through an authorized committee of the Board of Trustees, to Dr. William C. Braisted, a former Surgeon-General of the United States Navy, who expressed himself as favorable to accepting it. The preliminary negotiations proving satisfactory, Dr. Braisted was elected President at an adjourned meeting of the College on May 9, 1921, his salary being guaranteed by a group of generous alumni until the College could take care of this expense in its budget.

It was unfortunate in many ways that a few of the members of the College, instead of accepting the result of the election and seeking later to have it changed by the membership, questioned the legal right of Dr. Braisted to hold the office of President and took their case into court. As a result, the campaign for funds for the College was checked.

The alumni, members and friends of the College will be gratified to learn that the action taken has been disposed of by the Court of Common Pleas, No. 3, County of Philadelphia, Judge Ferguson presiding, and unqualified judgment has been entered in favor of Dr. Braisted continuing as President of the College. This was especially gratifying to the Board of Trustees, as Dr. Braisted has consistently pursued a course of entire devotion to the best interests of the College with an utter disregard of personal consequences. When the court action was first brought, he sought the advice of the Board of Trustees as to whether he should remain as President, or whether the Board considered that the institution would be better served by his prompt resignation. At his request, the Board took a ballot which resulted in an unanimous vote of confidence, with the request that he remain in the presidency until the legality of his position had been judicially determined. This determination has been recently made and is as follows:

COMMONWEALTH OF PENNSYLVANIA, ex. rel.  
RICHARD V. MATTISON AND GEORGE M.  
BERINGER,

vs.

WILLIAM C. BRAISTED

C. P. No. 3  
March Term, 1921  
No. 8993

FERGUSON, J., October 28, 1921.

This is a petition in quo warranto to test the right of William C. Braisted to hold the office of President of the Philadelphia College of Pharmacy and Science.

To the suggestion for the writ a motion of quash was filed. At the argument of this motion it was stated to the Court that, at most, any irregularity in the election of the respondent had been due to a misunderstanding of the requirements of the by-laws, that the relators under no circumstances were entitled to the office, and neither was any other person who asserted a right to it; that the respondent represented the choice of a large majority of the members of the corporation, and if opportunity were given them to indicate their choice at another election that fact would be demonstrated, if that action were deemed necessary.

The Court, being of opinion that a prolonged controversy over the question would bring scandal and great injury upon an ancient institution of learning, of honorable repute in the community, felt justified in delaying action upon the motion to quash for a few weeks to enable the respondent to demonstrate the facts thus brought to its attention. Accordingly the respondent resigned his office to take effect in the month of September of this year, and at a regular stated meeting of the corporation held on September 26, 1921, after notice in accordance with the by-laws, an election was held, at which the respondent, by an overwhelming vote, was chosen President. With leave of the Court the motion of quash was thereupon withdrawn and an answer filed, setting out the facts just related.

Whatever criticism, if any, could be made against the prior election becomes therefore of little importance. The respondent holds his office by a title which cannot now be questioned.

The matter having been brought to the attention of the Court on petition and answer and the facts set up in the answer admitted, it must necessarily follow that judgment should be entered for the respondent.



The plans for the improvement of the College have progressed most satisfactorily. A fund was raised by subscription amounting to nearly \$12,000 for the physical betterment of the College, such as repairs, painting, furnishings, additional lavatories, laboratory equipment, etc. A comprehensive budget system of expenditures was promptly put into effect. Additional professors and instructors were engaged to give adequate instruction in the B.Sc. courses in Pharmacy, Chemistry, Pharmacognosy and Bacteriology, which are of high cultural and scientific value, equivalent to similar courses in the universities and scientific colleges, and to provide adequate assistants, not only for carrying on the routine teaching work of the College, but also to enable constructive research work to be accomplished in every department. The new B.Sc. courses are in force with a gratifying number of students.

Furthermore, the new administration has rearranged the Roster of the College and increased the facilities for teaching, whereby it has been made possible to handle at least 750 students, instead of the former maximum of 600.

The number of students this year, both in the regular and in the post-graduate courses, is record-breaking, nearly 700 being in attendance. The College is prosperous, and has never had such whole-hearted support from the alumni, members and friends as at present. This support is shown not only by the interest in the College, but by generous contributions of money, *nearly thirty thousand dollars having been contributed during the past six months*, including the contributions for the physical betterment of the College mentioned above. But the College cannot rest satisfied with its past achievements. It must go forward and develop and extend its activities, or it will not be true to its traditions; and to do this, further contributions of funds will be necessary.

Since Founder's Day, February 23, 1921, the membership of the College has been practically doubled, i. e., from about 600 members to 1,200 members.

A series of public scientific lectures has been inaugurated for the present season as one of the means of showing the value of the institution to the general public. Important research work is being carried on in several of the departments, the results of which when published, will be of great value in advancing the scientific standing of the College.

A series of lectures on Citizenship is contemplated as leading up to and paving the way for the subject of pharmaceutical ethics, for good citizenship is recognized as a fundamental necessity in the making of a good pharmacist.

There has been no change in the educational policies of the College, nor is any change contemplated, except to improve and amplify the courses of instruction and keep them up to date. These policies will be, in the future, as they have been in the past, in the hands of the Faculty subject to the approval of the Board of Trustees and the College.

The campaign for funds for the College for extension and endowment has been postponed for a time, and we believe that our prospects are very bright for a generous response, not only from our alumni and members, but from individuals who can see in the vision of the future a greater institution than its founders ever planned and one of tremendous value to the progress of pharmacy and to the welfare of the general public.

We believe that a new era is at hand in the development of scientific and professional pharmacy in this country, and in such development, our College should be the leader. We believe, also, that President W. C. Braisted has the vision to see and the ability to properly promote such development, and thereby perform a service of the highest value to American Pharmacy. We enclose the reprint of an editorial he has written for the current issue of the *American Journal of Pharmacy*, giving his views upon the subject of "The Dawn of a New Era in Scientific Pharmacy."

Yours for a Greater Philadelphia College of Pharmacy and Science:

Frank R. Rohrman, Ph.G. First Vice-President of the College, Chairman of Finance Committee of Board of Trustees. Manager-Director of the Philadelphia Wholesale Drug Co.  
 Joseph L. Lemherger, Ph.M. Second Vice-President of the College. Retail Pharmacist.  
 Ambrose Hunsberger, Ph.G. Recording Secretary of the College. President of National Association of Retail Druggists. Retail Pharmacist.  
 Otto W. Osterlund, P.D. Member of Board of Trustees. Member of Pennsylvania Board of Pharmacy. President of Belmont Trust Co. Retail Pharmacist.



## 338 First Century of the Philadelphia College of Pharmacy

- Theodore Campbell, Ph.G. Member of Board of Trustees. Member of Pennsylvania House of Representatives. Retail Pharmacist.
- Warren H. Poley, Ph.G. Member of Board of Trustees. Retail Pharmacist.
- Otto Kraus, Ph.G. Member of Board of Trustees. Secretary of Philadelphia Association Retail Druggists. Pharmacist.
- Samuel P. Sadtler, Ph.D., LL.D. Chairman of the Board of Trustees. Emeritus Professor of Chemistry. Consulting Chemical Engineer.
- William L. Cliffe, Ph.M. Member of Board of Trustees. Chairman of Committee on Education of Board of Trustees. Retail Pharmacist.
- Russell T. Blackwood, Ph.G. Member of the Board of Trustees of the College. President of Alumni Association of College. First Vice-President of Philadelphia Wholesale Drug Co. Retail Pharmacist.
- Benjamin T. Fairchild, Phar.M. Member of Board of Trustees. President of Fairchild Bros. and Foster, New York. Manufacturing Chemist.
- Richard H. Lackey, Ph.G. Member of Board of Trustees. Retail Pharmacist.
- Josiah C. Peacock, Ph.G. Member of Board of Trustees. President of Pennsylvania Pharmaceutical Association. Retail Pharmacist.
- Horatio N. Fraser, Ph.G. M.D. Member of Board of Trustees. Formerly President of Fraser Tablet Co., New York City.
- Samuel Price Wetherill, Jr., B.Sc. Member of Board of Trustees.
- Frank P. Streeper, Ph.G. Member of Board of Trustees. Retail Pharmacist.
- Robert S. Sherwin, Ph.G. Member of Board of Trustees. General Manager of Petty's Pharmacy, Newark, N. J.
- Paul A. Kind. Member of Board of Trustees. Treasurer of Kind and Landesmann Gelatin Company, Inc., Camden, N. J.
- George B. Evans, Ph.G. Member of Board of Trustees. Retail Pharmacist.
- Charles H. LaWall, Ph.M., Sc.D. Member of Board of Trustees. Dean of Philadelphia College of Pharmacy and Science.
- C. Mahlon Kline, Ph.B. Member of Board of Trustees. First Vice-President of the National Wholesale Druggists' Association. President of Smith, Kline and French Co. Manufacturing Pharmacist and Wholesale Druggist.
- Adolph W. Miller, Ph.G., M.D. Corresponding Secretary of College. President of Aschenbach and Miller, Inc. Director of Philadelphia Drug Exchange. Treasurer of John Bartram Association. Wholesale Druggist.
- Walter V. Smith, Ph.G. Member of Board of Trustees. President of Valentine H. Smith and Co., Inc. Director of Philadelphia Drug Exchange. Wholesale Druggist.
- Milton Campbell, Ph.G. Treasurer of College. President of H. K. Mulford Co. Director of Philadelphia Drug Exchange. Manufacturing Pharmacist.
- William Duffield Robinson, Ph.G., M.D. Member of Board of Trustees. President of American Climatological and Clinical Association. First Vice-President of Pennsylvania Tuberculosis Association. Physician.
- Joseph W. England, Ph.M. Vice-Chairman of Board of Trustees. Secretary of Alumni Association of College. Secretary of Philadelphia Drug Exchange. Director of Research Laboratory of Smith, Kline and French Co.
- George D. Rosengarten, Ph.D. Member of Board of Trustees. Member of Advisory Board of "Journal of Industrial and Engineering Chemistry" of American Chemical Society. Vice-President of Powers-Weightman and Rosengarten Co. Manufacturing Chemist.

PHILADELPHIA, NOVEMBER 21, 1921.

### The Dawn of a New Era in Scientific Pharmacy

The article recently published by Dr. Llewellys Barker on therapeutic measures (*Jour. Amer. Med. Assoc.*, Oct. 8, 1921); the papers read at the last meeting of the American Medical Association in the section devoted to pharmacology and therapeutics, by Rountree, Young, Crile and others; the last presidential address of the British Pharmaceutical Association; the address of the President of the American Medical Association calling attention to a renewed interest in pharmacy and therapeutics; the examples of the close union of schools of pharmacy with hospitals in Germany and the efforts being made in this direction in this and other countries, are but evidences that a new era is at hand in the history of pharmacy

and that its growth in usefulness and importance in the interests of humanity and medicine is so well advanced and determined that we cannot afford to fail to respond to the inspiration of the great work planned by all thinking minds for the decade to follow.

The Philadelphia College of Pharmacy and Science, for the past one hundred years, has been a leader in all that pertains to pharmacy and the allied sciences, and the progressive element in the Board of Trustees, the Faculty and the College body appreciate fully the importance of the present movement and desire that this institution shall be among the foremost to join in the efforts to advance the interests of this great profession, with all its varied interests and ramifications in both the professional and business world.

With this end in view, the efficiency of the College has been improved and enlarged, made possible by the financial assistance of the Board of Trustees and a few friends of the institution. The College has been renovated and repaired to try to provide proper, adequate and comfortable quarters for its work, and its faculty and curriculum expanded to meet the demands of the awakening interest in pharmacy and therapeutics. The allied branches of the work—general chemistry, industrial chemistry, physiological chemistry, bacteriology—have equally been provided for, and at the same time measures have been taken to raise the general standard of educational pre-college work, which has already brought to the institution a class better equipped for the work than ever before. To supply a broad and thorough basic education as a preparation for our professional courses, instruction in the languages, in mathematics and in business methods, has been provided, in order that the graduate shall go forth well equipped for work in the world and with a foundation that makes possible successful life work, whether it be in pure pharmacy or its business branches, such as the retail drug business or the great manufacturing houses, or in the work of pure research, whether it be botany or chemistry or physiology or bacteriology. It will be the effort of the College to provide instruction in its regular and post-graduate work which will enable its students to successfully enter the fields of life work in the many splendid openings existing today as real pharmacists, as analytic chemists, as directors of great sanitation problems, as research workers either independently or in the great laboratories of our educational and industrial institutions, to be directors and assistants in the bacteriological and biological laboratories of educational institutions, of general and municipal governments, in the great drug manufacturing laboratories, to carry on work of this kind in pharmacies and drug stores which maintain laboratories great or small, and to be the skilled assistants of physicians in those important branches of their practice involving all that pertains to the chemical, bacteriological, biological examinations of their patients, and which the physician has not the time and often not the technical skill to perform.

A glance shows the vast importance, the numerous splendid openings for the work contemplated by the present organization of the College. It must not be overlooked also that the preprofessional work to be obtained in this College provides the best possible basis for those who intend ultimately to study and practice medicine. In fact, it must be apparent that no medical man can hope to enter on his profession, equipped for research and scientific medical attainment, without the basal information given in the work of this school.

The fact that medicine and pharmacy have grown apart during the past years is regretted by both professions, and their closer union is absolutely necessary for the success of each in its humanitarian work.

The great need of the present day, as Dr. Rountree states at the close of his address before the Section on Pharmacology and Therapeutics of the American Medical Association, is the establishment of a "National Institute of Pharmacology and Experimental Therapeutics."

This idea has been in the minds of some of the trustees and officers of the College, and it has been thought that a movement along this line might be contemplated with the Philadelphia College of Pharmacy and Science as a center, linking up its work with a great hospital existing or to be built in the city in connection with a manufacturing plant under the control and direction of the College, with an adequate animal farm for biological products and an extensive botanical and research garden for the systematic study, cultivation and standardization of therapeutic drug plants.



This would allow the equal and co-ordinate union of the College for teaching, research and standardizing all that pertains to pharmacy and its allied branches in chemistry and bacteriology, the proper preparation for safe and scientific administration of its products and the determination of their value at the bedside in the associated hospital by the best staff of attending and consulting physicians the city could produce. This would bring about, ideally, the union of the doctor, the scientific pharmacist and the highest and best method of making the therapeutic agent for human use. As a co-ordinate body they would work constantly together, and the final approved therapeutic agent, with its full history, characteristics, mode of application and method of manufacture would then be given to the world for its use and to the commercial manufacturers for production. No commercial element enters into this proposed organization. For this purpose a sufficient endowment must be raised to place the College, the hospital, the manufacturing plant absolutely outside of any possible commercial implication. If possible, the patients at the hospital should be free patients, but given the best of every hospital attention and equipment. Philadelphia, which needs so acutely larger facilities for the care of its sick, could well assist to make so magnificent a contribution to the welfare of its population, and indirectly to that of the world.

This outline of the visions of the possibilities of the future, it is hoped, will stimulate thought and action in the forward movement of the work and help lead to the assistance and solution of the great problem before us.

The College possesses already on its staff men of splendid attainment and untiring energy and courage to prosecute its work. Never have I seen a group of educators better equipped to inspire the young, to give instruction that has real, practical, usable worth in the life work. With the increase in the faculty more time will be given for problems of research, which in the past has been so important, inspiring and valuable. It is hoped when the reorganization is complete that the resources of the College may be made available to the outside world in order that its problems may be referred to our research workers for solution, and if this work can be provided practically free of charge, many a splendid idea may result in practical fulfillment and use.

In view of the splendid possibilities, can there be one among us who will not do his utmost to see that at last pharmacy may be given its fair chance to develop itself in the world's work?

W. C. BRAISTED.

### Co-operative Research in Pharmacy and Medicine

Later (May 3, 1922), President Braisted discussed more fully the subject of scientific pharmacy, especially in relation to research work and the co-ordination of all the healing agencies for the benefit of humanity, stating to the *Philadelphia Ledger* that:

"The work which we have in mind will begin at the very beginning, that is, with the raising of our own medicinal herbs and plants. In this branch, as well as in the later ones, the most exhaustive research will be conducted. We plan to experiment with all the now known medicinal plants and to experiment not only with these and with combinations of them, but also to raise many plants the medicinal value of which is as yet not definitely known, and, in short, to make a thorough and practical survey of the entire botanical field.

"When we have discovered drugs which appear to be of value in the science of healing, the next step will be to have them thoroughly tested. This we shall do ourselves in our own laboratories, up to a certain point, and then we shall have them thoroughly tested by the best physicians in the country, many of whom have already signified their willingness to co-operate with us.

"When the time arrives that these great physicians are convinced that certain drugs will always have certain effects, then we shall give the formulæ to the manufacturers. We shall



not do any of the manufacturing ourselves, as it is essential for us to keep ourselves entirely away from the commercial side; we are simply doing the work of discovery through research and experimentation.

"We already have two acres of ground under cultivation, and there are 200 acres at our disposal near Philadelphia upon which we shall place our experimental botanical gardens. From the work which is to be done on this land we have high hopes of making some important medical discoveries.

"Our plan contemplates the working together in a closer manner than ever before, since medicine and pharmacy separated about a century ago, on these two great agencies, and to them will be added the work of the chemists, bacteriologist and all other agencies which are now working more or less separately toward the same end.

"A practical demonstration of the value of an institution of this kind was given in a notable way at the American University Experiment Station in Washington during the war. Amazing results followed the labor of the experts in the various lines, among them being chemists, physicists, biologists, pharmacologists and pathologists from many sections of the country and all working under one roof in close co-operation and in conference almost hourly.

"This is what we hope to establish as a permanent thing, and if the work is carried out along the lines now planned, as there seems to be every likelihood that it will be, it will constitute one of the great movements of the present century. Thousands and hundreds of thousands of lives are now being lost needlessly because of insufficient knowledge concerning chemical, physical and biological changes.

"With all these agencies working together, it will be quite possible to obtain new and higher standards of drugs. Research and experimentation alone will do much, but we plan also to have the co-operation of many of the largest and most responsible chemical and drug houses and to take full advantage of their practical knowledge.

"Together we shall approach the problems which constantly beset the physician and the pharmacist; problems relating to the variability of drugs, their pathological action and the results of combining them. Perhaps the greatest deterrent factor in the combating of disease in the past has been that there was so little co-operation among the sciences of healing, which are all striving for the same goal but by highly different paths.

"In this great work from which we hope to achieve so much of good for humanity, Philadelphia will play a leading part, and the Philadelphia College of Pharmacy and Science will be the vehicle for the movement. We have thus far received the heartiest co-operation which could be asked from all those who have been approached, and all the allied branches of medicine have expressed hearty approval of the idea. This has been the case with the manufacturing houses as well as with the scientists. It is no part of the program to interfere in any way with private enterprise. Our work will in a measure be to stand as a sort of clearing house between the medical arts and sciences and the manufacturers. The problems of the former will come to us, we shall solve them if possible, and turn over the results, after they have been thoroughly tested and approved both by us and by the physicians to the manufacturers.

"As to our plans for the College, they are already pretty well known. We have assurance of the sale of our present site, and will take a new location which will permit the expansion which is now essential to our college work as well as to the research work which we have in mind. The new buildings will contain ample room and all modern facilities for the great task which is ahead of us. The Philadelphia College of Pharmacy and Science is the oldest institution of its kind in the United States, and at its centennial anniversary, which was observed recently, the alumni proposed to raise a substantial sum to be devoted to the endowment of the new college.

"We have secured thus far the most cordial co-operation of all the various elements which we shall combine in our new plan of research. But the support of the public is also a necessary thing in a movement such as this. We are going ahead with what we believe to be one of the most important movements of the present century; a movement which, when its permanent value is demonstrated, will receive the unquestioning support not only of the citizens of Philadelphia, but of the entire world as well."

CHAPTER XI

OFFICERS, TRUSTEES, EXECUTIVES AND FACULTY OF THE PHILADELPHIA COLLEGE OF PHARMACY

The following list indicates the officers, executives, faculty and deans of the College, with their respective terms of service, after which biographical data are given in chronological order, according to position last held:

OFFICERS OF THE COLLEGE

PRESIDENTS

Charles Marshall .....	1821-1824	Charles Bullock .....	1885-1900
William Lehman .....	1824-1829	William J. Jenks.....	1900-1900
Daniel B. Smith.....	1829-1854	Howard B. French.....	1900-1921
Charles Ellis .....	1854-1869	Otto W. Osterlund.....	1921-1921
Dillwyn Parrish .....	1869-1885	William C. Braisted.....	1921-

FIRST VICE-PRESIDENTS

William Lehman .....	1821-1824	Dillwyn Parrish .....	1868-1869
Stephen North .....	1824-1826	William Procter, Jr.....	1869-1874
Charles Marshall, Jr.....	1826-1828	Peter Williamson.....	1874 (February 17 to March 30)
Daniel B. Smith.....	1828-1829	Charles Bullock .....	1874-1885
Samuel Jackson .....	1829-1831	Robert Shoemaker .....	1885-1897
Henry Troth .....	1831-1842	William J. Jenks.....	1897-1904
Charles Ellis .....	1842-1854	Mahlon N. Kline.....	1905-1909
Samuel F. Troth.....	1854-1867	Richard V. Mattison.....	1910-1921
William Procter, Jr.....	1867-1868	Frank R. Rohrman.....	1921-

SECOND VICE-PRESIDENTS

Stephen North .....	1821-1824	Elias Durand .....	1843-1845
Charles Marshall, Jr.....	1824-1825	Samuel F. Troth.....	1845-1854
Samuel P. Wetherill.....	1825-1826	Dillwyn Parrish .....	1854-1868
Charles Allen .....	1826-1827	William Procter, Jr. ....	1868-1869
Samuel Jackson .....	1827-1829	Robert Shoemaker .....	1869-1885
Henry Troth .....	1829-1831	William J. Jenks.....	1885-1897
Samuel Jackson .....	1831-1836	Howard B. French.....	1897-1900
George B. Wood.....	1836-1843	Richard V. Mattison.....	1900-1910
Joseph L. Lemberger.....	1910-		

TREASURERS

William Heyl .....	1821-1826	William B. Webb.....	1889-1894
Edward B. Garrigues.....	1826-1838	James T. Shinn.....	1894-1907
Samuel F. Troth.....	1838-1842	Richard V. Shoemaker.....	1908-1916
Joseph C. Turnpenny.....	1842-1850	Warren H. Poley.....	1916-1920
Ambrose Smith .....	1850-1871	Aubrey H. Weightman.....	1920-1921
Samuel S. Bunting.....	1871-1889	Milton Campbell .....	1921-

SECRETARIES

Daniel B. Smith.....	1821-1828	Charles Ellis .....	1828-1830
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RECORDING SECRETARIES

Charles Ellis .....	1830-1842	William J. Jenks.....	1873-1885
Dillwyn Parrish .....	1842-1854	William B. Thompson.....	1885-1899
Edward Parrish .....	1854-1864	W. Nelson Stem.....	1899-1900
Charles Bullock .....	1864-1873	C. A. Weidemann.....	1900-1921
Ambrose Hunsberger .....		1921-	

CORRESPONDING SECRETARIES

Elias Durand .....	1831-1843	William Procter, Jr.....	1855-1867
William Hodgson, Jr.....	1843-1850	Alfred B. Taylor.....	1867-1886
Joseph C. Turnpenny.....	1850-1855	Adolph W. Miller.....	1886-

CHAIRMEN OF BOARD OF TRUSTEES

Samuel P. Wetherill.....	1821-1822	H. C. Blair.....	1854-1857
Jeremiah Morris .....	1822-1824	Robert Bridges .....	1857-1882
Henry Troth .....	1824-1842	T. Morris Perot.....	1882-1896
Warder Morris .....	1842-1845	William J. Jenks.....	1896-1897
Samuel F. Troth.....	1845-1845	T. Morris Perot.....	1897-1901
Thomas P. James.....	1845-1852	Mahlon N. Kline.....	1901-1909
John Harris .....	1852-1854	George M. Beringer.....	1910-1921
Samuel P. Sadtler.....		1921-	

CURATORS

Joseph P. Remington.....	1877-1883	Joseph W. England.....	1887-1920
Charles F. Zeller.....	1883-1887	Heber W. Youngken.....	1920-

ACTUARY

Thomas S. Wiegand.....1878-1900

ASSISTANT ACTUARY

C. J. Taylor.....1897-1899

REGISTRARS

W. Nelson Stem.....	1900-1903	Jacob S. Beetem.....	1903-
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DIRECTOR OF DEPARTMENT OF SUPPLIES

William R. Keeny.....1919-

FACULTY OF THE COLLEGE

PERIOD OF 1821-1846

*Professors of Materia Medica and Pharmacy*

Samuel Jackson .....	1821-1827	George B. Wood.....	1831-1835
Benjamin Ellis .....	1827-1831	Robert Eglesfeld Griffith.....	1835-1836
Joseph Carson .....		1836-1846	

*Professors of Pharmaceutical and General Chemistry*

Gerard Troost .....	1821-1822	Franklin Bache .....	1831-1841
George B. Wood.....	1822-1831	William R. Fisher.....	1841-1842
Robert Bridges .....		1842-1846	



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### PERIOD OF 1846-1867

#### *Professors of Materia Medica*

Joseph Carson .....1846-1850      Robert P. Thomas.....1850-1864  
 Edward Parrish .....1864-1867

#### *Professors of Pharmacy*

William Procter .....1846-1866      John M. Maisch.....1866-1867

#### *Professor of Chemistry*

Robert Bridges .....1846-1867

### PERIOD OF 1867-1897

#### *Professors of Materia Medica and Botany*

John M. Maisch.....1867-1893      Edson S. Bastin.....1893-1897

#### *Professors of Theory and Practice of Pharmacy*

Edward Parrish .....1867-1872      William Procter, Jr.....1872-1874  
 Joseph P. Remington.....1874-1897

#### *Professors of Chemistry*

Robert Bridges<sup>1</sup> .....1867-1879      Samuel P. Sadtler.....1879-1897

#### *Professors of Analytical Chemistry*

Frederick B. Power.....1881-1883      Henry Trimble .....1883-1897

### PERIOD OF 1897-1916

#### *Professor of Materia Medica*

Clement B. Lowe.....1897-1916

#### *Professor of Botany and Pharmacognosy*

Henry Kraemer .....1897-1916

#### *Professors of Theory and Practice of Pharmacy*

Joseph P. Remington.....1897-1916      Charles H. LaWall (Associate)..1906-1916

#### *Professors of Chemistry*

Samuel P. Sadtler<sup>2</sup>.....1897-1916      Freeman P. Stroup (Associate)..1910-1916

#### *Professors of Analytical Chemistry*

Henry Trimble<sup>3</sup> .....1897-1898      Frank X. Moerk.....1899-1916

#### *Professor of Bacteriology and Hygiene*

John A. Roddy.....1914-1916

<sup>1</sup> Professor Emeritus of Chemistry, 1879-1882.

<sup>2</sup> Professor Emeritus of Chemistry, 1916-

<sup>3</sup> In 1898-1899 the Chemical Laboratory was in charge of Professor Samuel P. Sadtler, with Josiah C. Peacock as his assistant.

# First Century of the Philadelphia College of Pharmacy 345

## PERIOD OF 1916-1921

### *Professors of Materia Medica*

Clement B. Lowe<sup>4</sup>.....1916-1921      Horatio C. Wood, Jr.....1921-

### *Professors of Botany and Pharmacognosy*

Henry Kraemer .....1916-1917      Heber W. Youngken (Acting) ...1917-1918  
Heber W. Youngken.....1918-

### *Professors of Theory and Practice of Pharmacy*

Joseph P. Remington.....1916-1918      Charles H. LaWall (Associate) ..1916-1918  
Charles H. LaWall.....1918-

### *Professor of Operative Pharmacy*

E. Fullerton Cook (Associate) ...1915-1918      E. Fullerton Cook.....1918-

### *Professors of General Chemistry*

Freeman P. Stroup (Acting).....1916-1917      Freeman P. Stroup.....1917-

### *Professor of Analytical Chemistry*

Frank X. Moerk.....1916-

### *Professors of Bacteriology and Hygiene*

John A. Roddy.....1916-1919      Louis Gershenfeld (Acting).....1919-1920  
Louis Gershenfeld .....1920-

### *Professor of Pharmaceutical Chemistry*

Julius W. Sturmer.....1916-

### *Professor of Physics and Physical Chemistry*

David Wilbur Horn.....1921-

<sup>4</sup> Professor Emeritus of Materia Medica, 1921- .

Up to 1846 there were only two chairs--one of materia medica and pharmacy, and the other of pharmaceutical and general chemistry; then the former chair was divided into two separate chairs--materia medica and pharmacy, and the title of the chemical chair changed to chemistry.

In 1867, however, the chair of materia medica was changed to that of materia medica and botany, to remain such until 1897, when it was divided into materia medica (to include physiology and pharmacology), and botany and pharmacognosy.

In 1867 the chair of pharmacy was changed to that of theory and practice of pharmacy, the chair of analytical chemistry was established in 1881, that of bacteriology and hygiene in 1914, those of general chemistry and of pharmaceutical chemistry in 1916, and that of operative pharmacy in 1918.

## DEANS OF THE COLLEGE

### *Deans of Faculty*

John M. Maisch.....1879-1893      Joseph P. Remington.....1893-1918  
Charles H. LaWall.....1918-1920

### *Dean of Postgraduate and Special Courses*

Julius W. Sturmer.....1918-1920

### *Dean of Pharmacy*

Charles H. LaWall.....1920-

### *Dean of Science*

Julius W. Sturmer.....1920-



PROFESSORS, ASSISTANTS AND ACTUARY IN 1890



PROFESSORS AND ASSISTANTS IN 1897





PROFESSORS, ASSISTANTS AND REGISTRAR OF THE COLLEGE IN 1902



PROFESSORS AND ASSISTANTS OF THE COLLEGE IN 1915

## OFFICERS AND TRUSTEES OF THE COLLEGE

## Charles Marshall

Founder; President, 1821-1824.

Charles Marshall, the first president of the College, was born May 8, 1744. He was the youngest son of Christopher Marshall, the "fighting Quaker," who had long conducted an apothecary shop which enjoyed the confidence of the physicians of the city in an unusual degree, located first in 1729 at Front and Chestnut Streets and after 1735, on the south side of Chestnut Street above Second (now No. 214). Christopher Marshall was one of the picturesque figures of the Revolution on the patriot side, though his membership in the Society of Friends forbade warlike activities. It was on this account that he joined the Wetherills and others in founding the "Free Quaker Meeting," which erected a house of worship, still standing at Fifth and Arch Streets. In 1765 two of his sons, Christopher, Jr., and Charles, were taken into partnership; seven years later he withdrew from active participation in the business, but still continued his public activities. In 1776 he was commissioned "to look after the needs of the sick and wounded in the hospitals of Philadelphia." (Congressional Record, 1776.)

Charles Marshall was a man of unusual natural ability and highly educated. He was a deep student of Latin and Greek and possessed fine literary taste. He learned the drug business of his father and became the active manager of the business, his brother Christopher, Jr., confining his attention chiefly to the shipping business, in which the brothers were associated in partnership with their older brother Benjamin.

The enviable reputation of the Marshall drug store increased and "a laboratory for the boiling of oils and the manufacture of ammonia salts and other chemicals was established in North Third Street, near the stone bridge over the Cohocksink Creek. This firm supplied large quantities of medicines to the Colonial troops; those of Pennsylvania, New Jersey, Maryland, Delaware and Virginia obtained their medicinal supplies almost entirely from this store" (George M. Beringer).

Charles Marshall became one of the master apothecaries of the city and "by scrupulous probity of character, combined with great urbanity of manners, he secured the respect and affection of a large circle of friends and customers. After being in business for many years (until 1801), and acquiring an ample competence, he resigned its cares to his son, though unfortunately retaining his connection with the firm, which, through imprudence, became involved in bankruptcy after its senior member was far beyond the period of life at which he could repair his fortunes. In 1804, his daughter, Elizabeth Marshall, a lady of singular good sense and business ability, took the shattered business in hand and built it up with great success, supporting the family and gaining for them a position of independence" (Edward Parrish).

But his bankruptcy was a sad blow to Charles Marshall and he addressed the following letter to his fellow members of the Society of Friends.

To the Monthly Meeting of Friends in Philadelphia :

DEAR FRIENDS :

To be in unity with the Body of our religious Society it is a reasonable Condition that the Members should walk orderly. To be found so doing hath I humbly trust, been measurably my Study from my Youth up. By the Mismanagement of a Concern in which I was a Partner I have been reduced from the Enjoyment of a comfortable Competence to an Inability to pay the Demands made upon me; Yet in the Midst of my own and my dear Family's Distress, I have some Consolation in being able to reflect that I have not intentionally been the Cause of my Introduction to my present unhappy Situation. For altho I was improperly hurried into a Measure which I generally disapproved by giving a partial Security to two of the Creditors in part of their Demands, one of whom especially was very peculiarly and critically circumstanced, it was done under an Impression at the Time that the Debts for which I had been made liable were greatly short of what they were afterwards discovered to be.

It would be a very great Alleviation of my present Distress to look forward with Hope and Confidence of being ever able to satisfy all the remaining Claims of my just Creditors, but my advanced Age, bodily Infirmities and present Circumstances forbid the Expectation. Altho my Prospects, be thus gloomy with Respect to outward Things, yet I am at Times favoured with a sustaining Hope that He whose tender Mercies are over all His Works will not be altogether unmindful of your afflicted Friend.

Philada, 5 Mo. 30th, 1805.

CHARLES MARSHALL.

Disb'd: April 1776

25 The 1st Continental Congress

To the 1st Congress Medicines completed for the Pennsylvania Ship Malabar

Dr

Alum Com	℥ij	10
Bals. Copaiba	℥ij	10
to Traumatic	℥ij	9.6
Parakaidur	℥ij	1.0
Pulv Cori per Op	℥ij	4.5
2 <sup>d</sup>	℥ij	9.5
Tart Crem	℥ij	10
Rad Jalapin	℥ij	16
Quassia	℥ij	36
Rhei	℥ij	30
		1. 17.6
Rad Jalapin	℥ij	56
		18.6
Gum Aloe Socot	℥ij	9.6
Campbr	℥ij	16
Arabi Op	℥ij	12
Mylch	℥ij	4
Quassia	℥ij	5
Opium (this belong to Congress)	℥ij	15
		68
Conta pte	℥ij	7 1/2
		15
Emp. Adhaciu	℥ij	29
		12
Diac Simp	℥ij	1/10
		11
Mercurial	℥ij	6
		6
Mer. Subl p <sup>o</sup>	℥ij	2
		16
Sublim Cor	℥ij	1/6
		3
Racyp Rub	℥ij	1/6
		6
Vio	℥ij	10
		6.8
Flo Sulphur	℥ij	1/2
		6.8
Ulex Vitruil	℥ij	1/1
		1.10
Alkalic	℥ij	19
		19
Ol. Olivar Opt	℥ij/3 m <sup>o</sup>	2/6
		6.3
Ulcio <sup>p</sup>	℥ij	5
		1.6
Coar Rosar Rub	℥ij	5
		6 15
Steel carry forward		92
		119



227) P. M. ---

Decem<sup>r</sup> 26<sup>th</sup> 1776Respected fr<sup>d</sup>!

You may think of the old Proverb "out of sight out of mind" but this has not been my case of which I think thou wilt be convinced when I have informed thee of the painful Exercises I am and have been engaged in from the 5<sup>th</sup> instant, that is at the request of Council of Safety I accepted to call on some of my fellow Citizens as many as I thought convenient to assist me in taking care of the distressed Sick Soldiers as they came into town provide for them such Necessaries as could be procured & convenient for them in this their Unhappy grievous Condition of which no Idea thou can form will come up to their Distress, thus Occasioned wholly thro' the Cruel and most barbarous Severity inflicted on them whilst Prisoners under Gen. Howe and his associates, of which some hundreds are already dead & others dying daily notwithstanding all the assistance afforded them;

They say that for the 4<sup>th</sup> four days no Subsistence of any kind was allowed them, shut up in nasty filthy places & yt. in such numbers yt. it was a wonder that any escape an infection, when supplied it was with short allowance of extremely bad bread and raw pickled pork, this their Accounts from their appearance is not exaggerated the objects speak for themselves skins covered with filth and lice covering a parcel of bones, with scarcely rags sufficient to hide their Nakedness, Nature so emaciated that in some hundreds of them there is hardly enough able to hand the others a drink of water, O the terrible Anguish and Disolation that Accompany their dwellings &c. &c.

Thus I have gave thee but a faint Sketch of their Deploable Circumstances and in order in some degree with some more of my Neighbours are we daily employ in order if possible to mitigate their sufferings and by proper methods are striving to preserve as many of their lives as possible by the help of good nourishment and Physick properly applyd, of which we use our best endeavours and Skill daily, I hope now thou art convinced that I have been fully employd and that it was no remissness in me yt. prevented me from writing, and altho I have taken this Opportunity yet my poor family is not forgotten, for which reason I must beg thy excuse for not giving thee a detail of other publick Occurrences amongst us at this time, when Opportunity presents and I find freedom I shall not be backward in giving thee my genuine Sentiments on what appears to me to be worthy thy notice and regard.

In the Interim please to accept of my best wishes for thine and family's prosperity and without mentioning of particulars give my kind respects into all enquiring fr<sup>d</sup>s, I remain thy ready fr<sup>d</sup>, to serve when Capable:  
To P. M. ---

C. Marshall

Elizabeth Marshall (1768-1836) continued to manage the business until 1825, when it was sold to Charles Ellis and Isaac P. Morris. Her brother, Charles Marshall, Jr. (1774-1837), was the only adult son of Charles Marshall; he served as first vice-president of the College in 1826-1828.

Charles Marshall was an apothecary, druggist, botanist and chemist. It was in testimony of his work and worth as a scientist and leading citizen that, in spite of his advanced years, he was unanimously chosen to serve as the first president of the College, and he gave it all his sympathy and support. He resigned, however, in 1824, and died the following year.

### Peter Williamson

Founder; Secretary of Meetings for Organization, 1821; First Vice-President, 1874 (February 17 to March 30).

Peter Williamson, one of the founders of the College and the Secretary of the meetings held in Carpenters' Hall for its organization, was born in Philadelphia on September 6, 1795.



PETER WILLIAMSON

Grand Master of the Grand Lodge of Pennsylvania F. and A. M., 1856-1857, and Grand Treasurer of the Grand Lodge, 1858-1871

*(From painting in Masonic Temple, Philadelphia, presented by Franklin Lodge, No. 134, F. and A. M., reproduction by courtesy of Committee on Temple)*

He received his early education at a Friends' Seminary, and serving his apprenticeship with John W. Bryant, at Second and Pine Streets, he, at eighteen years, entered into partnership with Dr. Joseph Klapp, their store being located at Second and Almond Streets.

In 1828 Mr. Williamson became the sole proprietor, and in 1836, in order to accommodate their increasing trade, especially in the furnishing of medical supplies to the shipping inter-



ests, a large store was erected at 710 South Second Street. In 1845, his son, Jesse, Jr., became associated with him in the business under the firm name of Peter Williamson and Son. For nearly fifty years, the Williamson store was the leading drug store in the old District of Southwark. In 1854 the business was sold to James L. Bispham.

Although not active in the College in his later years, he was deeply interested in it and was a frequent attendant of its meetings. He was present at the Fiftieth Celebration of the College in 1871, and on this occasion read the minutes of the first meeting which he himself had written. At a special meeting of the College on February 17, 1874, he was honored by unanimous election to the office of first vice-president, to fill the unexpired term of William Procter, Jr., deceased.

On March 30, 1874, he founded the first scholarship of the College—"The Peter Williamson Scholarship," conveying to the Trustees the sum of \$500, the interest of which was to be used for the benefit of needy and deserving students in defraying their expenses of instruction.

He was connected with many worthy public enterprises, particularly with reference to the development of the southern section of the city. He was a founder of the Southwark Dispensary, and was one of the corporate members of the Trinity P. E. Church of Southwark and for twenty years its Rector's Warden. He was an ardent Mason having been made a Master Mason by Franklin Lodge, No. 134, F. and A. M., on November 16, 1816, shortly after attaining his majority; and was the R. W. Grand Master of the Grand Lodge of Pennsylvania in 1856-1857, and R. W. Grand Treasurer from 1858-1871. In the archives of the Masonic Temple of Philadelphia there is preserved his notebook containing, in his handwriting, a record of certain Masonic precedents.

He died on March 6, 1886, in his ninety-first year.

Peter Williamson was a man of unusual force of character, and his genial manner and social disposition endeared him to a wide circle of friends.

### William Lehman

Founder; First Vice-President, 1821-1824; President, 1824-1829.

William Lehman, a founder of the College, and its president from 1824 to 1829, was born in Philadelphia on September 14, 1779. He was descended from John George Lehman, Farmer General of the Revenues and Lands of the Manor of Tubigen in the Electorate of Saxony. His son, Philip Theodore, emigrated to this country and became one of the secretaries of William Penn and in this capacity wrote the celebrated letter to the Indians of Canada, of June 23, 1692, the original of which is in the Capitol at Harrisburg. William Lehman's grandfather, Christian Lehman, an astronomer and mathematician, was a friend of David Rittenhouse, the famous astronomer. He devoted himself to literary and scientific pursuits and the grandson inherited similar tastes.

William Lehman was educated in the department of arts of the University of Pennsylvania, and then passed to the medical school and graduated, but he did not practice medicine except as it served him as a druggist; he entered the drug business with his father, George Lehman. About 1802 he opened his own store at 97 South Second Street, and a few years later removed to 76 South Second Street (old numbers), below Chestnut Street. He was associated in partnership under the firm name of William Lehman, William Smith and Son, and later as Lehman and Smith. This partnership was dissolved in 1819, and he continued the business alone until 1822, when he entered into partnership with Algernon S. Roberts.

The records of the Athenæum of Philadelphia state that "William Lehman added to his paternal fortune by his success as a druggist, which business he conducted on a large scale." He spoke French and German fluently, and was a good Latin Scholar. Several times he visited Europe and left notes of travel which attest to his powers of observation.

He was a hard student analyzing all the books he read and making such extracts from them as he considered useful and practical, accompanied with his own comments or illustrations; which extracts, it is stated, numbered 5,000 or 6,000.



He made himself a useful force in politics, particularly on the subject of improving internal communications, then very essential to the progress of the country, and much in the public mind. Through the press he wrote and at public meetings he spoke on this question. From the city councils he passed to the Pennsylvania Legislature in 1814, of which he was a member for fifteen years, until his death at Harrisburg on March 29, 1829, a period during which he was an earnest advocate of internal waterways, the turnpike and other public improvements.

Upon his demise, William Lehman left a bequest of \$10,000 to the Philadelphia Athenæum "for the construction of a suitable building." In this association, founded in 1814, he was deeply interested. Its reading room at first had been located at Fourth and Chestnut Streets in a room above Matthew Carey's book store. From this place its collections were removed to an apartment in the hall of the American Philosophical Society behind the State House. The legacy was prudently invested and with it and its accretions the directors were enabled to erect in 1847 the edifice which this famed institution still uses on Sixth Street below Walnut Street.

### Daniel B. Smith

Founder; Secretary, 1821-1828; First Vice-President, 1828-1829; President, 1829-1854.

Daniel B. Smith, who was the third president of the College, held the position for twenty-five years, and was one of the most talented men ever identified with the practice of pharmacy in this country. He was a man of unusual intellectual attainments, satisfying his scholarly and literary ideals, while at the same time meeting the daily demands of an arduous business life. In all of these activities he achieved an enviable reputation. He was born in Philadelphia in 1792 of Quaker parents, but his father dying in his infancy, he was taken to Burlington, N. J., where his youth was spent. His early education was had in the school of John Griscom, a distinguished Quaker educator, from whom he acquired his love of chemical science. Without further training, he then entered John Biddle's drug store on Market Street between Fourth and Fifth Streets as an apprentice, and in due time was taken into partnership by his preceptor under the firm name of Biddle and Smith.

In 1819, he opened his own store at the northeast corner of Sixth and Arch Streets, at this time a quiet, secluded, residential section. In 1828, he entered into partnership with William Hodgson, Jr., a young Quaker, "then fresh from the store of John Bell, Oxford Street, London, where he had been associated as an apprentice with the since-eminent Jacob Bell, Robert Alsop and Theophilus Redwood, all lights in the London pharmaceutical world" (Edward Parrish).

The firm name became Smith and Hodgson. They enlarged their store and became notable manufacturers and wholesalers. Many young men came to them for instruction in pharmacy; and to two graduates of their laboratories and counters, Charles Bullock and Edmund A. Crenshaw, they sold their business in 1849.

Smith educated himself in so remarkable a way that he came to be the associate of many of the leading scientific figures of his day. He was an active, if not the dominating spirit in the founding of the College, he was its first secretary, occupying this position for seven years, when he became vice-president. The next year he was elected to the presidency, which place he held until 1854, a full quarter of a century, during which time he played a most important part in placing the institution upon a sound foundation. He was one of the principal sponsors in 1825 for the *Journal of the Philadelphia College of Pharmacy* and contributed its first original article—"Epsom Salts and Magnesia." To him belongs the credit of having established, from its beginning, the periodical on a high scientific and ethical plane.

Wood and Bache invited him to be a collaborator in the preparation of the United States Dispensatory, but after contributing a few articles his other engagements made this impossible. When, in 1852, the pharmacists of the country met in Philadelphia to organize the American Pharmaceutical Association, his distinction was so great that he was unanimously chosen to be its first president.

Many other subjects claimed the attention of this public-spirited man. He was one of the organizers of the Apprentices' Library of Philadelphia in 1820, was elected a member of the Franklin Institute immediately after its organization in 1824, and was an incorporator of the Historical Society of Pennsylvania in 1826. He was also one of the incorporators of the Philadelphia Savings Fund, and of the House of Refuge. He was elected a member of the American Philosophical Society in 1829, and was also a member of the Academy of Natural Sciences.

Born a Quaker, he kept up his attachment to the Society of Friends and interested himself in its educational work, particularly at Haverford School (now Haverford College). He was the animating spirit of the College from 1833 to 1843. In 1834 he was elected to the chair of moral philosophy, English literature and chemistry, and principal in 1843. In 1846 he resigned from Haverford College to give increased attention to his business.

For twelve years he resided at Haverford, with pleasure to himself and benefit to the young men who came under his influence. It was while serving at this post that he wrote his "Principles of Chemistry," a text book which passed through several revisions. He retired from active business in 1853 and died March 29, 1883, in his ninety-first year.

Daniel B. Smith was the "most learned and public spirited pharmacist of his day, and was remarkable for the versatility of his attainments, being a happy combination of business man, philanthropist, literary and scientific scholar, teacher, author and editor, and in all of these activities he established an enviable reputation and won the admiration of his contemporaries" (George M. Beringer).



EDWARD B. GARRIGUES

### Edward B. Garrigues

Founder; Treasurer, 1826-1838.

Edward B. Garrigues was born in Philadelphia on October 8, 1795; his great grandfather was among the Huguenots who left France after the revocation of the Edict of Nantes in 1685. The family name was De la Garrigue. He died November 3, 1889, and, at the time of his death, was the last survivor of the sixty-eight original members who founded the Philadelphia College of Apothecaries.

His early education was at "West-town," a school conducted by the Society of Friends. At a suitable age he was apprenticed to John Hart, on Second Street below Market; after serving his time he opened a store on Sixth Street above Market, and later at Sixth and Market Streets, where he conducted a successful business for nearly twenty years. He then built a store and dwelling at Sixth and Spring Garden Streets, to which place he removed his business, and a few years later retired temporarily from business. In 1843 he opened a store at Tenth and Fairmount Avenue, and continued in business until 1887, when advancing age counseled his retirement, leaving the conduct of the business in the hands of his partner, Edwin M. Boring.

In 1826 he was elected treasurer of the College and served as such with conscientious fidelity until 1838, when he resigned.

He was, also, for a time a manager of the Friends' Asylum for the Insane at Frankford, a trustee of Haverford College, and a school director of the old District of Spring Garden.

"Edward B. Garrigues," Charles Bullock has written, "was educated in the Society of Friends, and conforming through a long life to the customs of that Society, in language and apparel, he was in this respect the last of its numerous members who have done honor to the business of druggist and apothecary in Philadelphia. A man of even and genial temperament, courteous in address and pleasant in intercourse, he was esteemed by all who knew him."

### Charles Ellis

Founder; Secretary, 1828-1830; Recording Secretary, 1830-1842; First Vice-President, 1842-1854; President, 1854-1869.

Charles Ellis, a younger brother of Dr. Benjamin Ellis, the second professor of materia medica and pharmacy in the College, was its fourth president. He was born on January 31, 1800, like his brother, at Muncy, Pa., one of several sons of William Ellis, a Welsh Quaker landholder who settled there, and Mercy Ellis, widely known in the ministry of the Society of Friends. He was taught carefully at home and then proceeded to a school in New York. In 1817 he came to Philadelphia and was apprenticed to Elizabeth Marshall, the talented daughter of Charles Marshall, the first president of the College, who, at that time had the renowned Marshall drug store, then on Chestnut Street above Second Street.

In 1825, Charles Ellis and Isaac P. Morris, another apprentice, formed a copartnership, purchased the business and continued it as Ellis and Morris. In 1830 the firm was dissolved, Mr. Morris withdrawing and Mr. Ellis continuing the business. In 1832 William Ellis, a nephew, became associated in the business, the firm name being Charles Ellis and Co. The firm rapidly developed a large wholesale and manufacturing business, first establishing a laboratory in Vidall Court, to the east of the main store building, and later, a building was erected at Sixth and Morris Streets for laboratory purposes, and the drug business was removed to more commodious quarters at 724 Market Street. In 1863, there was a division of the firm, William Ellis continuing the business at 724 Market Street, and the reorganized firm of Charles Ellis, Son and Co., opened a store at the northeast corner of Seventh and Market Streets, retaining the laboratory at Sixth and Morris Streets. Subsequently, Charles Ellis erected for the company (and its laboratory) a building at the southwest corner of Tenth and Market Streets, which was occupied until the company ceased business in 1875, after having had a signally honorable life of 146 years, first in the hands of Christopher Marshall who founded it in 1729, and then his descendants and successors.



Charles Ellis was one of the sixty-eight founders of the College and took the keenest interest in it, actively laboring for its advancement for over half a century. In 1828 he was made secretary, serving for two years; in 1830, recording secretary, serving for twelve years; in 1842 first vice-president, serving for twelve years; and in 1854 president, serving for fifteen years.

He was much interested, also, in the work of the *American Journal of Pharmacy* and contributed a number of articles to its pages, and for forty years was a member of its Publishing Committee, the greater part of the time as treasurer. He was one of the three Philadelphians who attended the meeting in New York, in 1851, to consider the question of drug imports, out of which grew the organization of the American Pharmaceutical Association in 1852. He was active in this organization, and was elected second vice-president in 1855-1856, and president in 1857-1858.

He was energetic in works of benevolence and charity, and for many years was a manager of the Friends' Asylum for Persons Deprived of Their Reason; the Society for the Support and Establishment of Charity Schools, founded long before our free schools were known; the Philadelphia Society for Alleviating the Misery of Public Prisons; the Home of Refuge for Juvenile Delinquents; Will's Hospital for Diseases of Eye and Limbs; the Orthopedic Hospital for the Cure of Deformities and Nervous Diseases; the Philadelphia Dispensary; the Tract Association and Bible Society of the Society of Friends.

He was a consistent member of the Society of Friends, and took a deep interest in the affairs of this religious body, and his voice was frequently raised in support of active evangelical works.

Charles Ellis was one of the earliest advocates and supporters of the College, and continued such until his demise in 1874. He performed the official duties assigned him with characteristic dignity, modesty and efficiency during some of the most trying years in the history of the College, and his love of truth and spirit of brotherly kindness and gentleness endeared him to all.

### Henry Troth

Founder; Second Vice-President, 1829-1831; First Vice-President, 1831-1842.

Henry Troth, one of the most active of the founders of the College, if the idea of its institution did not originate in his fertile brain, was born September 4, 1794, near Easton, Maryland. He was the son of Samuel and Ann Berry Troth. After acquiring such education as circumstances permitted, he came to Philadelphia in 1811, where he apprenticed himself to Jeremiah Morris, a druggist on Market Street east of Seventh.

In 1815, being then nearly twenty-one years of age, he formed a partnership with his brother-in-law Edward Needles, and the wholesale drug firm of Henry Troth and Company was established on Market Street (222, old number) below Seventh, which continued in the Troth family for nearly fifty years. In 1823, Samuel F. Troth, a younger brother, entered the firm, and in 1826 Samuel purchased the interest of Edward Needles.

It was Henry Troth who first discussed the subject of a College of Apothecaries with Peter K. Lehman, another Market Street druggist, a cousin of the better-known William Lehman, who succeeded Charles Marshall as president of the College. From this conversation came the meetings in Carpenters' Hall.

For more than twenty years, Henry Troth was a leading spirit of the College, as well as of the drug trade of the city, presiding at the meetings with dignity and impartiality. He was second and then first vice-president of the College, and for many years, chairman of the Board of Trustees. "He was seldom, absent from his post, and at his death, in the summer of 1842, strong testimony was placed on the records of the College as to his high moral worth, combined with kindness and courtesy of manner, and many estimable traits of character." (Edward Parrish.)

He was a member of the Society of Friends and for many years treasurer of the Pennsylvania Society for the Abolition of Slavery. He was a manager of the Children's Asylum, the Almshouse, the Provident Society, and the Schuylkill Navigation Company; and also, one of the Guardians of the Poor, a trustee of Girard College and a founder of the House

of Refuge, and the Apprentices' Library; and was active in many philanthropic, business and scientific organizations.

Henry Troth was one of the most progressive citizens of Philadelphia of his day, as the record of his service as a member of the common council of the city of Philadelphia (1824-1833), and its president, and elsewhere, shows. He fought most earnestly for the introduction into use of illuminating gas for lighting the city, and also, for anthracite or "stone coal," and many other civic improvements, and no difficulties drove him from his path and no disappointment diminished the firmness of his determination to accomplish it. His hope was ever high and he had the faculty of infusing it into all within his circle.

### Elias Durand

Corresponding Secretary, 1831-1843; Second Vice-President, 1843-1845.

Elias Durand was born in Mayenne, France, January 25, 1794, the second year of the French Republic, in the midst of the most trying times of the Reign of Terror, and was the youngest of fourteen children. His father was André Durand, Recorder of Deeds of Mayenne. His early education was obtained in the schools of his native town.

In 1808 he commenced the study of pharmacy under the famous M. Chevallier, and in 1812 attended lectures in Paris. He then became *pharmacien* or aid in the Pharmaceutical Department of the French Army (1813), and served with the Fifth Corps at the battles of Lutzen, Bautzen, Hanau, Katzbach and Leipsic.

Upon the downfall of Napoleon, he left France and arrived at New York, July 1, 1816. After a few months, he came to Philadelphia and took charge of a chemical laboratory at Broad and Race Streets. In preparing mercurial salts his health became impaired and he went to Baltimore as an employee of E. Ducatel. In 1825 he returned to Philadelphia and leased a house at the southwest corner of Chestnut and Sixth Streets (the site of the present *Public Ledger* building), for a consideration of \$500, on a ten years' lease, and opened a drug store, fitting it up at considerable expense, using French glassware, porcelain jars, mahogany drawers, marble counters, etc. It was quite the handsomest drug store in the Quaker City, and he had many novelties in drugs and chemicals, and an apparatus for making and vending carbonic acid water.

In 1835 Durand first introduced the bottling of mineral water, opening a large establishment on Sixth Street above Arch. The apparatus, especially that part of it for bottling under pressure, was of his own invention, and superior to any other in use in France. Later, he sent it to the Société de Pharmacie, and it was adopted for use in Paris. "At the period when Durand opened his store," William Procter, Jr., has stated: "French Pharmacy stood confessedly by far in advance of that of all other countries, whilst his thorough education and recent visit to France for stock, etc., gave him such great advantages that his store became an important center of pharmaceutical information, which directly and indirectly, had much to do with the introduction of scientific pharmacy into Philadelphia, and through this College, its Journal and graduates, into the United States. Many of the finer medicinal chemicals were made in this country first by Durand, which gave him prestige, and his great skill as a pharmacist, his untiring industry, close attention to business and social and scientific qualities, attracted the most eminent physicians to his store. The writer gratefully remembers when, in early life, he was engaged in investigations under great disadvantages for want of accurate instruments, his friend Durand imported a set of French metrical weights and presented them to him with a word of encouragement." (*Amer. Jour. Phar.*, 1873, 513.)

Durand became a member of the Philadelphia College of Pharmacy in 1825, then corresponding secretary (1831-1843), and then second vice-president (1843-1845). In 1840 when the Philadelphia College of Pharmacy was invited to assist in the revision of the U. S. Pharmacopoeia, Durand was one of the College committee and contributed valuable labor and counsel. He was deeply interested in scientific pharmacy and botany; contributing many original articles to the earlier volumes of the *American Journal of Pharmacy*. Valuable



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contributions to American Pharmacy came from Durand's store also, through Augustine J. L. Duhamel, a protege of Durand, for many years his chief clerk. The process of displacement or percolation, for example, was first introduced into this country by Duhamel. (*Amer. Jour. Phar.*, Vols. VI to XVIII.)

Durand was well acquainted with the flora of North America. About the year 1858 he presented to the Philadelphia College of Pharmacy an herbarium of 12,000 specimens, which formed the nucleus of the present general herbarium of the College. Later, he gathered an herbarium of over 100,000 specimens, covering 12,000 species of plants, which he presented to the Museum of the Jardin des Plantes of Paris, in 1868. The gift was much appreciated, arranged in a special gallery and named "Herbia Durand."

In 1829, in connection with Dr. Togno, he translated and published Edwards and Vavasour's Manual of Materia Medica and Pharmacy, to which he made many additions of a pharmaceutical character, before the publication of the United States Dispensatory.



ELIAS DURAND

He wrote memoirs of Dr. Thomas Nuttall, the English botanist, Dr. Kane, the arctic explorer, and André Michaux, the botanical explorer who bequeathed a large sum of money for establishing the park of American forest trees, now known as the Michaux Grove, in Fairmount Park, Philadelphia. He also wrote descriptions of plants collected in California by Lieutenant R. S. Williamson, in California and Nevada by Mr. Pratten, and in the arctic regions by Dr. Kane, and contributed to the Linnean Society of Bordeau, France, an exhaustive paper on the vines and wines of North America.

He was a member of the American Philosophical Society (and one of the curators), the Academy of Natural Sciences, the Société de Pharmacie de Paris, the American Pharmaceutical Association, the Société d'Acclimatation de Paris, the Société 'Linneen de Bordeau,



the Buffalo Society of Natural Sciences, the Linnean Society of Lancaster, and other scientific societies.

"Durand's social and scientific qualities," Procter has written, "endeared him to all who came in close contact with him. He was a man of generous impulses, and his private charities were numerous. He died August 14, 1873, at his late residence on South Broad Street, Philadelphia, honored and respected by all who knew him." (*Amer. Jour. Phar.*, 1873, 508.)

At the annual meeting of the Philadelphia College of Pharmacy of September 29, 1873, Alfred B. Durand, son of Elias Durand, presented an oil painting of his father painted expressly for presentation to the College, and considered to be a most excellent likeness. The gift was accepted with the thanks of the College, "representing, as it does, faithfully, one of our oldest and most valuable members" (*Minutes of the College, Amer. Jour. Phar.*, 1873, 508). It now hangs in the library of the College and the fine personality that looks out from the painting, almost as if to speak, evinces unusual force of character and ability.

### Samuel F. Troth

Treasurer, 1838-1842; Second Vice-President, 1845-1854; First Vice-President, 1854-1867.

Samuel Fothergill Troth, younger brother of Henry Troth, was born May 7, 1801, near Easton, Maryland. Coming to Philadelphia as a boy of fifteen to visit his brother, he was



SAMUEL F. TROTH

persuaded to remain as an apprentice in the business house of Henry Troth and Co. He attended the first course of lectures in the College (1821-1822), and also the second course (1822-1823).

Soon after attaining his majority he became a partner in his brother's firm. A few years later Edward Needles withdrew from the business, and established a store of his own at Twelfth and Race Streets, then out among the open fields, and the brothers Troth were left alone in the Market Street store. They turned to the wholesale trade. Their laboratories and warehouses must be enlarged and they erected a five story building, No. 224 (now 630) Market Street, to accommodate their growing needs. This is said to have been the first five story building on Market Street used exclusively by a business firm and its erection caused much comment. After Henry Troth's death in 1842, Samuel conducted the business alone until a partnership was formed with his nephew, William P. Troth, as Samuel F. Troth and Co. In 1853 the condition of his health induced his retirement from active work.

He was elected a member of the College in 1822; treasurer from 1838 to 1842; second vice-president from 1845 to 1854; and first vice-president from 1854 to 1867. Mr. Troth was of particular value to the College in the financial adjustments which ensued upon the erection of the hall on Zane Street, and which cleared the way for the removal to Tenth Street, being treasurer of the Sinking Fund Committee appointed in 1844. Of him Edward Parrish has said: "Justice requires that the name of Samuel F. Troth should go on record as the man through whose energy and persistence for twenty-three years, we came safely through the embarrassment created by building on Zane Street."

He died in 1886 at his home, 1019 Cherry Street, near the College building.

The dignified simplicity of Samuel F. Troth's manner, the open and cheerful expression of his countenance, which evinced the kindly sentiments of his heart, gained the confidence of all who sought his counsel and endeared him to many, and while a consistent member of the Society of Friends, he ever manifested an unsectarian interest for those holding the doctrines of the Christian Church.



JOSEPH C. TURNPENNY

### Joseph C. Turnpenny

Treasurer, 1842-1850; Corresponding Secretary, 1850-1855.

Joseph C. Turnpenny, son of John and Tabitha Turnpenny, was born in Sheffield, England, September 28, 1812 and died June 15, 1892. He came to this country at an early age and received his elementary education at the school of the Society of Friends of Philadelphia on Pine Street near Second.

In 1828 he was apprenticed to Henry M. Zollickoffer at Sixth and Pine Streets. He graduated from the College with the class of 1833, and went into business the following year, at the corner of Tenth and Spruce Streets. In 1864 he retired from business being succeeded by Samuel S. Bunting.

In 1834 he actively identified himself with the work of the College, and for over a half a century faithfully served his Alma Mater. He was treasurer from 1842-1852, corresponding secretary from 1850-1855, and also, for a number of years, was a member of the Board of Trustees. He was the author, or joint author with A. J. L. Duhamel, or with William Procter, Jr., of a number of papers on practical pharmaceutical subjects.

"Joseph C. Turnpenny," Charles Bullock has stated: "as a member of the Society of Friends maintained through life their customs of dress and address. For many years he was an active member of many of the charitable institutions of the city, and devoted much time to the alleviation of the necessities of the poor and suffering. His long service on the Board of Managers of the Pennsylvania Hospital—his painting hangs on the walls of that institution—terminated only with his life. Affable in his disposition and courteous in his address, carefully correct in all his business transactions, he leaves an honored name on the roll of the deceased members of the College."

### Dillwyn Parrish

Recording Secretary, 1842-1854; Second Vice-President, 1854-1868; First Vice-President, 1868-1869; President, 1869-1885.

Dillwyn Parrish, the fifth president of the College, was a son of Dr. Joseph Parrish, the distinguished Quaker physician and philanthropist of Philadelphia, and a brother of Edward Parrish, professor of materia medica in the College (1864-1867), and later, professor of pharmacy (1867-1872). He was born in 1809. At an early age he was placed in the Marshall drug store, lately come into the hands of Ellis and Morris. Attending lectures in the College, he was graduated from it in the class of 1830. He was now twenty-one years old and ready to embark in business for himself. He opened a store at Eighth and Arch Streets, where he was located for many years. It was at this place that his brother Edward conducted the School of Practical Pharmacy for medical students upon the removal of that school from Ninth and Chestnut Streets.

He was elected to the Board of Trustees of the College in 1833, became recording secretary in 1842, second vice-president in 1854, and first vice-president in 1868. Having taken a very active part in the labor which attended the erection of the building in 1868 on Tenth Street he, upon Charles Ellis's retirement in 1869, was elected to the presidency of the College. He continued in this position until March 30, 1885, when the increasing infirmities of a ripe old age made his resignation a necessity, and he retired with the deep regret of his colleagues, who realized in full measure the value of the calm, quiet dignity and strength of character he displayed in the execution of his official duties.

Dillwyn Parrish retired from active business at the outbreak of the Civil War, and devoted the rest of his life to useful public undertakings, an interest which he had not neglected in earlier life. He was a director and member of the Board of Corporation of the Woman's Medical College, a founder of the Orthopedic Hospital, and a trustee of the Grandom Fund for supplying coal to the deserving poor and a member of several minor charitable organizations. Like his father he was deeply outraged by the evils of negro slavery, and many poor black fugitives on the "underground railroad" were helped forward by him and the mem-



bers of his family. He died at his home at 1017 Cherry Street, the house adjoining that of Samuel F. Troth, on September 17, 1886, leaving two sons, Joseph Parrish, a member of the Philadelphia Bar, and Stephen Parrish, an accomplished artist, the father of Maxfield Parrish, even better known in the world of art.

### William Hodgson, Jr.

Corresponding Secretary, 1843-1850.

William Hodgson, Jr., was born in Sheffield, England, May 25, 1804. In 1821 he was apprenticed to John Bell, of Oxford Street, London, from whose shop so many eminent British pharmacists have graduated. Here he remained for nearly six years. He then came to America, arriving in Philadelphia in the early part of 1827. In 1828 he entered into partnership with Daniel B. Smith, a connection that lasted for more than a score of years.

Both Smith and Hodgson were members of the Society of Friends and their store at Sixth and Arch Streets was the general rendezvous for the members of that society. This store with a few others, was patronized by the most eminent physicians of the city such as: George B. Wood, Franklin Bache, Casper Wistar, Chas. Evans, Joseph Parrish, Samuel Jackson and many others, because of the unusual care it exercised in the compounding of prescriptions and the preparation of medicinal compounds.

William Hodgson, Jr., was one of the most skilled pharmacists of his day, the result of natural ability and the skilled training he had received at the hands of one of England's most famous pharmacists—John Bell.

He took a deep interest in the College, being a member for fifty years (1828-1878), a trustee, and later, corresponding secretary (1843-1850). He insisted upon all his clerks attending the College, and finally, to graduate. Many of these became prominent in the pharmaceutical world, among such being Thomas H. Powers, Ambrose Smith, William J. Jenks, Charles Bullock and Edward A. Crenshaw.

After Smith and Hodgson sold their drug business to Bullock and Crenshaw in 1849, "the firm embarked in the manufacture of chemicals in a large way, but this enterprise was not a success and Mr. Hodgson returned again to the retail drug business, locating at the northeast corner of Tenth and Arch Streets" (William J. Jenks). He retired altogether from business in 1867, and died December 24, 1878.

### Ambrose Smith

Treasurer, 1850-1871.

Ambrose Smith was born in Philadelphia on August 8, 1815. He received his early education in the Friends' School, and was subsequently apprenticed to learn the drug and apothecary business with his cousin Daniel B. Smith.

After completing his apprenticeship, he graduated at the College in 1834, and was admitted as a partner in the firm of Smith and Hodgson.

He retired from this firm and formed a partnership with Henry W. Worthington for the manufacture of prussiate of potash. He afterwards engaged in business at the corner of Seventh and Chestnut Streets, where he remained for twenty years. Subsequently he removed his business to Broad and Chestnut Streets, where he remained a few years and then retired from business.

For nearly half a century Ambrose Smith was a member of the College (1838-1884). He was elected treasurer of the College in 1850, a position he held for over twenty years. During this period there was entailed on him more than usual labor, incidental to the erection of the College building on Tenth Street.

"Ambrose Smith," Joseph P. Remington has written, "was faithful to all trusts confided to him; quiet and unassuming in his manner, he endeared himself to all his friends by his strict integrity and sterling worth."

### Charles Bullock

Recording Secretary, 1864-1873; First Vice-President, 1874-1885; President, 1885-1900.

Charles Bullock, the sixth president of the College, was a son of John Bullock, a descendant of an English Quaker who came to America early in the eighteenth century, and Rachael, a sister of the well-known and distinguished pioneer of this country, John Griscom, famous as a teacher of chemistry. John Bullock, the father of Charles, conducted a school in Wilmington, Del. There the son was born in 1826. As a boy he fell under the influence of his famous uncle, and imbibed his love of chemistry, and after spending a short time at Haverford College, he quite naturally in 1844 began an apprenticeship in the drug business with Smith and Hodgson, for Daniel B. Smith was now a teacher at Haverford, and Smith himself had been an old student of Griscom's. Bullock was graduated from the Philadelphia College of Pharmacy in 1847.

In 1849 he formed a partnership with his friend and fellow apprentice, Edmund A. Crenshaw, taking over the business of his preceptors, Smith and Hodgson, which became Bullock and Crenshaw, a firm with a trade that reached important proportions. The house enjoyed an enviable reputation for fifty years as wholesale druggists and manufacturers of pharmaceuticals and chemicals, and dealers in laboratory apparatus, which were sold over all the United States. Retaining a retail pharmaceutical department, the firm continued the old custom of receiving and instructing apprentices. In 1900, it was alleged that in all probability no house has acted as preceptor to so many students and graduates of the College as Smith and Hodgson and their successors Bullock and Crenshaw, which together covered a period of eighty years in the life of the institution.

He became a member of the College in 1849, its recording secretary in 1864, first vice-president in 1874 and president in 1885, serving until his demise on March 21, 1900.

He joined the American Pharmaceutical Association in 1857 and was its recording secretary for two years (1857-1859); at the meeting of the Association in Philadelphia in 1876 he was elected its president. He was a member, also, of the American Philosophical Society, of the Academy of Natural Sciences, and of the Franklin Institute, being at different times its curator, vice-president and president.

Charles Bullock was the contemporary of Parrish, Procter and Maisch and was frequently associated with them in the scientific work that has added so much luster to American pharmacy and honor to the College. His investigation of the alkaloids of *Veratrum Viride* was especially noteworthy. He represented in his person the finest principles and traditions of his Alma Mater and his self-sacrificing labor for her has been of potent value in furthering her development.

### Samuel S. Bunting

Treasurer, 1871-1889.

Samuel S. Bunting, son of Josiah and Sarah S. Bunting, was born in Philadelphia, on April 23, 1828. His family were among the early Quaker settlers of Pennsylvania, who, since their arrival from England, have been residents and landowners for several generations near Darby, in Delaware County.

He received his elementary education at the Friends' Monthly Meeting School at Darby.

When seventeen years of age, he became apprenticed to Joseph C. Turnpenny, at Tenth and Spruce Streets, to learn the "drug and apothecary business."

He graduated from the Philadelphia College of Pharmacy in 1850, and a few years later became a partner in the business with Mr. Turnpenny, and in 1864 purchased his interest. He became a member of the College in 1855, and the following year was elected a trustee, serving in that capacity until his demise (1890). In 1871 he was chosen treasurer of the College, and continued as such until November, 1889, when failing health caused him to resign.

In 1886, he retired from business, and lived a quiet life at his home in Delaware County, but continued to manifest an active interest in the affairs of the College.



SAMUEL S. BUNTING

"Samuel S. Bunting," Charles Bullock has written, "was a man of unassuming manner, his diffidence and modesty obscuring his real worth. His sterling integrity and faithful performance of his duties have left their record with all who have had relations with him; and the quiet and even tenor of his life, in its simplicity, has left with us a pleasant memorial of one of the oldest and most valued members of the College."

### William J. Jenks

Recording Secretary, 1873-1885; Second Vice-President, 1885-1897; First Vice-President, 1897-1904; President, 1900-1900.

William J. Jenks was a descendant of a Quaker pioneer who settled in this country, and was the seventh president of the College. He was born on March 30, 1822, near Newtown, Pa. His father was a county judge and for a time a member of Congress from Bucks County. Mr. Jenks attended the school of John Bullock, father of Charles Bullock, at Wilmington, Del. In 1838, at the age of sixteen, he came to Philadelphia and apprenticed himself to Smith and Hodgson. Under their preceptorship, he entered the College, from which he was graduated in 1842 in the class with Edward Parrish. For a time he was in the employ of Smith and Hodgson, but in 1845 he formed a partnership with his friend, Charles S. Ogden, and they engaged in the wholesale drug business at 160 North Third Street.

At the beginning of the Civil War, financial embarrassment overtook the firm, and a new partnership with Elwood Middleton, as Jenks and Middleton, was then formed. Finding that conditions in the jobbing business were no longer satisfactory, he removed, in 1887, to 4043-4045 Market Street, where he devoted himself to the retail drug trade until his demise on October 21, 1904.



He became a member of the College in 1846 and served it with rare fidelity for fifty-eight years as a member and chairman (1897-1897) of the Board of Trustees, secretary of the College, second vice-president and first vice-president. Upon the death of Charles Bullock in 1900, he was elected to the presidency in appreciation of his long years of service, but he was approaching eighty years of age, and he resigned almost immediately, whereupon Howard B. French was elected to succeed him.

Mr. Jenks's sympathy with students as chairman of the committee on examination for many years, and his lovable personality endeared him to all.

As has been said of William J. Jenks, "his always pleasant, smiling, happy countenance during the examinations proved an inspiration to many a student nervous over the finals, and restored confidence and natural ability. Many are today cherishing the memory of the 'Grand Old Man' and his reassuring smile, who happened along with a pleasant word of encouragement just at the right time" (George M. Beringer). And with his sunshiny disposition, he was also reserved, thoughtful and considerate of others, while his friendliness, sincerity and good judgment won for him universal confidence and respect.

### William B. Thompson

Recording Secretary, 1885-1899.

William B. Thompson was born September 11, 1831, and died December 7, 1906. His father was Judge John Thompson of Philadelphia.



WILLIAM B. THOMPSON

The son was educated in the private academy of Thomas James, and in 1848 entered the employ of Edward and Charles Yarnall, whose place of business was on Market Street near Second, and had been established in 1819. He matriculated at the College in 1848, but pressure of business prevented the completion of the course.

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In 1856 he established himself in business at Seventeenth and Mt. Vernon Streets, and for thirty years did a remunerative business. He then disposed of his store, and became interested with Edward C. Jones in the wholesale drug business at Fifteenth and Market Streets. After a limited period this connection was dissolved, and he took service with John Wyeth and Brother, with whom he filled a highly responsible position until his death (December 7, 1906).

He was deeply interested in the welfare of the College, becoming a member, in 1858. For nineteen years he was a trustee, and for fourteen years (1885-1899) the recording secretary.

He was a member of the American Pharmaceutical Association for fifty years (1856-1906). He was associated with the Charity Hospital of Philadelphia as its secretary and treasurer for twenty six years, and for a time was treasurer of the Philadelphia Association of Retail Druggists.

William B. Thompson had a ready pen and contributed numerous articles to pharmaceutical periodicals, especially on pharmaceutical ethics; one of his maxims being: "Business Logic: Poor drugs—poor result. Poor result—poor reputation. Poor reputation—poor business."

### Howard B. French

Second Vice-President, 1897-1900; President, 1900-1921.

Howard Barclay French, eighth president of the College, was born in 1848 in Salem, Ohio. His father, Samuel H. French, was a native of New Jersey to which colony his Quaker ancestors had come, as early as 1680; his mother was Angelina (Dunseth) French. Mr. French was educated in the Friends' Schools. For three years he was an apprentice in the drug store of William B. Webb, attended the lectures of the College, and graduated in pharmacy as of 1870.

He then entered the employ of his father's firm, French, Richards and Co., wholesale druggists and paint manufacturers. In 1883 the two branches of the business were separated, Howard B., with his brother, William H., joined with their father, Samuel H. French, and John L. Longstreth, their firm taking over the paint department, and being known as Samuel H. French and Co., of which since 1901 Howard B. has been the sole member. The Smith, Kline and French Company was the successor of the old firm in the drug line.

He was elected to the board of trustees of the College in 1872, and became the second vice-president in 1897, from which office, at Mr. Bullock's death in 1900 and Mr. Jenk's resignation after election to the place, he was elected president.

In the affairs of the College he had been very active as a trustee, especially in connection with erection of the new buildings on Tenth Street and the equipment of the enlarged building in 1892-1893. He was chairman of the committee which had charge of this important work, and it was under this administration that the new laboratory building was later erected on the old Aimwell School property on Cherry Street. His interest in the celebration of the centenary of the College was expressed by the formulation of plans for exercises a long time in advance of the event. His labors looking to the procurement of a site for new College buildings, and his zeal and industry throughout a long period, in bringing the College into active relationship with the public life of the city, bear testimony to his interest in the institution.

Mr. French's connection with the business and civic organizations of Philadelphia, and in larger fields, have been numerous and various. Of several of these he has been president. Many improvements with which he has been identified, have had for their aim the improvement of life for the public, such as the work of building recreation piers on the Delaware River front of the city; the extension of foreign trade of the country through the Commercial Museum of Philadelphia, of which he is a vice-president and the deepening of the internal waterways. He has been active also in a number of organizations designed to give the city better government. As an officer and former president of the Philadelphia Chamber of Commerce; a member of the State Board of Charities by appointment of the

Governor of Pennsylvania; president of the Equitable Trust Company for a number of years, and an officer of other financial institutions of Philadelphia, in addition to the engrossing engagements of his own business, his life has been one of exceptional activity.

He has always taken a deep interest in the landed affairs and early history of New Jersey as a member of the Council of Proprietors which holds the right of proprietorship in unlocated lands. This right of proprietorship has succeeded from one generation to another for two hundred and forty years.

The names of few Philadelphians have been better known in connection with enterprises bound up with the welfare of his city and state than Howard B. French, while his constructive work for his Alma Mater will be held in lasting remembrance.

### Charles A. Weidemann

Recording Secretary, 1900-1921.

Charles A. Weidemann was born in 1843 at Louisville, Ky. His early education was had in the public schools of Philadelphia and he then became apprenticed to Thomas S. Stewart at Tenth Street and Girard Avenue, remaining over seven years, when he enlisted for Hospital Service during the Civil War, continuing in the service for nearly three years.



CHARLES A. WEIDEMANN

He graduated from the College in 1867 and immediately went into the retail drug business for himself at Twenty Second and Green Streets, retiring from business in 1902. In the meanwhile, he became interested in medicine and matriculated in the Medical Department of the University of Pennsylvania, receiving his degree in 1880. He then combined the practice of medicine and pharmacy and with marked success.



For more than fifty years (since 1868), he has been a member of the American Pharmaceutical Association, and in 1877 became actively identified with the work of the College. He was elected recording secretary in 1900, serving as such for twenty-one years. He has also been active in the work of the Alumni Association of the College, having been elected second vice-president in 1875-1876, and again in 1882-1883, and first vice-president in 1883-1884, and president in 1884-1885.

Few men have rendered more devoted service to their Alma Mater than has Charles A. Weidemann. In season and out of season, in fair weather and foul, he has been ever faithful in the performance of his duties and loyal to the best traditions of his profession, winning the respect and affection of wide circle of friends.

### Warren H. Poley

Treasurer, 1916-1920.

Warren H. Poley was born in Montgomery County, Pa., and shortly after his birth his parents moved to Norristown, Pa., where he received his early education, graduating from the high school in 1871. In August of that year he entered the drug store of his uncle Francis B. Poley and remained in his employ (or his estate) until the fall of 1876.



WARREN H. POLEY

He graduated from the College in 1875, his thesis being "Phytolacca Decandra."

In 1876 he purchased a drug store in Germantown between Upsal and Sharpnack Streets, removing in 1883 to a larger store and dwelling nearby, and known as the Upsal Pharmacy; previously (1881), he had purchased the Walnut Lane Pharmacy, operating both stores with marked success. In 1904 he sold the Upsal Pharmacy, and a year or so later the Walnut Lane Pharmacy.

Warren H. Poley has rendered thirty-five years of splendid service as a retail pharmacist, averaging fifteen or sixteen hours a day and frequently seven days a week. Putting the work on a "union basis" of eight hours per day, this would make a business life's work of sixty years or more, and he has found time, also, for outside activities, and has given yeoman service. Thus, he was one of the organizers of the Philadelphia Association of Retail Druggists, and has been its vice-president and president, also, a member of its Executive Committee from the time of its organization to his retirement from business when he was elected an honorary member. He was, also, one of the organizers of the National Association of Retail Druggists, and is a member of the American Pharmaceutical Association (1906- ).

Warren H. Poley has ever exhibited the deepest interest in his Alma Mater. Elected a member of the College in 1900, he became a member of the Board of Trustees in 1906, and an active member of many of its committees, and treasurer of the College (1916-1920), in which position he rendered services of unusual value. He was elected recording secretary of the Alumni Association of the College in 1912-1913, second vice-president in 1913-1914, first vice-president in 1914-1915, and president in 1915-1916.

### Otto W. Osterlund

President, March 28, 1921-May 9, 1921.

Otto Williams Osterlund, ninth president of the College, was born in Sweden on May 28, 1874, and was the son of Andrew and Catherine Osterlund. His father died while he was quite young, and in 1886 his mother and himself came to this country. He received his early education in the public schools, and was then apprenticed with Dr. Charles Henry, of Upland, Nebraska, for four years.

He matriculated at the Philadelphia College of Pharmacy in the fall of 1896, his preceptor being Theodore Campbell, of Overbrook, and graduated with the class of 1899, the subject of his thesis being "Cinchona and its Bast Fibres"; he was the vice-president of his class.

After graduation, he went into the retail drug business at Forty-sixth and Baltimore Avenue, and at Fifty-second and Spruce Streets; recently he gave up this business to assume the presidency of the Belmont Trust Company of Philadelphia.

He was appointed a member of the Pennsylvania Board of Pharmacy in 1914, and has been reappointed from time to time; he is treasurer of the Board. He was elected President of the Philadelphia Association of Retail Druggists in 1919. He has taken a deep interest in the work of the Alumni Association of the College, and was its corresponding secretary in 1908-1909, second vice-president in 1909-1910, first vice-president in 1910-1911, and president in 1911-1912; and also, in the College, having been elected a member of the Board of Trustees in 1910.

At the height of an unusually successful business career, he was called to assume the presidency of the College, and consented to serve only until a successor of national reputation could be secured, and such a person was found in Dr. William C. Braisted, former Surgeon General of the U. S. Navy, who was elected to succeed Mr. Osterlund on May 9, 1921.

In his short term as president of the College, Otto W. Osterlund won, in an exceedingly difficult and trying position, the respect and affection of the College membership by his whole hearted devotion to the interests of his Alma Mater, and now, as a member of the Board of Trustees, he is rendering equally valuable service.

### William C. Braisted

President, May 9, 1921-

William C. Braisted, tenth president of the College, was born in Toledo, Ohio, on October 9, 1864. In 1883 he was graduated a bachelor of philosophy from the University of Michigan. Three years later, when he was graduated a doctor of medicine from Columbia University, he was an honor man in his class. After two and a half years of

service in Bellevue Hospital in New York he practiced medicine in Detroit until, in September, 1890, he entered the Navy as Assistant Surgeon.

Step by step William C. Braisted advanced in the service, serving on many vessels and at many naval hospitals. Twice he was instructor in surgery in the Naval Medical School. For zeal and skill in caring for the wounded after the battle of Puerto Cabello he was decorated with the Order of Bolivar by the President of Venezuela. In 1904, he fitted out and equipped the hospital ship "Relief."

During the Russo-Japanese War he represented the Medical Department in Japan and was decorated by the Mikado. As Assistant Chief of the Bureau he assisted in the complete reorganization of the medical service of the Navy. For a time he served as Attending Physician at the White House in the administration of President Roosevelt.

From 1912 to 1914, he was Fleet Surgeon of the Atlantic Fleet. In 1913, he was elected President of the Association of Military Surgeons of the United States. February 18, 1914, he was appointed to the post of Surgeon General and Chief of the Bureau of Medicine and Surgery, with the rank of Rear Admiral.

Upon the shoulders of Admiral Braisted fell the responsibility for the surgical, medical and pharmaceutical readiness of the Navy in the World War, not only in the matter of supplies, but in personnel also. So well did he perform his task that every call made upon the bureau was answered. To his care nearly 120,000 sick and wounded soldiers, sailors and marines were entrusted; his jurisdiction extended over the Marine units fighting in France, over the Naval aviation stations, over health conditions in submarines and the sanitary and medical features of the transportation of the Army to Europe accomplished by the Navy, in fact, over the myriad activities touched upon by the Naval forces.

An idea of the magnitude of his task may be obtained from the fact that of 1,235,933 American troops returned by June 20, 1919, 111,522 of them were sick or wounded and in his keeping.

Admiral Braisted has brought about the reorganization and enlargement of the Medical and Hospital Corps by securing necessary legislation for increased personnel with increased rank and pay. He has secured hospital construction and administration of the most up-to-date kind of the Navy. He has founded four colleges at Newport, Norfolk, the Great Lakes Training Station and San Francisco, respectively, for the training of Naval pharmacists. In addition he established a correspondence course in pharmacy for men in the Navy's Hospital Corps. The first hospital ship of the Navy to be designed and fitted out from the keel up for the special purposes of the Medical Department, now under way at the Navy Yard at Philadelphia, was undertaken under his auspices. He has had prepared the book of instructions for the Hospital Corps, as well as the Manual of the Medical Department for Medical Officers, the Compend for Masters of Auxiliary Vessels, special reports on the War in Europe, etc.

Recognition of the distinguished services of Admiral Braisted has not been lacking. Among the honors accorded him are the degree of doctor of laws by the University of Michigan and Jefferson Medical College, and the degree of doctor of science by Northwestern University. He is president of the Board of Visitors of the Government Hospital for the Insane, a member of the Board of Regents of the American College of Surgeons, a director of Columbia Hospital in Washington, and once vice-chairman of the War Relief Board of the American Red Cross. During the war he was a member of the Central and Executive Committee of that body.

He is President of the National Board of Medical Examiners and a member of the American Medical Association, of which he was president in 1921, the Southern Medical Association, the American Academy of Medicine, and many other societies. Dr. Braisted is also Chairman of the Provisional Board of the Gorgas Memorial Institute begun recently at Panama, a great institution for research into tropical diseases and preventive medicine for the welfare of the entire world.

For his services during the war he was awarded the Distinguished Service Medal of the Navy.



**Thomas Wiltberger**

Founder, Trustee, 1821-1822.

Thomas Wiltberger was born in 1792, and received his early education in the Episcopal Academy of Philadelphia. He then became apprenticed to a prominent druggist on Market Street, and entered the drug business for himself in 1815 at 233 North Second Street where he had an unusually successful career as a wholesale druggist. He was succeeded in busi-



THOMAS WILTBERGER

ness by his son Alfred in 1849, and at his death, by another son David S., who continued the business until his demise in 1896.

Thomas Wiltberger was a man of character and was held in high esteem.

It is of interest to add that Adam Pfromm, a graduate of the Philadelphia College of Pharmacy, class of 1869, who had been in the employ of the firm since 1863, formed a partnership with I. H. S. Kindig under the firm name of Pfromm and Kindig, which was continued until the death of Mr. Kindig in 1906. Since then Mr. Pfromm has continued the business under the name of Adam Pfromm and Co., his connection with the business having been for fifty-nine years with this more than a century old firm. Mr. Pfromm is, also, actively identified with the work of the Philadelphia Drug Exchange.

**Warder Morris**

Founder, Trustee, 1821-1853; Chairman of Board of Trustees, 1842-1845.

Warder Morris was born on October 3, 1789, at Pottsgrove, Pa. His parents were originally Philadelphians. At an early age he was placed in the store of John and Daniel

Elliot, and when twenty years of age, commenced business on his own account at 45 North Third street, where he continued in business for forty-four years, retiring in 1853. As a business man, his knowledge and experience were extensive and his judgment good. His practice was distinguished by rigid economy and ready adaptation of means to ends.

He was one of the founders of the College, being very zealous in the determination to establish on a permanent basis an institution that should do credit to the profession of pharmacy. He was a member of the College from 1821 to the time of his death (March 10, 1863), a period of forty-two years, over thirty years of which he was a trustee.

In 1844 the College became financially embarrassed on account of money borrowed from its members to build a hall, at which time he was the first to step forward with an offer to relinquish one-half of his loan (which was considerable), to relieve the institution from its difficulty, and also labored much to induce others to do the same, a movement whereby the College was placed on an independent basis.

Warder Morris possessed strongly marked peculiarities. In deliberations with his fellow members, he gave his opinions freely, without fear or favor, and was sometimes a little caustic; nevertheless his really kind nature dispelled any bitterness and always retained for him the respect of his associates. He was seldom idle or permitted those about him to be so. He was a man of few amusements and few vices, but with many internal resources; he read much and had a large stock of general information; conversed well but not freely, using very few superfluous words, and much could be learned from his conversation, particularly when his hearers knew him well enough to accommodate themselves to his peculiarities.

### Thomas J. Husband

Trustee, 1835-1836.

Thomas J. Husband was born in Harford County, Md., in 1813. Coming to Philadelphia when a boy, he entered the drug store of Thomas McClintock, a well-known Philadelphia druggist, at the northwest corner of Fifth and Callowhill Streets. As an apprentice he gave abundant promise of future usefulness in his profession. He attended the Philadelphia College of Pharmacy, graduating with honor in the class of 1833. He spent much time in working upon his thesis, the subject being: "Galipea Officialis." This was published in the *American Journal of Pharmacy* for October, 1833. He subsequently (1834) joined the College, becoming a life member, and for several years served on the Board of Trustees.

For more than fifty years he conducted a successful retail business at the northwest corner of Third and Spruce Streets, but his name is inseparably connected with the preparation known all over the country as "Husband's Magnesia." The enormous sale of this household remedy was due to his unusually accurate knowledge of the physical properties of magnesia, and to the careful and judicious management which he exercised in putting it upon the market.

His qualities of mind, his education and training, and above all, his scrupulous honesty, had a great influence in establishing for more than one generation the continued demand for the magnesia made by Husband. He took a great interest in his apprentices, and none left his store without being thoroughly imbued with the principle that honesty, industry and faithfulness were incumbent upon all who desired to serve their fellow-men. These sterling qualities endeared him to all who came in contact with him.

Later, he relinquished his active interests in the retail drug business, but continued the manufacture of magnesia at his laboratory at Byberry, Twenty-third Ward, Philadelphia, until the time of death.

Thomas J. Husband was a life long member of the Society of Friends, attending the Meeting at the northeast corner of Ninth and Spruce Streets. He died on January 21, 1898, in the eighty-fifth year of his age, and his passing away was as peaceful as his long life had been useful.



THOMAS J. HUSBAND

### Augustine J. L. Duhamel

Trustee 1841-1846

Augustine J. L. Duhamel was born in 1813 in Philadelphia. His forbears were French, his father having been a native of Bayonne, France.

In 1829 young Duhamel commenced the study of pharmacy with Elias Durand, of Philadelphia, under whose guidance he attained marked proficiency in pharmaceutical practice; and he devoted ten years after attaining his majority in the employ of his preceptor.

He became a graduate of the College in 1834, a member in 1840, and a trustee in 1841, and was most zealous and useful in the performance of duties. His talent for scientific research and his thorough acquaintance with pharmacy and correlated science were shown by his contributions to the *American Journal of Pharmacy*. His papers in this journal numbering only thirty-four, and scattered through twelve volumes of the journal, were eminently practical in character. His inaugural essay on the preparations of iodine, published in 1835, extended through seventeen pages and contained much that was new and original. Several of his communications related to the then new method of displacement or percolation originated by the Boullays of Paris in 1833; and he was probably the first in this country to report upon this epoch making discovery of exhausting vegetable drugs.

His other papers embraced a wide field. In studying his subjects, he was more influenced by the practical and useful than by any abstract scientific interest they might possess. "His acquaintance with English literature and history was of no mean extent and his familiarity with the French language gave him access to the writers of that country, of which he extensively availed himself." (William Procter, Jr.)



Though possessing a retiring disposition, Duhamel's talents were none the less appreciated by his associates, and he was not without frequent evidence of their confidence and regard. His early death on December 21, 1846, terminated a short but brilliant career that had large possibilities of further development.

### Henry C. Blair, 2nd

Trustee, 1850-1857; Chairman of Board of Trustees, 1854-1857.

Henry C. Blair, 2nd, was born at Carlisle, Pa., on December 26, 1816. His forbears were of Scotch origin. The first Blair of the line came to this country in the seventeenth century, and landed in Philadelphia with his wife and children—a son and daughter—and soon after his death, William Blair, 1st, was born. He went to Carlisle, Pa., and married Mary Cowan. Their descendants are: William Blair, 2nd (1760-1792); Andrew Blair (1789-1861); Henry C. Blair, 2nd (1816-1862); Andrew Blair, 2nd (1841-1898); Henry C. Blair, 3rd (1844-1901); Henry C. Blair, 4th (1869- ).



HENRY C. BLAIR, 2nd

Henry C. Blair, 2nd, learned the "drug and apothecary" business with Franklin R. Smith at the corner of Eighth and Walnut Streets, founded in 1829, and graduated from the Philadelphia College of Pharmacy in 1836. In 1838 he purchased the business, and by his judicious management it became one of the most favorably known and prosperous drug stores of the city. Though much engrossed by business, he was not unmindful of the claims of the community and of his profession. In 1842 he became a member of the College and then a member of the Board of Trustees (1850-1857), and later its chairman (1854-1857). Later, he joined the American Pharmaceutical Association.

The business passed to the sons—Andrew Blair, 2nd (1841-1898), and Henry C. Blair, 3rd (1844-1901). Both sons were eminently skilled pharmacists and maintained the traditions of the old Blair store; the former graduated from the College in 1865, becoming a member of the College (1869), and later a trustee (1879-1882). Henry C. Blair, 4th, graduated from the College in 1892, and is a life member.

The Blair drug store, as it came to be known, established by Franklin R. Smith in 1829, was "the" prescription pharmacy of the residential neighborhood around Washington Square when that section of the city was a social center. Henry C. Blair, 2nd, who succeeded Mr. Smith, won the high regard of the medical profession of Philadelphia, and physicians of eminence frequently consulted him as to the best methods of preparing drugs to meet the complex pharmacy of those days. Here were developed many ethical pharmaceutical preparations, including elixirs.

John Wyeth, Frank Wyeth, Edward T. Dobbins, Henry Croft and Francis E. Stewart were clerks in the Blair store. John Wyeth afterwards became a partner, the firm's name becoming Blair and Wyeth. Later the partnership was dissolved, and the Wyeths with Dobbins opened a drug store on Walnut Street above Broad, as the firm of John Wyeth and Brother, specializing in elixirs, and achieved world-wide fame as manufacturing pharmacists.

In 1870, or thereabouts, Henry Blair, Andrew Blair and Henry Croft opened a store at Chestnut and Eighteenth Streets; and later, the partnership was dissolved and Andrew Blair opened a store of his own at Nineteenth and Chestnut Streets and conducted this for a number of years.

The example and influence of the several proprietors of the Blair store were always conducive to the elevation of the standards of education and professional ethics in pharmacy.

The admirable discipline of the Blair establishment was founded on a just appreciation of the rights and interests of the young apprentices entrusted to their care and their responsibility to themselves and to the community. A healthy moral tone pervaded the establishment and many of these young men became prominent figures in the pharmaceutical world.

One of the characteristic productions of the Blair store was a code of rules and regulations originally adopted in 1848 and modified in 1893, and were as follows:

#### RULES AND REGULATIONS OF THE DRUG STORE OF HENRY C. BLAIR

1. Store to be opened promptly at 7 A. M. and closed at 10 P. M.; Saturdays, 10.30 P. M. Sundays, 9 A. M. and 9 P. M.
2. Business hours will include time between 7 A. M. and 6 P. M. on week-days, except when special work requires longer hours.
3. During business hours all hands must be on their feet and employed either in waiting on customers or some other store duty.
4. As waiting on the counter requires most knowledge and experience, the senior clerk must always go front first, then the next oldest. The younger clerks are not to wait on customers except when the older clerks are occupied.
5. In every case customers must be waited on promptly and when goods are to be sent it must be done with the least possible delay.
6. *Never* put up an article unless you are certain you are right.
7. Every other duty must give way to waiting on the counter, except where serious detriment would be the consequence.
8. Every person entering the store, whether rich or poor, infant or adult, white or colored, must be treated with courtesy and kindness.

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9. Boisterous mirth and a sullen temper are to be equally avoided as productive of neither business nor business character. The acquisition of a uniformly cheerful temperament is an attainment worth far beyond the price it usually costs.

10. There are to be no master and no servants. Each one is to feel conscious of the fact that the performance of the duties assigned to him are just as necessary and as important as what pertains to any other hand in the store. All useful employment is honorable. Indolence is a disgrace.

11. As neatness, order, cleanliness and accuracy are necessary and not mere accomplishments in a pharmacist, all are required to practice them constantly.

12. Every clerk is expected to become a graduate of the Philadelphia College of Pharmacy and time will be allowed during third and fourth years for attending the lectures (three evenings for Senior course; two evenings and afternoon for Junior course).

13. To deserve the Degree of Graduate will require severe economy of leisure hours, and their application to the study of those books which relate to the theoretical and practical knowledge necessary to make an accomplished pharmacist.

14. Students need but few social acquaintances and they should be very select. While the occasional visit of a well-behaved young friend will be allowed, lounging in the store will not be tolerated.

15. Each junior clerk will have at his disposal an afternoon and evening every week (from 1 P. M. until 10.30 P. M.), and these privileges will not be interfered with unnecessarily. Rooms are furnished for all clerks in store building.

16. No junior clerk will be allowed to be absent at night after hours without permission. The first and second clerks are expected to be in at reasonable hours, and under no circumstance are both to be away at same time.

17. Each clerk will be allowed two weeks vacation each year.

18. Necessity requires that the store should be accessible on Sunday for the purpose of supplying medicines; beyond this the proprietor is not desirous of doing business on that day, and he enjoining on those in his employ that while they need not positively decline to furnish an article when asked for, to hold out no inducements to purchasers.

19. It is not the wish of the proprietor that any of his clerks should extol an article beyond its merits to advance his pecuniary interests, or to say or do aught in the performance of his duty that he would not be willing that others should say or do to him under the same circumstances.

20. Goods taken from stock for personal use of clerks must be paid for at cost.

21. The proprietor would affectionately recommend and advise all his clerks to attend public worship with a denomination of his own selection, at least once every Sunday, as circumstances may permit. The habit when accompanied by a corresponding moral deportment (without considering the immense spiritual advantage which may result from it), confers a degree of respect in the estimation of those whose esteem is worth having, that scarcely any other act will.

22. The daily intercourse of the employees should be characterized with the courtesy becoming young gentlemen.

23. Should a clerk wishing to leave before his allotted time expires have a good reason, the proprietor will not probably object, and should his cause be a bad one and be persisted in, the proprietor will certainly not offer hindrance to his going. The proprietor depends on the honor of the individual.

24. A cheerful compliance with the foregoing rules is expected and the repeated infraction of a known regulation will be cause for immediate dismissal.



**Daniel S. Jones**

Trustee, 1850-1879.

Daniel Sexton Jones was born near Columbus, Ohio, November 13, 1822, and died May 12, 1893, at his residence in Philadelphia. His early education was had at a boarding school at Burlington, N. J. He learned the drug business with Henry Zollickoffer, at Sixth and Pine Streets, Philadelphia, graduating in 1843 from the Philadelphia College of Pharmacy with high honors; his graduating thesis was upon the subject of "Arum triphyllum."



DANIEL S. JONES

In 1846 he began business for himself at 1201 Spruce Street, Philadelphia, where he continued until his death.

He became a member of the College in 1840, and took an active part in its work, participating in many of its meetings and serving frequently on committees; for many years he was a trustee (1850-1879). He was a member of the American Pharmaceutical Association (1857-1893).

Not only was he active in pharmacy, but he was identified, also, with several business corporations, principally coal companies, having been treasurer and president of the Piedmont Coal and Iron Company, and president of the Bridgeport Coal Company.

**Evan T. Ellis**

Trustee, 1853-1873.

Evan Tyson Ellis was born in Philadelphia, August 10, 1826, and died October 11, 1913. He came of sturdy Quaker stock, his father, Charles Ellis, being a well known Orthodox Quaker, a leading wholesale druggist and a faithful official, in various capacities, of the Phila-

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delphia College of Pharmacy for many years. He received his education at Haverford College, graduating with the class of 1844.

He then studied pharmacy and graduated from the Philadelphia College of Pharmacy in 1847. The subject of his thesis was "Extract of Valerian."

After graduation, he went into partnership with his father in the wholesale drug business under the name of Charles Ellis, Son & Co.

During the Civil War he served in the hospital department of the United States Army. He took a deep interest in the Philadelphia College of Pharmacy, having been a life member,



*From photograph by William Shewell Ellis*

EVAN T. ELLIS

and serving as a member of the Board of Trustees for twenty years. He was a charter member of the Philadelphia Photographic Society, and a life member of the American Pharmaceutical Association.

Evan T. Ellis was a life member of the Orthodox Meeting of the Society of Friends of Philadelphia. He was noted for his thoughtfulness and kindness, particularly to those who were in the drug business and who had fallen by the wayside. His life, after retiring from business, was devoted to good works. He did not rest content by contributing a handshake or pleasant smile to needy unfortunates, but he would do his utmost in every case to procure situations for them or send them food, medicine or help of a practical character.

### Wilson H. Pile

Trustee, 1857-1881.

Wilson Hunt Pile, son of William and Sarah Pile, was born in Philadelphia, October 12, 1808. His early education was had in a school on Lombard Street above Fifth.

About 1824 he commenced to learn the "drug and apothecary business" with Elisha Crowell at the corner of Fifth and South Streets; later he became engaged with William Hodgson, Jr., and then with Thomas Evans. He then took up the study of medicine and graduated from the University of Pennsylvania in 1833, the subject of his inaugural essay being "Malaria."

Soon after graduating he settled in Orwigsburg, Pa., to practice medicine and had an apothecary shop. Not meeting with success, he went to Pidgeontown, White Marsh, Pa.,

and then returned to Philadelphia, and taught in the Lombard Street School for Colored Children, and afterwards, in the Northeast Public School (Key's Alley), where he remained for eight or nine years, teaching physics, electricity, etc.

In 1846 he opened a drug store at Passayunk Road and German Street, removing a year later to the northeast corner of Passayunk Road and Catharine Street, where he remained for ten years, when he removed to the northwest corner of the same streets, where the business was continued until 1881.



WILSON H. PILE

He became a member of the College in 1857, and in the same year was elected a trustee, serving as such until his demise (1881).

Becoming deeply interested by observation and study in the subject of weights, measures and graduated instruments, he was led to the manufacture of a number of specialties which acquired a high reputation. For his hydrometers and specific gravity bottles, he was awarded a first class medal from the Franklin Institute, the judges reporting them "to be equal to any imported from Europe." He made a number of experimental galvanic batteries and also electric motors consisting of a soft iron rod wound with cotton wrapped copper wire and mounted in cups filled with mercury and exhibited these before the Franklin Institute. He was, also, a proficient musician and water color painter.

He contributed a number of valuable papers to the *American Journal of Pharmacy* upon the graduating of hydrometers, the manufacture of dilute phosphoric acid (in the making of which he nearly lost his life), sulphuric acid, etc.

In 1857 he was elected a member of the American Pharmaceutical Association, and during the remainder of his life took a keen interest in its proceedings, being present at many of its meetings.



Of him, Dr. W. S. W. Ruschenberger, his friend of many years, has written: "Considering the narrow circumstances of his early life, and his comparatively slender means and opportunity of early education, his intellectual achievement is vastly greater than might have been reasonably anticipated. The prominent parts of his natural character were perfect integrity, generosity, love of accuracy and truth in all things, cheerfulness, often under trying conditions, and a very affectionate disposition. He was modest, unpretending in reference to his own abilities, and respectfully considerate of the rights, feelings and opinions of others. I have never been closely associated with any man, either in private life or public, whose moral tone was higher or better in my estimation than that of Wilson H. Pile."

In addition, his fine character, his kindness of heart, his patient and exact observations, and his readiness to communicate his knowledge, acquired from an extensive and varied experience, won for him the highest esteem of his fellow men.

His son Gustavus has followed in the footsteps of his father as a trustee of the College for many years (1885-1910), and the drug business of Wilson Pile has been continued to the third generation as W. H. Pile and Sons.

### Henry N. Rittenhouse

Trustee, 1858-1859, 1865-1870.

Henry Norman Rittenhouse was born December 31, 1831, at corner of Crown and Vine Streets, Philadelphia. He was the only child of Henry and Eliza Norman Rittenhouse and a descendant of David Rittenhouse, the famous astronomer.

His early youth was spent on a farm near Norristown, Pa., and while his educational opportunities were limited he made the most of them. He came to Philadelphia, a lad of twelve years, and entered employ of Dr. Wynkoop, a druggist at Lombard and Thirteenth Streets; later he went with Edward Parrish, and then with William Hodgson, Jr. He graduated from the Philadelphia College of Pharmacy in 1855 and carried on the retail drug business until August 13, 1862, when he received his appointment as Medical Store Keeper with the rank of captain in the United States Army, with headquarters at Cincinnati, Ohio, in which office he remained until his resignation in February, 1865, when he again took up the drug business, being admitted to the firm of Parrish and Mellor in June of the same year.

During the early part of the Civil War he made the acquaintance of Alfred Mellor, both being interested in making collodion used in the manufacture of ball cartridge for the U. S. Government. After two years with Parrish and Mellor he entered into partnership (1867) with Alfred Mellor, as Mellor and Rittenhouse, with their laboratory at 816 Filbert Street, for the manufacture of pharmaceutical extracts and preparations, and later extract of licorice. Eventually extract of licorice became their sole product of manufacture, and they were compelled to secure larger quarters and machinery at 218 North Twenty-second Street, where for many years they made this product, which achieved a national reputation.

In 1890, Mr. Rittenhouse retired from Mellor and Rittenhouse Company, the firm in the meanwhile (1886) having been incorporated. His interest in drug affairs, however, especially the subject of licorice, never flagged. He made numerous researches looking toward the introduction of the growth of licorice in this country and published his results in the *American Journal of Pharmacy*.

He was closely identified with the College, being elected a member (1854), and trustee (1858-1859, 1865-1870); also, a member of the Publishing Committee of the *American Journal of Pharmacy*, and took the deepest interest in this periodical, being chairman of the committee from 1874 to 1894, and treasurer from 1894 to 1902. His long and faithful service was highly commented upon, and a unanimous vote of thanks was extended to him by the College for his more than twenty-five years of faithful work.

In 1867 he became a member of the Philadelphia Drug Exchange, and remained such for thirty-eight years; twenty-four years of which he was a director; vice-president in 1874-1875, and president in 1881. In 1857 he joined the American Pharmaceutical Association, serving as recording secretary of the Association in 1864-1865.

Henry N. Rittenhouse was a member of Montgomery Lodge, No. 19, Free and Accepted Masons; Pennsylvania Society, Sons of the Revolution, and the Military Order of the Loyal Legion of the United States, serving in this latter body as a member of the Board of Governors of the War Library and Museum.



HENRY N. RITTENHOUSE

Forceful in the execution of what he believed to be right, irrespective of expediency, sincere in his convictions, courageous in misfortune, and happiest when deepest in his beloved work, he had a character that drew to him friendships of life-long duration; he passed on, June 24, 1905.

### Charles Shivers

Trustee, 1865-1871.

Charles Shivers was born July 14, 1814, on the farm of his father, Isaac Shivers, near Camden, N. J. He received his early education in the Friends' School near his home, and was then apprenticed to Thomas Evans, a Quaker apothecary, and one of the founders of the College, who kept his shop at Third and Spruce Streets, Philadelphia, for nearly fifty years. After serving a term of four years, Mr. Shivers was employed for a time as a clerk and then went into business with D. S. Harker.

Harker and Shivers had their store at (old number) 45 Arch Street, between Front and Second Streets, and after several years of successful business, Mr. Shivers retired in 1841, to buy the business of Christopher Marshall, then at the northeast corner of Seventh and Spruce Streets.

In this store, Mr. Shivers spent most of his useful life. He trained a score or more of drug clerks who became prominent in pharmacy in various sections of the country. The

building, an old one, was torn down after he had occupied it for a few years, and was rebuilt. He had hoped to lengthen his years in the old laboratory—in which his working life was practically spent—and leave the business he had developed to his son, Charles, Jr., but this was not to be, as the owners of the building, the First Presbyterian Church, decided to tear the building down and build on the site the Barnes Memorial.



CHARLES SHIVERS

Charles Shivers was an old school Quaker apothecary of unusual force of character and practical ability, but exceedingly modest and reticent. During the Civil War he spread many thousands of yards of resin adhesive plaster for the Union Army, and with the same meticulous care and exactitude he used in compounding and dispensing prescriptions.

He had lofty ideals for his profession and was held in the highest esteem by all who had business relations with him. He allied himself with the Philadelphia College of Pharmacy, as a member in 1857, remaining such until his demise in 1897; he was a trustee of the College from 1865 to 1871. He was, also, a member of the American Pharmaceutical Association for thirty-seven years (1860-1897).

### William McIntyre

Trustee, 1872-1889.

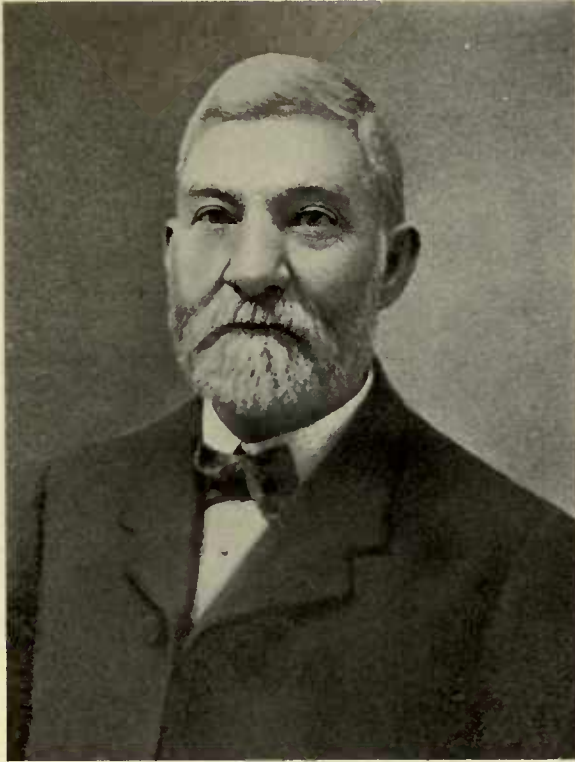
William McIntyre was born in 1843 in the North of Ireland, and brought to this country by his parents when a small boy. His family settled in Kensington, the northeastern section of Philadelphia. His early education was had in the public schools, at the end of which time he entered the pharmacy of John Bley.

In 1861 he matriculated at the College and graduated in 1863. After graduation, he entered into business on his own account and was unusually successful.



He inherited in large measure the character and virility which distinguish the Scotch-Irish people, who have given so many able men and women to the world.

In 1867 he became a member of the American Pharmaceutical Association and contributed many valuable papers and reports; in 1869 he was elected a member of the Philadelphia College of Pharmacy and three years later of the Board of Trustees (1872-1889). He was particularly interested in the pharmaceutical meetings of the College, and was secretary of the same for many years. His reports of the meetings were widely published, not only in this country but abroad.



WILLIAM McINTYRE

In 1906 he helped to organize the Philadelphia Branch of the American Pharmaceutical Association, and was its president in 1908. He was elected treasurer of this body, and held the position until his death. The Philadelphia Association of Retail Druggists was organized in 1899 with Mr. McIntyre as president. He held this office until 1901.

He took a great interest in children and their public education, devoting much time, as a school director and member of the Board of Education of Philadelphia, toward improving the conditions and advancing the interest and comfort of teachers and scholars.

Thirty-seven of his years were given to pharmacy, and when he retired from business, while giving the greater part of his time to the Board of Education, he ever retained his love and interest in pharmacy, and as a member and trustee was deeply interested in the welfare of the College. He was president of the Kensington Electric Company, and active in many civic, charitable and fraternal organizations.

William McIntyre passed away in 1913 beloved by all who knew him—men, women and children alike. He made the best possible use of his talents, by giving the best service he could to others ungrudgingly and from no other motive than love of human-kind.

**Albert P. Brown**

Trustee, 1873-1892.

Albert P. Brown was born in Philadelphia in 1840, and after attending the public schools, became an apprentice at the pharmacy of William B. Webb, at Tenth and Spring Garden Streets. Shortly after graduation (1862), he removed to Camden, N. J., where he established a drug store at Fifth and Federal Streets and continued in business until his demise.

He early identified himself with pharmaceutical matters in New Jersey, was recording secretary of the State Pharmaceutical Association from 1876 to 1884, when he was elected its president for the succeeding year, and for over eight years was secretary of the State Board



ALBERT P. BROWN

of Pharmacy. He was a member of the American Pharmaceutical Association for twenty-two years; and for twenty years a member of the Philadelphia College of Pharmacy, much of the time doing service on the Board of Trustees (1873-1892).

Upon the organization of the Alumni Association of the College, he served as a member of the Executive Board, became vice-president in 1872, and in 1878 was elected president.

He devoted much of his leisure time to work with the microscope and to the photographing of microscopical objects, his productions being characterized by scrupulous accuracy and attractive neatness. When the Alumni Association decided to give to the students of the College the opportunity of familiarizing themselves with microscopical work (1882), Mr. Brown was placed in charge of the new laboratory; and it was due to his enthusiasm in this work that many difficulties were surmounted, and he remained at his post of duty, even though his health had become impaired by an attack of the grippe developing into tuberculosis of the throat, which disease terminated his life April 19, 1892.

Albert P. Brown deserves especial praise for his development of the microscopical laboratory of the Alumni Association, later the botanical and microscopical laboratory of the College, which became possible through his self-sacrificing labor.

### Alonzo Robbins

Trustee, 1878-1896.

Alonzo Robbins was born in 1834 in Pottstown, Pa. He graduated from the Philadelphia College of Pharmacy in 1855, was elected a member in 1866, and in 1878 became a member of its Board of Trustees.

After graduation he was engaged for the most part as a drug clerk until the close of the Civil War, when he engaged in the retail drug business for himself at Eleventh and Vine Streets, where he remained until his death (1896).

He took a deep interest in all matters pertaining to pharmacy, and was an occasional contributor to the *American Journal of Pharmacy*. He did considerable work in connection



ALONZO ROBBINS

with the formation of the pharmaceutical laws of the State, and when the Pennsylvania Board of Pharmacy was appointed, became, on June 23, 1887, its first president. This position he held until May, 1895, when he resigned.

No small share of credit was due him, also, for his efforts in helping to found the Pennsylvania Pharmaceutical Association, of which he was a member. He was also a member of the American Pharmaceutical Association.

Alonzo Robbins was a member of the Committee of the Philadelphia College of Pharmacy for carrying on work for the Committee on Revision of the 1880 Pharmacopœia. His subject was fluid extracts, and he performed a large number of experiments for determining the most satisfactory formulæ for these preparations.



**Edwin M. Boring**

Trustee, 1878-1920.

Edwin McCurdy Boring was born at Lancaster, Pa., October 24, 1839. He was the son of John Dobbins Boring and Catherine McCurdy Boring. His boyhood days were spent in his hometown where he attended high school. Thereafter, about 1857, he worked for a time in Welchen's drug store in Lancaster, and for a few months in Philadelphia, after which he returned to Lancaster. He responded to Lincoln's call for 75,000 volunteers, and entered the three months' service with the Lancaster Fencibles April 18, 1861. At the expiration of such time, he re-entered in Company E, 79th Pennsylvania Volunteers, first as a private and was commissioned first lieutenant June 19, 1864. He took part in a number of the great battles of the war, and was mustered out in July, 1865. As a member of the Executive Com-



EDWIN M. BORING

mittee of the State of Pennsylvania Chickamauga-Chattanooga Battlefield Commission he assisted in the erection of the monument at Chickamauga Park to the 79th Pennsylvania Volunteers.

After the war, September 4, 1865, he came to Philadelphia and entered the employment of Edward B. Garrigues, at Tenth and Fairmount Avenue. During the same year he matriculated at the College and graduated in 1867. In 1868 he became a partner of Mr. Garrigues, and continued as such until the latter's retirement in 1887, when Mr. Boring became the sole proprietor, continuing the business until 1919, when he retired. He had many apprentices in his store who became widely known in the pharmaceutical world and once said, "My biggest and finest asset is the respect and kindly feelings of the young men I have employed." He was elected a trustee of the College in 1878, and continued as such for nearly half a century, rendering most faithful and efficient service. He became a member of the American Pharma-

ceutical Association in 1867, and was one of the organizers of the Philadelphia Wholesale Drug Company, and a member of the Pennsylvania Pharmaceutical Association, and the Philadelphia Association of Retail Druggists. He died June 22, 1920.

As a citizen Edwin M. Boring stood for all that was best in civic life, and loyalty, sense of duty and obligation to his profession, and to his fellow men, were his dominant characteristics.

### Wallace Procter

Trustee, 1883-1909.

Wallace Procter was born (1851) in Philadelphia. He was the only son of William Procter, Jr., and Margaretta (Bullock) Procter. His early education was had in private schools and the Friends' Central School.

He entered his father's store in 1868, and graduated from the College in 1872, the subject of his thesis being "Magnolia Tripetala"; he won the Alumni Gold Medal.



WALLACE PROCTER

After graduation he associated himself with his father in the drug business until the latter's death (1874), and then entered into copartnership with David Preston as William Procter, Jr., Co., which partnership continued until 1890, when Wallace Procter purchased a drug store at 1900 Pine Street. Here he remained in active practice for twelve years and then entered the service of the Ohio Valley Drug Company, at Wheeling, West Virginia, and remained in this position until his demise on May 27, 1911.

Wallace Procter was a devoted and earnest worker for his Alma Mater. He was elected a member of the Board of Trustees in 1883; and in 1888 became a member of the Committee on Examination and its chairman in 1890, serving for seventeen years.

He was a member, also, of the Committee on Instruction, and of the Committee on Property, and in 1894 became a member of the Publishing Committee of the *American Journal of Pharmacy*. He was an active worker in the Alumni Association, serving as its recording secretary (1876-1878), and was a member of the Executive Board for some years. He was twice elected as first vice-president, 1878 and 1885, and became president in 1886. In 1887 he was again elected to the Executive Board and continued in this capacity a number of years. He was one of the pioneer workers in the Association in the early days when this meant devoted and continued service under discouraging circumstances. He lived to see the Association flourish and grow, and he was foremost in encouraging College spirit.

He became a member of the American Pharmaceutical Association in 1874, and of the Pennsylvania Pharmaceutical Association in 1881. He contributed many papers to pharmaceutical organizations and periodicals. Like his father he accepted service in many capacities where the sole reward was the simple satisfaction of doing good and advancing the interests of pharmacy.

This simple record of the life-work of Wallace Procter gives but a faint picture of his achievements. "He possessed an excellent mind, developed by education and environment. He loved books and was an omnivorous reader, and all branches of pharmacy claimed his attention. His admiration for his father and the great mission which the latter fulfilled, were ever before him; and, while he did not inherit the love for original investigation which dominated William Procter, Wallace had an analytical mind and never trusted to surface indications. The son practiced what the father taught and added knowledge fitted for his time and generation" (Joseph P. Remington).

### George M. Beringer

Trustee, 1893-1921; Chairman of Board of Trustees, 1910-1921.

George Mahlon Beringer son of Levi D. and Rebecca Beringer, was born in Philadelphia on February 3, 1860. He obtained his early education in the public schools, graduating from the Central High School in 1876, with the degree of A.B. He immediately entered the employ of Bullock and Crenshaw, and graduated from the College in 1880, the subject of his thesis being "Caffeina." Subsequently, he engaged in laboratory work with Bullock and Crenshaw, and later became a department manager.

In 1892 he was chosen Director of the Microscopical Laboratory conducted by the Alumni Association of the Philadelphia College of Pharmacy and performed the duties of this position until the Association turned the laboratory over to the College in 1894.

Mr. Beringer remained with Bullock and Crenshaw until June 1, 1892, when he purchased from the estate of Albert P. Brown, the latter's store at Fifth and Federal Streets, Camden, N. J., and continued the business, in the conduct of which he has been eminently successful.

He is a life member of the Philadelphia College of Pharmacy, and was elected a trustee in 1893. He was active in the affairs of the College for many years, especially as a member of the committee on publication and the committee on instruction of the Board of Trustees, rendering valuable service. He was given the honorary degree of master in pharmacy by the College in 1903. He was elected chairman of the Board of Trustees in 1910. In 1917 he became editor of the *American Journal of Pharmacy* and did much to develop that periodical during his four years of service as editor.

Mr. Beringer was a member of the Committee of Revision of the U. S. Pharmacopœia of 1910, and the Committee on National Formulary of the American Pharmaceutical Association of 1908, in the work of which his comprehensive knowledge of pharmacy and allied sciences and his critical judgment did much to give to the U. S. Pharmacopœia (IX) and the National Formulary (IV) their practicality. He is a member of the present Committee of Revision of the U. S. Pharmacopœia and the Committee on National Formulary.

He has taken deep interest in the work of the American Pharmaceutical Association, having been elected a member in 1893; chairman of the section on practical pharmacy and dispensing in 1902-1903; and president of the Association in 1913-1914.



He is a member of the New Jersey Pharmaceutical Association, in which he has been most active, and of the Pennsylvania Pharmaceutical Association of which he is an honorary member; also, of the Academy of Natural Sciences of Philadelphia, of the Philadelphia Botanical Club, and of other bodies; and is deeply interested in movements for the betterment and development of his city, being a director of the local Board of Trade, member of the City Planning Commission of Camden, and secretary of the Guarantee Building and Loan Association of Camden.



GEORGE M. BERINGER

George M. Beringer was trained by Charles Bullock, as the latter had been by Daniel B. Smith, and it was but natural that, early in his business career, he should have been inspired by the life work of these two leaders of American pharmaceutical research, and become himself a devotee of research. His contributions to scientific organizations and periodicals, during the past forty years or more, have been many and of great scientific and practical value.

#### William E. Lee

Trustee, 1909-1914.

William E. Lee was born (1850) at Woodbury, N. J. He was the son of Walter B. and Martha Lee. Receiving his early education in the public schools of that town, he studied pharmacy with B. F. Carter, of Woodbury. Later he matriculated at the Philadelphia College of Pharmacy, graduating therefrom in 1872, the subject of his thesis being "Gnaphalium Polycephalum."

A few years later he opened a drug store at 2337 Brown Street, Philadelphia, where he was in business for forty-three years.

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Mr. Lee showed his devotion to his alma mater. He served as a member of its Board of Trustees, being especially active in the work of the committee on examinations, and was president of the Alumni Association (1913-1914). He was also a member of the Pennsylvania Pharmaceutical Association, rendering valuable service, especially as chairman of the committee on membership. He was a member of the Philadelphia Association of Retail Druggists, and of the National Association of Retail Druggists. He joined the American Pharmaceutical Association in 1905.

He was an active Mason. For fifteen years he was treasurer of Olivet Lodge, No. 607, F. and A. M. He was a member of Harmony Chapter, No. 52, R. A. M., and of Corinthian Chasseur Commandery, No. 53, K. T.



WILLIAM E. LEE

He was a member of the Olivet Covenant Presbyterian Church, and an earnest worker in the cause of civic reform. He died July 20, 1914.

William E. Lee was genial, warm-hearted and true to the highest ideals. He believed that character was the most important thing in life, and that the dollar was only a means to an end. He did a man's work and exerted an influence for good that cannot be measured, and his deeds will live long after him. Quiet and modest, but positive in matters of principle, he practiced in life those principles of religion and morality which stamped him as a man among men; he brought honor to his craft, and won the respect and love of his fellows, hundreds testifying of his aid to them in sickness and distress.

His widow, Nellie Florence Lee, secretary of the Women's Organization of the National Association of Retail Druggists, is president of the Philadelphia Chapter of that organization, and also an active member of the College.

### C. Stanley French

Trustee, 1911-1921.

C. Stanley French, son of Charles Barclay and Sarah Louisa French, was born in Germantown, Philadelphia, June 21, 1857.

After receiving a private and public school education, he entered the employ, in 1874, of the drug department of his uncle's firm, French, Richards and Co., at Tenth and Market Streets, Philadelphia. Here he received a thorough training and was admitted into partnership with the firm in 1888. In 1891, after the dissolution of French, Richards and Co., he became connected—and is at this time (1921) so connected—with Samuel H. French and Co., Fourth and Callowhill Streets, the members of which firm had in 1883 separated from French, Richards and Co., and became their successors in the manufacturing of paints and building materials and he is in active management of their large and prosperous business.

He has taken deep interest in the Philadelphia College of Pharmacy and for many years (1911-1921) has been an active member of the Board of Trustees, rendering most zealous service, especially as a member of its committee on property.



C. STANLEY FRENCH

C. Stanley French has been active, also, in many other bodies. In 1890 he was made director of the Mercantile Building and Loan Association of Philadelphia, member of board of directors of the Philadelphia Credit Men's Association, also treasurer of the New Jersey Society of Pennsylvania, a member of the Union League, Mercantile Beneficial Association, and Historical Society of Pennsylvania; and vestryman and treasurer of the Protestant Episcopal Memorial Church of the Advocate.



### EXECUTIVES OF THE COLLEGE

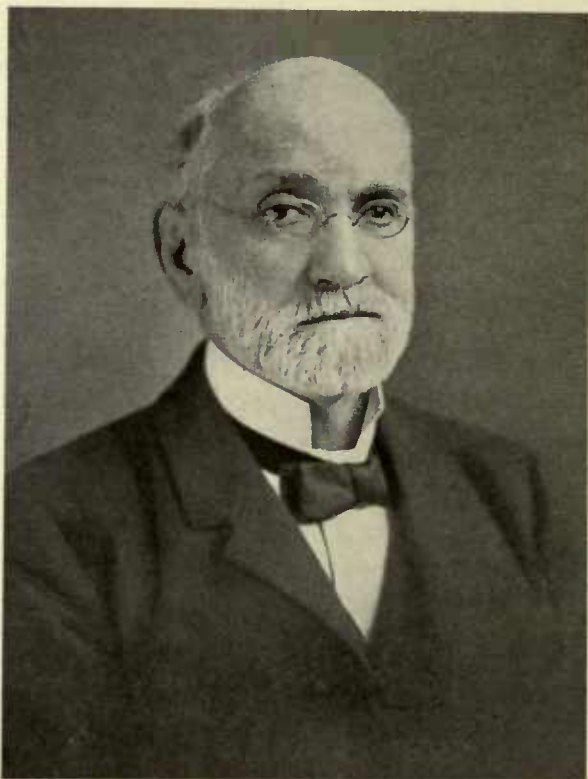
Thomas S. Wiegand

Actuary (Registrar), 1878-1900.

Thomas S. Wiegand was born November 9, 1825, in Philadelphia. He received his early education in a well-known private school conducted by Joseph P. Engles. In January, 1840, he became an apprentice in pharmacy with Haskell A. Merrick, a Philadelphia pharmacist.

Mr. Wiegand matriculated at the Philadelphia College of Pharmacy in 1842 and graduated in 1844 as a Ph.G.

In 1845 he was appointed apothecary to the New York Naval Hospital which position he retained until 1847 when he resigned to associate himself in business with Frederick Brown,



THOMAS S. WIEGAND

with whom he remained until 1851 when he entered into the retail business on his own account. Owing to ill health he was compelled to retire from retail pharmacy in 1866. He then entered the employ of Bullock and Crenshaw where he had charge of the sugar-coated pill department for sixteen years. He then again entered the retail business which he continued until 1885.

In 1878 Mr. Wiegand was elected Actuary of the College, which position he held until he was succeeded by W. Nelson Stem in 1900, and for the remainder of his life he was Librarian of the College, the duties of which position he had assumed in 1890.

In 1874 and in 1884 he acted as editor of the second and third editions of Parrish's Practice of Pharmacy. For nearly thirty years he was a member of the Publishing Committee of the *American Journal of Pharmacy* and a frequent contributor to its columns. In 1852 he first became a member of the College and in 1854 he was elected a member of the Board of Trustees, which position he held until 1900.

He was a loyal worker in the Alumni Association during the early years of its history. He was President of the Association for seven consecutive terms (1865-1872), being the only president in the history of the organization to be honored with more than one term.

Thomas S. Wiegand was a member of the American Pharmaceutical Association from 1857 until the time of his death in 1909. He was the most popular officer which the College has ever had and was idolized by the students. His remarkable memory for names and faces and his readiness to act as a fatherly adviser to many students in their perplexities and difficulties endeared him to the thousands of students who passed through the College while he was connected with the institution. The memory of "Uncle Tommy," as he was lovingly called, is a very dear one with the older graduates of the College who are still living.

### W. Nelson Stem

Registrar, 1900-1903.

W. Nelson Stem was born May 12, 1849, at Fredericksburg, Virginia. Shortly after his birth his family moved to Easton, Pa., where he obtained his early education. At the age of fourteen he was admitted as a matriculant in Lafayette College, where he



WILLIAM NELSON STEM

continued until his junior year, when he experienced a desire to study pharmacy and entered the drug store of C. A. Vorhees and Co. He later returned to Lafayette and completed the junior year in 1868. He then left his Lafayette College course permanently and obtained pharmaceutical experience with J. T. Kern of Belvidere, N. J., F. V. Barnett of Easton, Pa., Dr. Marple of Horseheads, New York, and W. N. Purdon of Easton, Pa.

In 1871 he matriculated as a student in the Philadelphia College of Pharmacy from which he graduated as a Ph.G. in 1873. After graduation he entered the employ of Robert

C. Brodie, a well known Philadelphia pharmacist, with whom he continued until 1900. During this period he became active in the work of the Apothecaries Union (later the Philadelphia Wholesale Drug Company.)

He was identified actively with the work of the Alumni Association for a number of years. When the annual proceedings was issued in 1891 as a monthly journal, Mr. Stem was unanimously chosen as its business manager, in which position he continued until 1902.

In September, 1890, he was elected to the membership of the Board of Trustees of the College, and in 1900, became secretary of the Board and Registrar. He held this latter position until his decease, which occurred suddenly from heart failure on March 14, 1903.

W. Nelson Stem was a man of engaging and attractive personality who made many friends and who discharged his various duties with conscientious fidelity.

### Jacob S. Beetem

Registrar, 1903-

Jacob S. Beetem was born at Carlisle, Pa., on October 5, 1856. He attended the public schools of Carlisle and graduated from the high school with honors in 1873. He was an apprentice in the pharmacy of Dr. George H. Markley of Harrisburg, Pa., from 1873 until



JACOB S. BEETEM

1876. He then secured a position in Philadelphia with S. S. Bunting, Treasurer of the College, and later took up the pharmacy course at the College, from which he was graduated in 1878 as Ph.G. He was with Smith and Painter, Wilmington, Del., for a short time, after which he again became associated with Mr. Bunting with whom he remained until 1884, when he went back to Smith and Painter. In 1885 he secured an interest in the business and shortly after secured the entire retail business of the firm.



He was an organizer of the Delaware State Pharmaceutical Association and a delegate of that organization to the U. S. Pharmacopœial Conventions of 1890 and of 1900.

In 1893 he opened a second store in Wilmington which he controlled for some time after selling his older store, which he did in 1894, when he accepted a position of confidential responsibility with John Wyeth and Brother which he retained until 1896.

Mr. Beetem was always interested in the Alumni Association affairs of the College. He has been corresponding secretary (1892-1893), second vice-president (1893-1894), first vice-president (1894-1895), and president (1895-1896).

In July, 1903 he sold his remaining store in Wilmington and in September of the same year accepted the position of Registrar at the College. He has conscientiously and faithfully performed the duties of this important office for nearly twenty years and has inaugurated many improvements in methods of handling the difficult and voluminous work which pertains to this position.

Jacob S. Beetem is a member of the Masonic order and also holds membership in the Pennsylvania Pharmaceutical Association and frequently attends the meetings of the latter organization. He has made many friends among the students and officers of the College during the many years that he has been in its service.



WILLIAM R. KEENEY

### William R. Keeney

Director of Department of Supplies, 1919-

William R. Keeney was born December 15, 1858. He was an apprentice in the pharmacy of his father, Caleb R. Keeney, at Sixteenth and Arch Streets, Philadelphia, and graduated from the College in 1878 with the degree of Ph.G.

He was associated for many years with his father's business, to which he later succeeded. In 1915 he severed his connection with retail pharmacy and for several years was connected with the scientific department of Williams, Brown and Earle, Philadelphia.

In 1919 he assumed charge of the Department of Supplies of the College, which position he still occupies. He resides at Wayne, Pennsylvania, where he devotes his spare time to gardening.

## FACULTY OF THE COLLEGE

### Samuel Jackson

Founder; Professor of Materia Medica and Pharmacy, 1821-1827; Second Vice-President, 1827-1829, 1831-1836; First Vice-President, 1829-1831.

Samuel Jackson, the first professor of materia medica and pharmacy in the College, Troost's colleague in the first Faculty of the school, was born in Philadelphia on March 22, 1787. His father, Dr. David Jackson, of Chester County, was a member of the first class to be graduated from the medical school of the College of Philadelphia, later the University of Pennsylvania, in 1768. The son received a classical education and then studied medicine in the University, taking his medical degree in 1808. The father had become the proprietor of a drug store on North Fourth Street in Philadelphia, and at his death in 1801, an elder son succeeded to the business. He too died in 1809, when to Samuel came the task of continuing the business. This duty he took up owing to the dependent state of the family. But he had no liking or talent for trade, and he left the store with heavy pecuniary obligations, which, however, at a later day, he discharged to the full from his earnings in the medical profession.

While still engaged in business, Dr. Jackson, during the war of 1812, joined the "First Troop of City Cavalry" of Philadelphia and went out into the field with that company to resist the advance of the British in Maryland.

After the termination of the war in 1815, he began practice as a physician. Of an ardent temperament with a very active mind, he interested himself in many of the movements for the well-being of his fellow citizens. He became president of the first Board of Health of Philadelphia in 1820. While in this position he did memorable service in the suppression of the yellow fever epidemic of that year. As a link between the professions of pharmacy and medicine, he had taken a part in forming the College, and he was properly chosen on April 23, 1821 to be one of its first professors. While occupying this place, he was invited to take charge of certain courses for medical students, given between terms at the University, instituted by Dr. Chapman. In 1822, he was elected to be one of the attending physicians at the Philadelphia Almshouse, where a system was introduced of delivering lectures twice a week. In 1827 he was chosen to assist Dr. Chapman in the University of Pennsylvania with the duty of lecturing upon the institutes of medicine, and he became full professor of this branch in 1835.

Already in May, 1827, so many duties claimed the attention of Jackson that he had resigned his professorship in the College. He held his chair at the University however, until 1863. For thirty-six years he was a member of the teaching force of that institution; for twenty-eight years he was professor of the institutes of medicine.

Doctor Jackson's name is connected with three preparations which were used as popular remedies, viz., Jackson's Pectoral Syrup; Jackson's Ammonia Lozenges; and Jackson's Pectoral and Ammonia Lozenges. The original formulas are given in the *American Journal of Pharmacy*, 1852, 34, 36. His name is also connected with an iodine solution called "Lugol's Diluted or Jackson's Iodine Solution," which is quite similar to the compound solution of iodine now official (*Amer. Jour. Pharm.*, 1834, 116). At one time there was largely used a "dissolving salve for breasts" which is made according to a formula devised by Professor Jackson (*Ibid.*, 1864, 116.)

Jackson died on April 4, 1872, at the age of eighty-five, after he won a great name for himself in American medicine. He was an active member of the original Publishing Committee of the Journal of the Philadelphia College of Pharmacy, and was the author of many original articles detailing his observations as a teacher and physician.

### Gerard Troost

Professor of Pharmaceutical and General Chemistry, 1821-1822.

Gerard Troost, the first professor of chemistry in the College, was born at Bois-le Duc, Holland, on March 5, 1776. He studied chemistry, geology, and allied sciences at Leyden, which university gave him the degree of doctor of medicine, and at Amsterdam, where he obtained the degree of master of pharmacy. In his country's military service he was severely wounded. Recovering he went to Paris in 1807 to further pursue his studies. In a scientific capacity, by appointment of the Crown, he accompanied a naval expedition to Java, but he was captured by an English privateer and taken to Dunkirk. Escaping, he embarked in an American vessel for New York, hoping to reach the East Indies under our flag, but before arriving in the United States he was again captured and carried back to Dunkirk. Upon his release, he was once more for a time in Paris, but in 1810 he came to Philadelphia, still cherishing the hope of proceeding to Java, but the surrender of the island to England led him to give up the plan, and he settled permanently in the United States. In 1812 he helped to institute the Academy of Natural Sciences of Philadelphia and became its first president.

During his residence in the city, he was interested in a number of manufacturing experiments. But neither this nor other enterprises which he promoted met with success. Though he spoke English with a decided foreign accent, he lectured frequently. In 1821 he delivered a course on mineralogy in the Philadelphia Museum, offering a public course on pharmacy and making geological explorations for the Philadelphia Society for Promoting Agriculture and for other bodies.

The Board of Trustees of the College elected Gerard Troost and Samuel Jackson as the first professors in the school on April 23, 1821, and in November of that year, they began their lectures in the German Hall on Seventh Street. Troost continued in the place for only one year, to be succeeded by George B. Wood.

A gentle dreamer in whom learning was mixed with generous philanthropy, looking to a reformation of the social order, Troost, with William Maclure, Say, Lesueur and other scientists joined Robert Owen in his communistic experiment at New Harmony in Indiana. Two years of this sufficed. In 1827 he removed to Nashville, where he helped to found the University of Nashville, and became in 1828, its professor of chemistry, geology and mineralogy. There he remained for twenty-two years, or until his death in 1850. For a portion of this time, from 1831 to 1839, he was State Geologist for Tennessee. At his death he possessed a cabinet of about 15,000 geological specimens which was accounted to be the finest private collection of its kind in the United States. An important zinc mineral (anhydrous zinc silicate), found largely near Franklin, N. J., is named *troostite* after him.

Troost's entire life was consecrated to the then infant sciences of geology, mineralogy and chemistry with results that won recognition at home and abroad.

### George B. Wood

Professor of Pharmaceutical and General Chemistry, 1822-1831; Professor of *Materia Medica* and Pharmacy, 1831-1835; Second Vice-President, 1836-1843.

George B. Wood was, in his day, probably the most distinguished member of the Faculty of the College. If this title be not his for original scientific investigation *per se*, it will be accorded to him by reason of his remarkable power of interpretation and exposition of scientific facts and principles, and his extraordinary industry in connection with the United States Pharmacopœia and its commentary the United States Dispensatory.

He was born in Cumberland County, N. J., March 13, 1797, of Quaker parents. He was graduated from the University of Pennsylvania in 1815 as an A.B., studied medicine under Dr. Joseph Parrish and received his doctor degree from the University in 1818. He was lecturing in the private school which Parrish maintained for medical students, and giving public courses before he came to the Philadelphia College of Pharmacy to succeed Troost as professor of chemistry in 1822.



## 398 First Century of the Philadelphia College of Pharmacy

Already his knowledge was so comprehensive that he could have filled, it is said, any one of a considerable number of teaching positions. In college, and afterward, he was known as a writer of verse, in Latin as well as in English. He translated from German. He wrote a novel which, however, was never published. He concerned himself with questions of education and was a public advocate of higher standards of professional conduct. At the death of Benjamin Ellis in 1831, Wood was transferred to the chair of materia medica and pharmacy, and Franklin Bache came to take up the course of chemistry in the school.

It was while he was lecturing at the Philadelphia College of Pharmacy that, as a member of a committee of the College of Physicians, Wood turned over his revision of the *Pharmacopœia*. The convention, which had authorized the first edition of the work in 1820, provided for revisions at the end of every ten-year period. In 1830, Wood, with the assistance of Franklin Bache and others, was ready with an entirely new draft. It became at once a standard work. Wood, and his friend Bache, also, by this time, professor in the College, immediately began the preparation of a commentary on the *Pharmacopœia*, the United States Dispensatory, a volume of more than 1,000 pages which was completed in less than two years. It was instantly seen to supply an indispensable need, and was issued and reissued. During Wood's life it passed through fourteen large editions, estimated to number 120,000 copies. He also interested himself in the later revisions of the *Pharmacopœia*, for the improvement of which he was tirelessly active.

He resigned his chair at the Philadelphia College of Pharmacy upon his election to the chair of materia medica and pharmacy in the Medical Department of the University of Pennsylvania in 1835. In this place he remained until 1850, when he was transferred to the professorship of the theory and practice of medicine, hitherto held by Professor Nathaniel Chapman, making himself, at this notable period in the history of medical education in Philadelphia, a prominent figure in its development to high fame. He was held to have been the most brilliant of the many excellent lecturers of the times. In 1860 he withdrew from active service as a teacher, although as a member of the Board of Trustees of the University and in other posts he still had a large part in the intellectual movements of the city until his death in 1879.

For many years Wood was president of the American Philosophical Society and of the College of the Physicians of Philadelphia. Several medical works, a treatise on the "Practice of Medicine" published in 1847, another on "Therapeutics and Pharmacology" published in 1856, both of which passed through several editions, supplemented his labors on the *Pharmacopœia* and the U. S. Dispensatory. His "History of the University of Pennsylvania" stands as evidence of his deep interest in this great institution.

### Benjamin Ellis

Professor of Materia Medica and Pharmacy, 1827-1831.

Benjamin Ellis succeeded Dr. Jackson as professor of materia medica and pharmacy in the College in 1827. He was born in Muncy, Pa., on May 5, 1798, being one of a Quaker family of eleven children, whose parents William and Mercy Ellis, the latter a well known preacher of the Society of Friends, settled at an early date on lands in Lycoming county which even yet was not far from a wilderness. He attended school at home and then went to a seminary at Manhattanville, near New York, where he completed his English education and studied Latin and French. While at school in 1815, he proceeded three times a week to New York, a distance of eight miles, to hear the lectures of Professor John Griscom, who implanted an interest in chemistry in Daniel B. Smith and so many men who made themselves notable figures in the early scientific history of the country.

Soon young Ellis was in a leading drug store in Philadelphia studying pharmacy, and passed to the University of Pennsylvania where he took his degree as doctor of medicine in 1822. While still in the medical school he was a house pupil of the Philadelphia Dispensary. At his graduation he became a physician of the dispensary and of the Board of Guardians to attend the out-door poor, thankless duties which he performed with scrupulous care. Coming in 1827 to the Philadelphia College of Pharmacy, in which his younger brother,

Charles Ellis, who had lately purchased the old Marshall drug store, was already a factor of importance, he gave four courses in the school. Death interrupted his labors on April 23, 1831, in the midst of ambitious plans for the promotion of science.

Simple, unaffected, cheerful and generous, few men it is said were "ever more beloved in their circle of intimate friends than Benjamin Ellis." He infused into the minds of pupils an ardent love of science, but he is most entitled to remembrance in the history of the College for having reorganized the *Journal* in April, 1829, and establishing it on a firm foundation as a quarterly publication. It was largely due to his perseverance that the periodical reappeared after its first not too successful issues. He had contributed to the first series several editorial and other articles. As editor of the new volumes he was aided by his brother, Charles Ellis, Daniel B. Smith, S. P. Griffiths, Jr. and George B. Wood serving as members of the Publishing Committee. For the last two years of his life he was a physician to the Philadelphia Almshouse. In his brief life he found the time to write a "Medical Formulary" which filled a national need and gained immediate recognition abroad. It ran through eleven editions, the last of which was the revision made by Dr. Robert P. Thomas in 1864.

### Franklin Bache

Professor of Pharmaceutical and General Chemistry, 1831-1841.

Franklin Bache, the third to occupy the chair of chemistry in the College, was a great grandson of Benjamin Franklin, the eldest son of Benjamin Franklin Bache, the editor of the *Aurora* who opposed Washington and Adams and the Federalists with so much indomitable energy in that newspaper, and who died during the yellow fever epidemic of 1798. He was born in 1792. Young Bache, after studying at the Rev. Dr. Wylie's well known private academy, was sent to the University of Pennsylvania, from which he was graduated in 1810 as an A.B., and in 1814 as a doctor of medicine. He spent some time in the army as a surgeon and upon his return to his native city began the practice of his profession. He held two or three small public positions—he was physician to the Walnut Street Prison in 1824, and to the Eastern Penitentiary at Cherry Hill in 1829. But his practice very slowly increased and his tastes drew him to scientific research and to writing and lecturing.

He was interested in the affairs of the Kappa Lambda Society, a medical association founded in 1822 by Dr. Samuel Brown of Kentucky, who designed that it should be extended throughout the Union, with branches in different localities, affiliated in one secret brotherhood. Samuel Jackson and Franklin Bache were the earliest members of the branch in Philadelphia. It thrived for a few years and was accounted a leading influence in establishing harmonious relations between the various physicians of the city and its environs and in elevating ethical standards in the profession. The organization published a quarterly magazine from 1826 to 1831 to which Bache gave much attention.

Particularly drawn to chemistry, he prepared a treatise on "A System of Chemistry for the Use of Students of Medicine," which he published in 1819. After the Franklin Institute was established in 1824, he became (1826) its lecturer on chemistry, as he had been earlier in Dr. Thomas T. Hewson's medical school, established by that well known physician to supplement the instruction given his many pupils in his office. Aided by Hewson's friendship, Bache was drawn into an active scientific circle which included George B. Wood. Through the College of Physicians they were industriously identified with the work of revising the *United States Pharmacopœia*. This book had first been issued in 1820 in Boston. It was imperfect in many particulars. Now in 1830, largely through the labors of Wood and Bache, with the support of Hewson, it was converted into a standard work. This done the two young men almost immediately began the preparation of a commentary upon the *Pharmacopœia*, the *United States Dispensatory*, which appeared first in 1833 to go through repeated editions, establishing an unusual record for long life based upon singular usefulness and incidentally achieving an unexampled commercial success.

In 1822 he succeeded Troost as professor of chemistry in the Philadelphia College of Pharmacy; in 1831 he took the chair of *materia medica*, which Samuel Jackson had vacated, and Bache at the same time came in as professor of chemistry, a position which



he held for ten years, or until 1841. In that year, he resigned to accept a similar position in Jefferson Medical College, which he occupied at the time of his death on March 19, 1864. Bache was actively identified with the later revisions of the *Pharmacopœia*. In 1860 he was chairman of the Committee of Revision. He loved science and was an industrious writer. At one time he was president of the American Philosophical Society, at another vice-president of the College of Physicians of Philadelphia. He held membership in many other scientific bodies.

Bache was made a Master Mason in Franklin Lodge, No. 134 F. and A. M., named after his great grandfather Benjamin Franklin, on April 16, 1814.

The junction of the minds of two such men as Wood and Bache in directing the teaching of the Philadelphia College of Pharmacy in its early years was of incalculable value in giving the institution a high scientific standing.

### Robert Eglesfeld Griffith

Professor of Materia Medica and Pharmacy, 1835-1836.

Robert Eglesfeld Griffith, who succeeded Wood as professor of materia medica and pharmacy in the College, held the chair for but one year, 1835-1836, but he had edited the *American Journal of Pharmacy* since the death of Benjamin Ellis. It was during this period that, by reason of his original papers on medicinal plants, he made a reputation for the journal in a field for which it long held a noteworthy position. He was born in Philadelphia in 1797, and graduated from the medical department of the University of Pennsylvania in 1820. In 1836 he passed to the University of Maryland to go thence to the University of Virginia, but illness compelled him to relinquish his duties and he proceeded to the West Indies to regain his health. Returning to the United States, he devoted his attention for a time to experimental agriculture on a farm near Baltimore.

Later he came back to Philadelphia, giving his time to private literary pursuits. He edited the translation of several foreign scientific works and wrote and published Griffith's *Medical Botany*, and Griffith's *Universal Formulary*. The former comprises nearly 700 pages. Dedicated to Torrey and Gray, with whom he had a close friendship, it soon came into general use. Up to this time there was no book of an authoritative character which was especially designed to elucidate the vegetable materia medica. It was not a compilation, says Henry Kraemer, but "the product of a master mind! On every page there is revealed careful work and it is a credit to the author." Griffith's "Universal Formulary" was a compendious collection of formulas and pharmaceutical processes. While not the first to be prepared in this country—the first was that of Ellis—it was long a standard work, being edited after the author's death by Thomas, and then by Maisch.

Griffith was also a high authority upon the subject of conchology at the time of his death in 1850. He was one of the vice-presidents of the Academy of Natural Sciences of Philadelphia. His friends and correspondents included some of the most distinguished scientists of Europe as well as of this country.

### Joseph Carson

Professor of Materia Medica and Pharmacy, 1836-1846; Professor of Materia Medica, 1846-1850.

Joseph Carson, who succeeded Griffith as professor of materia medica and pharmacy, was born in Philadelphia, April 19, 1808. His paternal ancestors were originally Scotch. His grandfather, Joseph Carson, was a shipping merchant in Philadelphia, who signed the non-importation agreement and later, like Robert Morris, lent his credit to the Continental Congress during the struggle for American Independence, and his father, also Joseph Carson, and also a merchant, married Mary Ann Hampton, daughter of Jonathan Hampton, an officer in the Continental Army.

Young Carson was the eldest of five children. At the age of fifteen he entered the University of Pennsylvania and graduated as a bachelor of arts in the class of 1826. He



then found employment in the drug store of Edward Lowber of Philadelphia, where he became interested in botany. He then decided to study medicine. His preceptor was Dr. Thomas T. Hewson, from whose office he was matriculated in the Medical Department of the University and from which he received the medical degree in 1830.

For a year or two he sailed the seas and visited foreign countries as a ship's surgeon, making extended observations in botanical and kindred fields during his travels. Upon his return, he engaged in the general practice of his profession. From 1836 to 1850, while on the Faculty of the Philadelphia College of Pharmacy, he published two notable volumes on medical botany, illustrated with 100 large colored lithograph plates; this magnificent and now rare work was the first dealing with botany to bear the imprint of a professor of the College on its title page.

He was the editor of the *American Journal of Pharmacy* during the entire period of his connection with the school. His resignation in 1850 followed his election to the chair of *materia medica* in the Medical Department of the University of Pennsylvania as the successor of Dr. George B. Wood, a place which he held until 1876, when he retired by reason of ill health to be made a professor emeritus. His death ensued in his sixty-ninth year. His writings in addition to what have been named cover a large field.

Carson held many offices and enjoyed many honors outside of the Philadelphia College of Pharmacy and the University of Pennsylvania. For seventeen years he was curator of the American Philosophical Society. In 1870 he was president of the Pharmacopœial Convention and chairman of the committee of revision. A fluent and deliberate speaker, he was a favorite as a lecturer. In 1869, after years of patient labor, he published "A History of the Medical Department of the University of Pennsylvania from its Foundation in 1765, with Sketches of the Lives of Deceased Professors," a work of rare and enticing interest upon which his fame as a medical historian will safely rest.

### William R. Fisher

Professor of Pharmaceutical and General Chemistry, 1841-1842.

William R. Fisher, a member of the class of 1829 of the College, was one of the earliest graduates. Soon after completing his course, he removed from Philadelphia, his native city, to Baltimore, where he actively engaged himself in the literary and scientific enterprises of the community of his adoption; though his interests and affections constantly drew him back to Philadelphia, as was evidenced by his frequent contributions to the *American Journal of Pharmacy*. Indeed, William R. Fisher in Baltimore, and George D. Coggeshall in New York, were the most brilliant torch-bearers to go out from the College in its first years for a lighting of the way of pharmaceutical education in other parts of the Union.

Upon the resignation of Franklin Bache in 1841, Fisher was elected professor of chemistry, but he taught for only one term, since his spiritual leaning and the views of duty called him to the ministry. He retired, therefore, to prepare himself for this calling, and Bridges succeeded him. But disease came and he died in the autumn of 1842. His last important work was as a member of the committee of revision of the Pharmacopœia appointed by the College in 1840, which made such substantial and thorough-going recommendations of changes in the book that the original draft was almost entirely rewritten.

Fisher was a man of the highest and noblest sentiments, which he consistently proclaimed and upheld. He had accurate and wide knowledge and was a glowing lecturer.

### Robert Bridges

Professor of Pharmaceutical and General Chemistry, 1842-1846; Professor of Chemistry, 1846-1879; Professor Emeritus of Chemistry, 1879-1882.

Robert Bridges came of English ancestry. His grandfather was a sailmaker in Philadelphia, his father Culpeper Bridges, a merchant who married Sarah, the eleventh child of William Clifton, the well known Quaker blacksmith of Southwark. His parents had two sons, William Clifton and Robert Bridges, the latter born on March 5, 1806. Both sons were

liberally educated. William graduated from the department of arts of the University of Pennsylvania in 1821. Robert, after attending the University for a time proceeded to Dickinson College, where he was graduated in 1824. Returning to Philadelphia, he became a pupil of the well known Dr. Thomas T. Hewson who, for the accommodation of many students in his office, conducted a private medical school located on the north side of Library Street, near Fourth Street, in which Franklin Bache taught chemistry. This was the beginning of a connection between the two men which lasted during the life-time of Bache, who appointed Bridges his assistant in Hewson's school and kept him at his side at the Franklin Institute, in the Philadelphia College of Pharmacy, and at the Jefferson Medical College.

Meantime Bridges in 1828 graduated from the Medical Department of the University of Pennsylvania and opened an office for practice, though his singularly modest disposition and retiring character brought him no great success. When Bache left the Philadelphia College of Pharmacy in 1841 to go to Jefferson Medical College, Bridges was a candidate for the vacant place, but William R. Fisher was elected by a majority of two votes. Upon Fisher's retirement after a year, Bridges, in 1842, was the unanimous choice of the Board of Trustees to succeed him and he held the chair for thirty-seven years, when he was elected Professor Emeritus of Chemistry with an annuity of \$1,000 in token of appreciation of his long years of faithful and valuable service to the institution. Painstaking and thorough in his teaching and kindly in his relations with the students, he was most highly esteemed. His personality, like his lessons, made a deep and lasting impression upon the thousands of students of the school he had taught.

He made a number of contributions to scientific literature, several of them being published in the *American Journal of Pharmacy* of which he was for a time, an assistant editor. He edited and revised Fowne's Text Book of Chemistry, and assisted George B. Wood, after Bache's death, in the revision of the United States Dispensatory. He died February 20, 1882.

Bridges' loyalty to the College and all that it stood for, his untiring industry as a teacher, his noble life and his eminently unselfish character, endeared him to all, and is affectionately remembered even to this day.

### William Procter, Jr.

Professor of Pharmacy, 1846-1866; Professor of Theory and Practice of Pharmacy, 1872-1874; Corresponding Secretary, 1855-1867; Second Vice-President, 1868-1869; First Vice-President, 1867-1868; 1869-1874.

William Procter, Jr. belongs to an English Quaker family. His father Isaac Procter, came out of England in 1793 and engaged in business in Baltimore; he married Rebecca Farquhar on November 3, 1799, and their ninth child, William, Jr. (so named as to distinguish him from his uncle), was born on May 3, 1817. The father's early death in 1820 prevented the boy from receiving a liberal education in his youth. Visiting Philadelphia, young Procter became acquainted with Joseph C. Turnpenny, then learning the drug business with Henry M. Zollickoffer at Sixth and Pine Streets, and in 1831, at the age of fourteen, he entered that well-known store as an apprentice. Here his young mind received its first lessons in pharmacy. In 1837 he was graduated from the College, the subject of his thesis being "Lobelia Inflata"; three years later was elected a member of the College, the beginning of a long period of signally notable services to the institution and to pharmacy generally.

He quietly continued his work in Zollickoffer's store, studying diligently and making journeys for recreation and improvement, from time to time, to various parts of the country—to Washington, to Ohio, returning by way of Niagara Falls, to Boston by sea and to other places, recording his botanical and other observations as he proceeded. Meanwhile he was reading diligently in his leisure hours. It was not until 1844 that he stood "behind his own counter," having purchased a property and opened a store at the southwest corner Ninth and Lombard Streets, where he continued in the retail drug business for many years.

Already he had made the acquaintance of some of the principal scientific workers of the city. In 1841 he was secretary to the Committee of Revision of the Pharmacopœia, mak-



ing numerous experiments; he was also active on the committee of the College at work on the same subject, while his activities on the successive revisions of the Pharmacopœia were untiring and of the greatest practical value.

In 1846 the College took a most important step forward. It divided the chair of materia medica and pharmacy (which had been in existence since 1821) into two—one chair on materia medica, and the other on pharmacy; and William Procter, Jr., was unanimously elected the professor of pharmacy as the man best qualified to assume the duties and tasks of the new position; and the high character of his lectures and their evident practicality brought him instant fame and appreciation.

There was no subject which enlisted his attention so much as the advancement of pharmacy. For a time he was associated with Carson as co-editor of the *American Journal of Pharmacy*, and upon the latter's retirement in 1850, Procter assumed sole editorial charge, a position which he held until 1871, when he was succeeded by John M. Maisch. For twenty years, the journal was a reflection of this man's active outreaching mind. He filled its pages with valuable material adapted to the needs and contributing to the education of American pharmacists, while the publication increased the reputation of its editor and the College which sponsored it. His own service as an author is made apparent when it is known that there are 550 original articles in the journal to which his name is attached, exclusive of extracts and editorials. In 1849 he issued his American edition of Procter and Redwood's "Practical Pharmacy," a voluminous work enriched by many additions from his pen, but which did not go through a second edition by reason of the cost of proper illustrations, which the publishers refused to incur, and without which much of the value of the work would have been lost.

"The American Pharmaceutical Association was the offspring of Procter's able and versatile mind. Throughout the years of his life which followed the organization of that body, he gave to it the richest treasures of an intellect fitted beyond all others for the work which he had undertaken. In 1853 he was chairman of the committee on the progress of pharmacy, and chairman of a committee to report a syllabus of a course of study for students of pharmacy, which committee reported in 1858. He was corresponding secretary of the Association from 1852 to 1857, first vice-president in 1859-1860, and was elected president at its session held in Philadelphia in 1862. The pharmacists of America ought not to let the memory of their most distinguished colleague fall into oblivion. They should keep the memory of William Procter, Jr., green in their hearts and should give him a monument more lasting than stone or bronze—a monument built in their affections and in the affections of those who come after them. Let us remember that the favorite child of his genius was the American Pharmaceutical Association. It was here that his work became as broad as his country." (Albert E. Ebert.)

Procter resigned the chair of pharmacy in 1866, and it was occupied one year by Maisch, but the latter, in 1867, exchanged chairs with Parrish, then professor of materia medica, who became professor of the theory and practice of pharmacy, and continued in this position until his demise in 1872, when Procter was persuaded to return to the place. This second period of service covered only two years, for he died February 10, 1874.

Procter loved research and was an untiring worker. He had an earnest and inquiring mind and was full of energy. "In manner he was unostentatious and retiring. He was an observer rather than a talker, but possessed the ability of expressing himself in clear and pleasant language. As a lecturer he was didactic. The jewels of his character were integrity, sincerity and a just sense of duty to his fellows. Educated to the religious belief of the Society of Friends, and holding their views during his life, he made no profession of sectarianism, but had an extended charity for the views of those who differed with him. He was happy in the use of his pen, and his essays were marked by clearness of expression and carefulness of detail. His investigation evidenced a faithfulness in research and a completeness which has made his name an authority." (Charles Bullock.) The character and extent of Procter's services for his profession made him truly "The Father of American Pharmacy."



### Robert P. Thomas

Professor of Materia Medica, 1850-1864.

Robert P. Thomas who succeeded Carson as professor of materia medica in the College, was born in 1821 (May 29), the year the apothecaries of Philadelphia were meeting in Carpenters' Hall to form the College. Of Quaker ancestry and training, he was sent to the Westtown School in Chester County for his early education. At sixteen he was obliged to enter the counting room of a shipping house, though his mind was bent upon medical study. In order to promote his ambition, he obtained the appointment, at the age of twenty-four, as assistant apothecary to the Philadelphia Dispensary, where he remained for a year. This connection enabled him to finish his medical course and take the degree of doctor of medicine at the University of Pennsylvania in 1847. Practice came to him only slowly, but in 1850 he was elected over Edward Parrish as Carson's successor.

Thomas brought much enthusiasm and great talent to the post. Soon he attached every one to him and it has been said that he was the ablest lecturer of his time in the United States on the subject of materia medica. He is named as the equal of Wood, then nearly ready to retire from active service. His writings, published in the *American Journal of Pharmacy* and elsewhere, attest his high character as a scientist. His most extensive literary labors were connected with the revision of Ellis's "Medical Formulary," and Griffith's "Universal Formulary." His death resulted suddenly from spotted fever in 1864. He lectured to his class on the evening of February 1, 1864, at the time apparently in the best of health. He rose the next morning with alarming symptoms of disease, which culminated fatally the following day. His passing was widely mourned.

### Edward Parrish

Professor of Materia Medica, 1864-1867; Professor of Theory and Practice of Pharmacy, 1867-1872; Recording Secretary, 1854-1864.

Edward Parrish was a son of Dr. Joseph Parrish, one of the most prominent figures in the medical history and the general life of the city in the first half of nineteenth century; "perhaps no one," said Dr. Joseph B. Wood, one of the many pupils who studied in his office (and as many as thirty were sometimes under his instruction at once), "was personally known more extensively in the city, and connected himself by a greater variety of beneficent services with every ramification of society."

Edward was the seventh son of Joseph Parrish and Susanna Cox Parrish, and was born on May 31, 1822, at the old homestead on Arch Street below Fourth. His early education was had in the Friends' School of Philadelphia; in 1838 he was apprenticed to his brother Dillwyn at the southwest corner of Eighth and Arch Streets. He matriculated at the College two years later, and in 1842 was graduated from the College, the subject of his thesis being "Statica Caroliniana."

In 1843 he purchased the drug store at the northwest corner of Ninth and Chestnut Streets, adjoining the building of the University of Pennsylvania, which brought him in contact with medical students and their wants. He believed that those who should return to their homes, often in isolated communities, would be without the information that would enable them to compound and dispense medicines for their patients, and that pharmaceutical knowledge was necessary to them, since they would be far removed from prescription drug stores, still to be found only in the largest towns and cities. He therefore started a School of Practical Pharmacy in the rear of his building at Ninth and Chestnut Streets, and gave courses of instruction to those who wished to avail themselves of them. Later (1850), becoming a partner of his brother Dillwyn, at Eighth and Arch Streets, the school was removed to that place, where better accommodations were had and instruction was given to both pharmaceutical and medical students.

In 1855 he published the first edition of his text book entitled "Introduction to Practical Pharmacy" (later called "Treatise on Pharmacy"), followed in 1859 and in 1864 by other and more extended editions.

In 1850 Parrish was a candidate to succeed Carson in the College, but the chair had never been held by any one but a graduate in medicine, and the Trustees elected Dr. Thomas instead. Upon Thomas's death in 1864, Parrish again offered himself as a candidate. He had long been active in the College, for ten years as its secretary. He was now successful, and was elected to the professorship, holding it for three years, or until 1867, when he exchanged chairs with Maisch, then professor of pharmacy. Parrish continued to occupy the chair of pharmacy, or rather, theory and practice of pharmacy, as it was now called, until his death in 1872.

He was one of the founders of Swarthmore College in 1864 and played an important part in collecting funds for the establishment of that institution, of which he was unanimously chosen to be its first president.

He took an active and efficient part in securing the passage by the Legislature of Pennsylvania of the pharmacy act of 1872 requiring examination and licensure for pharmacists and their assistants in the City of Philadelphia. He was appointed by Mayor Stokely as a member of the board created by this act. His death occurred September 9, 1872, at Fort Sill, in the Indian Territory, where he had gone by appointment of the Government for duties connected with the management of the Indian tribes.

He became a member of the American Pharmaceutical Association upon its organization in 1852, was recording secretary in 1853, first vice-president in 1866, and president in 1868; and was most active in its work.

Parrish loved education and was a born teacher. Whether addressing his own school, or the College or students, or the American Pharmaceutical Association, or Swarthmore College—in which he was deeply interested, also—"his free and open manner, the interest he took in his subjects, his good delivery as a speaker, rendered him a favorite and gave him influence; and his ready pen was always at command to bring together in order the results of his reflections and inquiry, whether these related to the ethics of pharmacy, the by-laws of associations, or the advantages of education, general or special" (William Procter, Jr.) He was exceedingly happy in his manner of classifying and grouping facts, so that his personality was deeply impressed upon his work and his name became a household word in American Pharmacy.

### John M. Maisch

Professor of Pharmacy, 1866-1867; Professor of *Materia Medica* and Botany, 1867-1893; Dean, 1879-1893.

John Michael Maisch, the eighth to hold the professorship of *materia medica* in the College, was born in Hanau, Germany, on January 30, 1831. After attending the schools of his native town, he was apprenticed to a goldsmith. This connection was of short duration. He was put into school again for the purpose of preparing for a university. But a long illness supervened. Upon his recovery, the revolutionary spirit was spreading over the country, and he embraced the tenets of the leaders of the popular uprising of 1848. Put into prison for preaching liberal doctrines he, like Carl Schurz, escaped and came to America.

He reached Baltimore in 1849. Now for several years he had the most various occupations in that city, Washington, Philadelphia and New York; in the last two cities from 1853-1859. The scientific bent of his mind led him to constant study and experimentation in chemistry, especially as that science bore upon pharmacy, and in 1859 he began to teach in Parrish's School of Practical Pharmacy. This connection lasted but a little while. In 1861 he was called to the chair of *materia medica* and pharmacy in the College of Pharmacy of the City of New York, at the same time being employed in the laboratory of Dr. Edward R. Squibb, of Brooklyn, who became a useful and interested friend.

In 1863, through Dr. Squibb, he became the chemist in charge of the United States Army Laboratory, located at Sixth and Oxford Streets, Philadelphia. Here by his ability and careful management he saved the Government large sums of money.

After the close of the Civil War he opened a drug store at 1607 Ridge Avenue and acquired an excellent reputation as a pharmacist. For some years he had been actively identified with the work of the Philadelphia College of Pharmacy. Now in 1866, upon the resigna-



tion of Professor Procter, he was elected to the chair of pharmacy, but in the following year, 1867, by mutual consent, he exchanged professorships with Edward Parrish, who since Thomas's death had held the chair of materia medica. Maisch's interests and talents more nearly fitted him for this position, and because of his personal qualifications for such teaching, the chair was enlarged to comprehend the subject of botany. For twenty-six years, or until his death in 1893, he continued to hold this important position, to the great advantage of the school.

In October, 1870, there was opened in the College under the auspices of the Alumni Association, a pharmaceutical and chemical laboratory for individual instruction and Professor Maisch accepted charge of it. As a sequence, a laboratory course in operative pharmacy was inaugurated by Professor Remington in 1878, and Professor Maisch confined his laboratory work to analytical chemistry; in 1881 he resigned, and Professor Frederick B. Power was elected director of the chemical laboratory.

At the same time Maisch was editor of the *American Journal of Pharmacy*, upon which he impressed his strong personality, publishing no less than 400 original articles exclusive of editorials. In 1856 he joined the American Pharmaceutical Association, and was elected in 1860 chairman of the committee on the progress of pharmacy, in 1862 corresponding secretary, in 1863 first vice-president, in 1864 chairman of the executive committee, and in 1865 permanent secretary, the duties of which he performed until his demise. His labor on behalf of the national organization was most useful and thorough; twenty-seven volumes of its Proceedings of the Associations were published under his supervision.



He took a leading part in the work of revising the Pharmacopœia at the recurring decennial periods. His pen was always busy, as is attested by a great number of titles of his published papers and books. He revised or assisted in the revision of several text books. In 1874 he revised the third Edition of "A Universal Formulary," by R. Eglesfeld Griffith, M.D. In 1882 he published the first edition of his "Organic Materia Medica," which passed through five editions during his life time. With Dr. Alfred Stille he edited the "National Dispensatory" which had reached its sixth edition in 1895.

The list of his memberships in American and foreign scientific bodies was long and he is rightly held to have been one of the greatest of teachers, one of the most painstaking and effective observers and investigators, one of the most industrious writers in the science who has appeared, not only in the history of the College, but in the broader field of American pharmacy and even international pharmacy.

The last honor he received was the Hanbury Gold Medal, given by the Pharmaceutical Society of Great Britain as a memorial to Daniel Hanbury, the eminent pharmacognocist, and awarded biennially to those who have pre-eminently distinguished themselves in pharmacognosy. The President of the Linnæan Society, the President of the Royal Chemical So-



ciety, the President of the Pharmaceutical Society of Great Britain, the President of the British Pharmaceutical Conference and Francis Ransom were the adjudicators of the award. This was the first Hanbury Medal that had come to America and was to have been presented to Professor Maisch by President Michael Carteighe of the Pharmaceutical Society of Great Britain in August, 1893, at Chicago, upon the occasion of the meeting of the International Pharmaceutical Congress over which Professor Remington was to preside, but Maisch was too ill to be present and Remington was deputized to present the medal to him. The list of those who had received the medal embraced such international authorities as Frederick August Flückiger (1881), John Eliot Howard (1883), George Dragendorff (1885), William Dymock (1887), Gustav Planchon (1889), and Julius Oswald Hesse (1891).

As soon as Remington returned to Philadelphia he called on Maisch. He found him on his couch quietly awaiting the Eternal Summons and handed him the Hanbury Medal; and as the golden glow of the setting sun streamed through the western window, his face, wan with suffering, was illumined with joy supreme! It was as if the great authorities of the world were saying to him: "Well done, good and faithful servant of science," and it was also, as if this presaged similar commendation by the Greatest Authority of All in the Great Beyond, in a few days hence. And so on September 10, 1893, the soul of John Michael Maisch passed on.

He was a member of Mt. Moriah Lodge, No. 155, F. and A. M., and of Harmony Chapter, No. 52, R. A. M.

Maisch was of tall and commanding appearance with a rugged frame and features that showed strength of character in every line. From his eyes shone the sunny, warm-hearted nature that dwelt within. His memory was keenly retentive—his brain a veritable storehouse of facts and incidents relating to pharmacy and allied sciences, all ready to draw upon at a moment's notice. And his work will live through the years to come. He was truly one of the master minds of American Pharmacy.

### Joseph P. Remington

Professor of Theory and Practice of Pharmacy, 1874-1918; Director of the Pharmaceutical Laboratory, 1878-1918; Dean, 1893-1918.

Joseph Price Remington was born in Philadelphia on March 26, 1847. He was a son of Dr. Isaac Remington, a practicing physician, and Lydia Hart Remington, a descendant of Townsend Speakman, one of the earliest of Philadelphia apothecaries. From his boyhood he was given to chemical experimentation. His father's death when he was fifteen, compelled him to make his own way in the world, and on January 1, 1863, he apprenticed himself to Charles Ellis, Son and Co. Charles Ellis, the head of the firm, was at that time the president of the College, and took more than ordinary interest in the young apprentice.

Entering the College, he was graduated in 1866, and the next year found him in the employ of Dr. Edward R. Squibb, of Brooklyn, who was probably the most painstaking and conscientious manufacturing pharmacist of the country. He made his home with the family of Dr. Squibb for nearly three years, during which time he had unusual opportunities for development. The death of his mother at this time, necessitated his return to Philadelphia, and he entered the employ of Powers and Weightman, with whom he continued until 1872, when he purchased the retail drug store at the northeast corner of Thirteenth and Walnut Streets. Here he continued in business for thirteen years.

His active participation in the affairs of the Philadelphia College of Pharmacy began in 1871, when he became an assistant to Professor Edward Parrish, then teaching pharmacy. After Parrish's death in 1872, and Procter's return to the chair of pharmacy, he retained Remington as his assistant, and when Procter died in 1874, Remington was elected to succeed him. Thus was begun a remarkable connection full of opportunities for himself and of meaning to the College. He displayed unusual executive ability. Of easy address, he developed into a fluent and forceful speaker, who was heard with pleasure, not only in the College, but on the platform elsewhere.

He became a member of the American Pharmaceutical Association in 1867, and in that body his service was varied and continuous. He played an unusually prominent part in its

meetings during the Centennial Exhibition in Philadelphia in 1876, and was its president in 1892, and during the World's Fair in Chicago, in 1893, he presided over the meetings of the International Pharmaceutical Congress.

In 1878 he aided in organizing the Pennsylvania Pharmaceutical Association, the meetings of which he attended with regularity and into the deliberations of which he entered with characteristic enthusiasm and ability. He was elected president of the Association in 1896.

In the conferences of pharmacists with various medical associations and other scientific bodies he exhibited unusual diplomatic skill, all the while bringing increased prestige to pharmacy and to the College.

His connection with the Pharmacopœia began in 1877 when he was appointed to serve on an Auxiliary Committee of Revision appointed by the College, which made recommendations for the revision of 1880 of such practical value that he found himself a member and first vice-chairman of the Committee of Revision of 1880. In 1890 and 1900, he was again in the second position on the committee and upon the lamented death of Chairman Charles Rice in 1901, he was elected to the chairmanship, and bore the brunt of the labor of making the uncompleted volume ready for press. He was also in charge of the ninth revision in 1910, and continued in the chairmanship until his death.

In 1879, he became an associate editor of the United States Dispensatory, and had an important share in the revision of this work for the editions which successively appeared after that date. In 1885 he first issued his "Practice of Pharmacy," one of the best known text books of pharmacy in the world. It has passed through a number of editions, each of which has been successful in the highest degree and has been translated into other languages; no other work has been accounted so nearly indispensable in the drug store and laboratory.

He was elected in 1886-1887, a Fellow of the Chemical, of the Linnæan, and of the Royal Microscopic Societies of Great Britain. His Alma Mater conferred upon him the honorary degree of master in pharmacy (Ph.M.). He was an honorary member of the College of Pharmacy of the City of New York, and of many state pharmaceutical associations. He was, also, a member of the American Philosophical Society, the American Chemical Society, the American Geographical Society, the Academy of Natural Sciences of Philadelphia, and of the Historical Society of Pennsylvania. He was appointed to represent the United States at the Eighth International Pharmaceutical Congress held at Brussels in 1896, was a delegate to the Pan-American Medical Congress in 1893; also to the second congress in Mexico in 1896. He held honorary membership in the Pharmaceutical Society of Great Britain, the British Pharmaceutical Conference, Pharmaceutische Gesellschaft in St. Petersburg, Instituto Medico Nacional, Mexico; Société de Pharmacie d'Anvers, Société Royale de Pharmacie de Bruxelles. He held membership, also, in the Art Club, the Society of American Authors, the Franklin Inn Club, and the Church Club, all of Philadelphia.

He died on New Year's Day of 1918 after completing nearly fifty years of service in the College, first as an assistant, then for forty-four years as professor of the theory and practice of pharmacy. Since Maisch's death in 1893 he had been dean of the College. He had just finished the revision of the twentieth edition of the U. S. Dispensatory, and the sixth edition of his Practice of Pharmacy. His work was done; his life had been one of almost unexampled industry and full of honors.

Remington was that rare combination—a master scientist and a master-executive, and was the foremost figure of his day in American Pharmacy. Perhaps his greatest service was his promotion of research. No man of his time directed and dissected more research work than he, as chairman of the committee of revision of the Pharmacopœia, for three successive decades. His wide knowledge of pharmaceutical literature, his practicality, his fine judgment, his forceful character and his reasonableness, gave to his opinions almost commanding authority. A vigorous personality, ever-zealous in advancing the interests of his profession, ready in debate, wise in counsel, and of unfailing courtesy and good humor, he was, also, a deep student of human nature, a discriminating patron of art and literature, having a rich fund of scientific knowledge and general information, and a winning personality; possessing, in brief, all the qualities that endeared him to hosts of friends and compelled the respect even of those who differed with him.



**Samuel P. Sadtler**

Professor of Chemistry, 1879-1916; Professor Emeritus of Chemistry, 1916-

Samuel Philip Sadtler was born in Pine Grove, Schuylkill Co., Pa., on July 18, 1847. His father Rev. Dr. Benjamin S. Sadtler, was a Lutheran Minister, who for ten years was president of Muhlenberg College at Allentown, Pa., but at the time of his son's birth had a charge in Pine Grove. After graduating from the high school of Easton, Pa., in 1862, he entered the Pennsylvania College at Gettysburg, and was graduated in 1867.

He then proceeded to the newly established Lehigh University at Bethlehem, and took his first year of professional study, after which he went to Harvard, in 1868, as an advanced student under the distinguished chemist Dr. Wolcott Gibbs. Completing the course of the Lawrence Scientific School in January, 1870, with the degree of bachelor of science, he sailed for Germany, where in the following year at Göttingen, under Professor Woehler, one of the great names in the history of chemistry, he received the degree of doctor of philosophy. Returning to this country in 1871, he was appointed professor of chemistry and physics at the Pennsylvania College, and in the fall of 1874 came to Philadelphia as professor of general and organic chemistry in the University of Pennsylvania.

It was while holding this position that in 1878, he was asked to relieve the venerable Robert Bridges at the Philadelphia College of Pharmacy by taking a part of his lecture work, and the next year when Bridges retired, he was elected as his successor. Upon the demise of Henry Trimble, professor of analytical chemistry, in the fall of 1898, Professor Sadtler was placed in charge of the Chemical Laboratory for the coming term with Josiah C. Peacock as his assistant.

After seventeen years of service at the University of Pennsylvania, he, in 1891, relinquished his duties there and confined himself to his work at the College, which was supplemented by private practice as a consulting chemical expert which in the course of years, has brought him into contact with the largest industrial interests of the country. He has devoted much attention and study to the modern processes of chemical manufacture and the industrial applications of chemistry, and is a recognized authority upon this subject, particularly in the field of organic chemistry, being frequently engaged as a chemical expert in many important patent suits.

In 1916 he retired from the chair in the College which he had held for thirty-seven years, and was made professor emeritus of chemistry, a position which he now holds. His resignation was marked by a complimentary dinner tendered him at Atlantic City in connection with the 1916 meeting of the American Pharmaceutical Association. Addresses were made and gifts from the alumni were presented to the guest of honor.

Professor Sadtler's first literary work was a "Handbook of Chemical Experimentation for Lecturers and Teachers" in 1877. He was the first American editor of the eighth edition of Atfield's Chemistry, a text book especially designed for students of pharmacy and chemistry in England and the United States. In 1880, he became the chemical editor of the United States Dispensary, and continued as such until 1916. In 1891 he published the first edition of his "Industrial Organic Chemistry," of which the fifth edition is now ready for issue; this has also been translated into German and Russian. In 1895, he published jointly with Professor Henry Trimble the first edition of "Sadtler and Trimble's Pharmaceutical and Medical Chemistry," which, since Professor Trimble's death, and in its later editions, has been known as "Sadtler and Coblenz's Pharmaceutical and Medical Chemistry."

He has been a delegate from the College to the U. S. Pharmacopœia Conventions of 1890, 1900 and 1910, and was a member of the Committee of Revision for these two successive decades. He has also contributed many scientific papers to chemical and pharmaceutical journals and delivered many public addresses on chemical and technical subjects. He is a member of a large number of chemical societies and other scientific bodies, perhaps the most important of which is the "American Institute of Chemical Engineers," of which he was one of the founders and the first president.



He is a member of the American Philosophical Society, of which he was secretary from 1898 to 1902; the American Association for the Advancement of Science; the American Chemical Society; the American Electro-chemical Society; the Chemical Societies of London and Berlin, and the Society of Chemical Industry, and the Franklin Institute, of which he is professor emeritus of chemistry. Of distinctively pharmaceutical organizations, he is a member of the American Pharmaceutical Association and the Pennsylvania Pharmaceutical Association. He is also a member of the Chemists Club of New York, and the Engineers Club and the University Club of Philadelphia.

Pennsylvania College, from which he had graduated thirty-five years before, conferred upon him, in 1902, the honorary degree of doctor of laws.

For many years he has taken an active part in the work of the Lutheran Church and has long occupied the position of president on its Board of Publication.

Sadtler has won national and international renown as a master mind in pharmaceutical and industrial chemistry and has done yeoman service in upbuilding the College. He has borne the heat and burden of the day for the past forty-three years as a teacher in the institution, has served for many years as dean of the Food and Drugs Course and on many important committees of the College, including the Publication Committee (of which he was the chairman for many years), and of the Board of Trustees, and now, as chairman of the latter, his wide knowledge, experience and matured judgment are of the greatest helpfulness in directing the executive work of the institution.

### Frederick B. Power

Professor of Analytical Chemistry, 1881-1883.

Frederick Belding Power, the first to hold the chair of analytical chemistry in the Philadelphia College of Pharmacy, was born in Hudson, N. Y., in 1853. He graduated from the College in 1874, the subject of his thesis being "Resina Podophylli."

After graduation, he decided to continue his scientific studies, and entered the University of Strassburg in 1876, from which in 1880 he received the degree of doctor of philosophy. During this period he conducted some important researches, and was appointed assistant to the eminent scientist Flückiger, who was one of his teachers.

He returned to America in 1880 and for three years was in charge of the chemical laboratory of the Philadelphia College of Pharmacy. In 1883 he was called to the University of Wisconsin to organize the department of pharmacy, of which he was the dean, and he there gave instruction in pharmaceutical chemistry and materia medica while also conducting laboratory work. In recognition of this service, and to commemorate the twenty-fifth anniversary of the establishment of the school of pharmacy, the University conferred upon him in 1908 the honorary degree of doctor of laws.

While still connected with the University of Wisconsin, he was appointed a member of the Committee of Revision of the United States Pharmacopœia of 1890, and contributed largely to that work. In 1892 he resigned his academic position in order to become the scientific director of the newly established laboratories of Fritzsche Brothers, near New York, which were devoted to the production of essential oils and fine organic chemicals. It was while thus engaged that many of his well-known researches on the more important essential oils were conducted.

In 1896 when his life-long friend, Henry S. Wellcome, established his chemical research laboratories in London, Power was appointed director of that institution which has since gained such renown in the scientific world. He was thus in a position to devote himself exclusively to chemical research in which he was assisted by a large staff of highly trained chemists. During those years in London, Power gained a wide reputation for the highly scientific character and fruitfulness of his researches, which covered a wide field, especially in plant chemistry. The results of these researches were communicated to the various learned societies and published in the leading scientific journals. At the same time an opportunity was afforded him of meeting many of the most prominent scientists of Europe, with some of whom close and enduring friendships were formed.

He was elected a fellow of the London Chemical Society in 1896, and he was also intimately associated with the Society of Chemical Industry on the Council and Publication Committee of which he served for several years. In 1913 the Chemical and Linnæan Societies and



FREDERICK B. POWER

Pharmaceutical Society of Great Britain jointly awarded him the Hanbury Gold Medal in recognition of his researches in the natural history and chemistry of drugs. This was followed by the presentation to him of a beautiful illuminated address and album which represented the appreciation of numerous scientific men in many parts of the world and contained

their signatures. In 1913 he received, also, the degree of master in pharmacy *honoris causa* from the Philadelphia College of Pharmacy. On resigning his position in London in 1914 in order to return to America, a gold medal bearing his profile in relief was awarded him by Henry S. Wellcome. This medal was inscribed as a recognition of his distinguished services to science during the eighteen and a half years as director of the Wellcome Research Laboratories in London. The presentation of this medal took place in Washington, D. C., in May, 1921, in the presence of Mr. Wellcome and a very distinguished company. The address on this occasion was delivered by Dr. Charles D. Walcott, of the Smithsonian Institution and President of the National Academy of Sciences, who in the course of his remarks said: "Dr. Power for fifty years has spent his thinking hours among the complicated molecules of organic compounds, and, because he possessed that peculiar faculty of exhausting each subject which he takes up, has had the greatest influence both in America and Great Britain in raising the standards of our Pharmacopœias. He has gained distinction by his most difficult and life-consuming researches into the chemical composition of plant compounds."

In 1916 he was assigned a position in the Bureau of Chemistry of the U. S. Department of Agriculture, where he is in charge of the Phytochemical Laboratory, and he has recently been appointed by President Harding a member of the National Research Council.

Power has won great fame for his scientific research. He belongs to the same pre-eminent group of research workers in pharmacy, chemistry and correlated science as Procter, Maisch and Lloyd whose work has been of such marked value in the upbuilding of these sciences, and his achievements are of so high a scientific character that they are destined to assume even greater importance in the years to come.

### Henry Trimble

Assistant in Chemistry, 1881-1883; Professor of Analytical Chemistry, 1883-1898.

Henry Trimble was born near Chester, Pa., in 1853. Of Quaker parentage, he received his early education at the old Westtown school in Chester county. At nineteen he became an apprentice and in 1876 was graduated from the Philadelphia College of Pharmacy. wishing to supplement his training, he entered the Scientific Department of the University of Pennsylvania to pursue special work in organic chemistry, and then became an assistant of Professor Samuel P. Sadtler, in teaching organic chemistry. It was at this time that Professor Sadtler was invited to take the lectures in chemistry in the College given for so many years by Dr. Robert Bridges; and Trimble became Sadtler's assistant at the College. He was elected to an instructorship in 1881, and when Dr. Frederick B. Power resigned from the school as professor of analytical chemistry and director of the chemical laboratory in 1883, Trimble took up the duties of those positions. Meanwhile, for some five years, he had been engaged in the retail drug business with his friend and classmate, C. W. Warrington, at Fifth and Callowhill Streets, but upon his election to the Faculty of the College, he retired from this connection and gave his entire attention to teaching and research.

He was an industrious investigator in a number of fields, having devoted himself in a particular way to the tannins, upon which subject and sylviculture he wrote and published a number of papers and monographs. In 1885, he prepared and issued a small "Handbook of Analytical Chemistry" for use in his laboratory. After running through several editions, it was merged into the "Text Book of Pharmaceutical and Medical Chemistry," published in 1895 by Trimble and Sadtler jointly. In 1894 upon the death of Maisch, he became the editor of the *American Journal of Pharmacy*. He threw himself with much energy into this new work.

In 1896 he had the honorary degree of master of arts conferred upon him by Haverford College. His Alma Mater had previously (1891) conferred upon him the honorary degree of master in pharmacy (Ph.M.). In 1897 he was elected a member of the American Philosophical Society.

Trimble's health failed him. He was forced to seek relief in rest, but without avail, and he died on August 26, 1898, in the full flush of young manhood. "Starting as a pharma-



chemical apprentice himself and earning his way through College, every step of his career was carved out by his own exertions. His example may well be emulated by young men who start life with perhaps a fear that the difficulties ahead of them are too great and the rewards too remote and uncertain. He leaves behind him also for those who were privileged to know him well, precious recollection—that of a true hearted and faithful friend who was always the same and whose word could always be relied upon implicitly" (Samuel P. Sadtler).

### Frank X. Moerk

Assistant in Chemical Laboratory, 1884-1892; Instructor in Theoretical Chemistry, 1886-1899; Professor of Analytical Chemistry and Director of Chemical Laboratory, 1899-

Frank Xavier Moerk was born in Philadelphia, July 3, 1863; his family moved to Wilmington, Delaware, where, in his early boyhood, he received his education in private and public schools. Beginning in August, 1877, he served an apprenticeship with August Kuhlmann, a German apothecary of Wilmington.

Later he spent some time in Philadelphia in the drug store of Dr. Wm. McClean and Dr. Henry Mueller. In September, 1881, he matriculated at the Philadelphia College of Pharmacy, and spent two years in his senior years' work in order to complete his thesis, a comprehensive dissertation upon malt. In March, 1884, he was graduated as a Ph.G., with honors, being awarded the chemistry prize and the Henry C. Lea Prize of \$100.

He then became associated in the teaching work at the College by becoming an assistant and instructor, and in 1899 was made professor of analytical chemistry and director of the chemical laboratory. His rise in position and authority was rapid and continuous, and he now occupies the highest position the College has to offer in his line of work.

His long experience with students in analytical chemistry has developed in him the realization of the necessity for efficient teaching helps. His notes on "Qualitative Analysis," published in 1901, and his later and more complete work on "Qualitative Chemical Analysis," published in 1905, are models of clearness and simplicity and have helped thousands of students in their work. He has devised many improvements in apparatus, and the literature of scientific pharmacy contains many contributions from his pen, usually along the lines of the simplification of chemical analytical processes. Many of his suggestions have found their way into the permanent literature of the profession, and have been adopted by the Committee of Revision of the Pharmacopœia and other authoritative bodies.

In 1905 he received the honorary degree of Ph.M., from his Alma Mater.

Frank X. Moerk is an active member of many chemical and pharmaceutical organizations. His extensive acquaintance with scientific literature, his thoroughness in analytical chemical work, and his practical common sense, make him an ideal consultant upon technical problems; and as such he is in constant demand.

### Edson S. Bastin

Professor of Materia Medica and Botany, 1893-1897.

Edson Sewell Bastin, professor of materia medica and botany following John M. Maisch, was born in 1843 in Ozaukee County, Wisconsin. His boyhood was spent on a farm and his early opportunities for schooling were not large. His way was not made the easier by the death of his parents before he had yet reached his teens. The Civil War breaking out, he enlisted with a regiment of Wisconsin volunteer infantry. Coming out of the war a captain, he was offered a cadetship at West Point, but instead he chose to enter Chicago University from which he graduated in 1867. In the same university he pursued divinity studies for three years, intending to preach, but his interest in the natural sciences, and particularly botany, turned him to the drug business.

His record in the Army led to his receiving a political appointment. He became United States Marshal in Indian Territory, then a lawless region, but his wife could not endure the strain of the exciting life which he was obliged to lead in the performance of his duties, and they returned to Chicago, where, in 1874, he became the registrar of the University of Chicago. In this institution he began teaching botany. In 1876, he was also lecturing on this

subject in the Chicago College of Pharmacy, and continued his double connection until 1883, when he resigned from the university to devote his entire time to his work in the Chicago College of Pharmacy.

In 1887 Bastin issued the first edition of his "Elements of Botany," later known under the title of "College Botany." In 1890 he resigned his position in the Chicago College of Pharmacy to become professor of botany and materia medica in the Northwestern University, and in 1893 he was called to Philadelphia to take the chair so long occupied by Professor Maisch. Here he assumed charge of the new botanical and microscopical laboratory established by the College in 1894 and published an important work, "Laboratory Exercises in Botany," containing several hundred illustrations from his own hand.

Bastin was engaged upon large and useful undertakings when death claimed him, on April 6, 1897, as a result of cerebral hemorrhage. His fifty-four years had been led among vicissitudes unusual and various. Bastin—"Whether as student, soldier, teacher, author or artist, was a man and a thoroughly honest one, and a master in every station in which he was placed" (Henry Trimble).

### Clement B. Lowe

Instructor in Materia Medica and Botany, 1886-1897; Professor of Materia Medica, 1897-1921; Professor Emeritus of Materia Medica, 1921-

Clement Belton Lowe was born in Salem, N. J., in 1846, and his early education was obtained in the public schools of that place. Later he spent five years in Bucknell University, Lewistown, Pa., from which he was graduated in 1865 with the degree of Ph.B. He spent the year 1866 at the Philadelphia Polytechnic College, intending to become a civil engineer, but was compelled by ill health to relinquish this purpose. In 1867 he entered the drug business with William Lippincott at the northeast corner of Ninth and Vine Streets, later succeeding to the sole ownership of the business, which he continued until 1895. He became a student at the Philadelphia College of Pharmacy in 1882, and was graduated as a Ph.G. in 1884. He subsequently studied medicine at Jefferson Medical College, from which he was graduated in 1887. In 1899, he purchased the Pelham Pharmacy in Germantown, which he conducted until 1914, besides devoting part of his time to the practice of medicine.

In 1885, he was made quiz master in materia medica and botany of the Alumni Association and in 1886 became assistant to Professor Maisch and quiz master in materia medica and botany. When Professor Bastin succeeded Professor Maisch in 1893, he continued in the same positions.

Upon the demise of Professor Bastin in 1897, it was decided to divide the teaching of materia medica and botany in the College into two professorships. The one embracing materia medica, physiology and pharmacology was given to Clement B. Lowe, while the other including botany, pharmacognosy and microscopy was given to Henry Kraemer.

He has always maintained an active interest in the Alumni Association of the College, having been a member of its Executive Board for ten years and president in 1888-1889.

For many years, he took a prominent part in the Pennsylvania Pharmaceutical Association and has been a frequent contributor to its proceedings. He served as chairman of the committee on adulterations, and chairman of the committee on papers and queries. He was first vice-president of the association in 1900-1901 and president in 1907.

He has also been a prominent worker in the American Pharmaceutical Association, having occupied the position of secretary and of chairman of the section on education and legislation in 1899-1901. He was for some years the editor of the Alumni Report of the Alumni Association of the College, and is the author of "A Syllabus of the Botanical Natural Orders," which has passed through several editions, and a volume on "The Medicinal Plants of the Philippines."

Since 1914, when he sold his drug store in Pelham, Germantown, he has resided in Vineland, N. J., and has devoted much of his time to local affairs.

He resigned and was made professor emeritus of materia medica in 1921, when he was succeeded by Dr. Horatio C. Wood, Jr. He is now living in retirement in Vineland, N. J.



Despite the demands of a busy career, Clement B. Lowe has always been earnestly engaged in the work of the Baptist Church, and especially in the Sabbath School. He was formerly a deacon of the Fourth Baptist Church of Philadelphia, and a member and deacon of the Second Baptist Church of Germantown. He has been superintendent of both of these schools and president of the Baptist Superintendent's Association of Philadelphia.

### Henry Kraemer

Professor of Botany and Pharmacognosy and Director of Microscopical Laboratory, 1897-1917.

Henry Kraemer was born in Philadelphia on July 22, 1868. His early education was obtained in Girard College from which he was graduated in 1883. He then served an apprenticeship of five years with Dr. Clement B. Lowe of Philadelphia, attended the Philadelphia College of Pharmacy, from which he was graduated in 1889, winning the John M. Maisch Microscope Prize and the Henry C. Lea Prize of \$100. During his senior year at the College, and for a year thereafter, he was assistant in general chemistry to Professor Samuel P. Sadtler at the University of Pennsylvania.

In 1890 he became instructor in botany and pharmacognosy in the College of Pharmacy of the City of New York, and while in New York took a special course in botany at Barnard College. In 1891 he matriculated in the School of Mines of Columbia University, from which he was graduated in 1895 with the degree of bachelor of philosophy. During his senior year at Columbia, he had been elected professor of botany, pharmacognosy and materia medica in the School of Pharmacy of Northwestern University with one year's leave of absence before entering upon his duties. This year he spent abroad at the University of Marburg (Germany), studying under such eminent authorities as Meyer, Cohen, Zincke and Melde, and in June, 1896, was awarded the degree of doctor of philosophy *cum laude*.

In the fall of 1896 he began his work at the Northwestern University, where he remained for one year, when he came to the Philadelphia College of Pharmacy, upon the death of Professor Edson S. Bastin, whose chair was divided, the course of materia medica being given to Dr. Clement B. Lowe, and that of botany and pharmacognosy to Henry Kraemer, who took over also, the directorship of the Microscopical Laboratory.

In 1898, owing to the illness of Professor Henry Trimble, he became acting editor of the *American Journal of Pharmacy*, being elected editor in 1899 after the death of Professor Trimble, to the pages of which, during his nineteen years of service, he personally made a large number of contributions.

In addition to the regular courses in the Philadelphia College of Pharmacy, he inaugurated and carried on special courses in the microscopic examinations of foods and technical products and a course in bacteriology.

He became a member of the Committee of Revision of the United States Pharmacopoeia in 1900 and was made chairman of the sub-committee on botany and pharmacognosy, which position he held during the subsequent revision period of 1910 and is now occupying in the present revision work.

He is an active member of the American Pharmaceutical Association and was the reporter on the progress of pharmacy from 1892 to 1895, and has been a collaborator on a number of scientific publications.

He is the author of widely used text books on "Applied Economic Botany" and "Scientific and Applied Pharmacognosy," which had been through a number of revisions.

In 1917 he resigned his chair at the Philadelphia College of Pharmacy to become Dean of the Department of Pharmacy of the University of Michigan. He resigned from this position in 1920, and is now doing consulting work in bacteriology, botany and chemistry.

He is a member of the International Botanical Society, Botanical Society of America, Torrey Botanical Club, American Philosophical Society, American Association for Advancement of Science, and many other scientific organizations; and is an honorary member of the Sigma XI, and is affiliated with other college fraternities and with the Masonic order.



Henry Kraemer has been a voluminous contributor to scientific literature, especially along the lines of botany and pharmacognosy, and his enthusiasm for and love of scientific research have stimulated like qualities in hundreds of those with whom he has been associated; he has won for himself high fame as a scientist.

### John A. Roddy

Professor of Bacteriology and Hygiene, 1914-1919.

John A. Roddy was born in Philadelphia, August 16, 1884, and was raised in the city of his birth, receiving his preliminary education in the public schools and the Brown Preparatory School. He was graduated from Jefferson Medical College, Philadelphia, in 1907. In 1907 and 1908, he was an interne in St. Joseph's Hospital, Pittsburgh, Pa. He was engaged in general practice and clinical and bacteriological laboratory work in Pittsburgh during 1908-1910. In



JOHN A. RODDY

1910 he returned to Philadelphia to become demonstrator in the Department of Hygiene and Bacteriology of the Jefferson Medical College. He was subsequently appointed chief assistant Medical Division, C., Jefferson Hospital, for the purpose of medical research. Through the kindness of the late Surgeon General Wm. C. Gorgas, Dr. Roddy spent the summer of 1913 in the Ancon Hospital, Panama Canal Zone.

Upon his return to Philadelphia, in addition to his other duties, he organized the Department of Bacteriology and Hygiene at the Philadelphia College of Pharmacy in 1914, of which he became the first professor of bacteriology and hygiene.

He continued this work until April 14, 1917, when, upon declaration of war by the United States upon Germany, he resigned and offered his services to the Surgeon General

of the Army. His offer was accepted and he was ordered to report for duty at Fort Slocum, New York, two days later. He served in the Medical Department of the United States Army at Fort Slocum, New York, Camp Dix, N. J., and Fort Sill, Oklahoma, and continued in military service until discharged April 25, 1919, with the rank of major. Following his discharge from the army, he traveled for some time through the southwest and finally resumed the practice of medicine at Oklahoma City, Oklahoma, during the summer of 1919, where he has remained since.

John A. Roddy is a member of the American Medical Association, the American Public Health Association and other scientific organizations connected with his profession.

### Freeman P. Stroup

Instructor in Chemistry, 1899-1916; Associate Professor of Chemistry, 1910-1916; Acting Professor of General Chemistry, 1916-1917; Professor of General Chemistry, 1917-

Freeman Preston Stroup was born at Rouseville, Venango County, Pa., January 24, 1870. His early education was obtained in his native town.



FREEMAN P. STROUP

In 1891 he began a three years' apprenticeship in pharmacy with Dr. William C. Tyler of Rouseville. In 1894 he matriculated at the Philadelphia College of Pharmacy, and was graduated in 1896 with the degree of Ph.G. He then pursued a post graduate course of study in chemistry which he completed in 1897. In 1896 he was engaged as research assistant by Professor Samuel P. Sadtler in his private laboratory and continued in that capacity until 1899, when he accepted the position of chemist with the India Refining Company, re-

finers of coconut oil; in the fall of the same year, however, he accepted a position as assistant to Professor Sadtler and instructor in chemistry. In 1910, he became associate professor of chemistry and in 1917 was made professor of general chemistry. During 1911-1916, he was editor of the "College Bulletin." He became librarian of the College in 1920.

He is an active member of leading pharmaceutical and chemical societies and a regular attendant at their meetings, an energetic worker in the Alumni Association of the College, having been its president in 1905-1906, a member of the Masonic order, and of the Central Congregational Church of Philadelphia, of which he is an officer.

Freeman P. Stroup is a born teacher and has not only the happy faculty of making things clear to the student mind, but by his sympathetic interest has made many close friends among the thousands of students he has taught. His hobby is the devising of mechanical aids to the teaching of scientific subjects, in which direction he has remarkable talent.

### Julius W. Sturmer

Professor of Pharmaceutical Chemistry, 1916- ; Dean of Postgraduate and Special Courses, 1918-1920; Dean of Science, 1920-

Julius William Sturmer was born in Niagara County, N. Y., on a farm in 1870. In 1874 his family moved to Indiana where he became an adopted Hoosier.

In 1889 he entered Purdue University and pursued a modified pharmacy course which also included some work in the School of Science, and in the second year he worked in collaboration with one of the instructors of the University on organic synthesis. In 1891 he received the degree of graduate in pharmacy, and was appointed instructor in pharmacy immediately after graduation. He also conducted classes in organic chemistry and pursued additional studies in the School of Science during the next few years.

In 1894 he was elected professor of pharmacy, where he continued until 1912, when he resigned to become professor of pharmacy and dean of the Department of Pharmacy of the Medico-Chirurgical College of Philadelphia.

In 1910 he received the degree of doctor of pharmacy, Ph. D., in course, from the University of Buffalo for original work upon mixed solvents.

At the time of the merger of the Department of Pharmacy and Chemistry of the Medico-Chirurgical College with the Philadelphia College of Pharmacy in 1916, he became professor of pharmaceutical chemistry in the latter institution, and in 1918, dean of the Post Graduate and Special Courses, and in 1920, Dean of Science. In 1917 he received the honorary degree of Ph.M., from the Philadelphia College of Pharmacy.

Julius W. Sturmer is the author of a successful and widely used text book on "Pharmaceutical Latin," and one on "Pharmaceutical Arithmetic." He is the editor of the "Bulletin of the Philadelphia College of Pharmacy and Science" and is a frequent contributor to pharmaceutical literature.

### Heber W. Youngken

Assistant Professor of Botany and Pharmacognosy, 1916-1917; Acting Professor of Botany and Pharmacognosy, 1917-1918; Professor of Botany and Microscopy and Director of Microscopical Laboratory, 1918-

Heber Wilkinson Youngken was born October 31, 1885, on a farm in Richland Township, Bucks Co., Pa. His father and grandfather were both florists and nurserymen and his early days were spent in Quakertown, Pa., where his father was engaged in the florist and nursery business. His early training was in the public schools of Quakertown. He entered the drug store of Howard R. Moyer, of Quakertown in 1901, and after two years' practical experience, matriculated at the Medico-Chirurgical College of Pharmacy, from which he was graduated in 1905 with the degree Ph.G., and he passed a successful examination as a registered pharmacist in Pennsylvania in the same year.

He studied Greek, Latin and mathematics under private tutors during the following year, and entered Bucknell University in 1906, taking a classical course with electives in biology. He graduated from Bucknell in 1909 with an A.B. degree, *cum laude*. He im-



mediately entered the medical course of the Medico-Chirurgical College and completed two years of work in that department. During this time, he was demonstrator of biology and botany under Professors Shaw, Fox and McFarland. He gave up the study of medicine in 1911, to accept the position as instructor of botany and pharmacognosy and director of the botanical laboratory in the Department of Pharmacy and Chemistry of the Medico-Chirurgical College, becoming assistant professor in 1912.

During this same year he enrolled as a graduate student in the University of Pennsylvania, taking his major in botany and his minor in zoölogy. In 1914 he obtained the degree of M.S. at the University of Pennsylvania, and in 1915 the degree of Ph.D. In this same year he was made adjunct professor of the department in which he had been teaching at Medico-Chirurgical College, and when this College was merged with Philadelphia Col-



HEBER W. YOUNGKEN

lege of Pharmacy in 1916, he had just been elected professor of botany and pharmacognosy; he was now made an assistant professor of botany and pharmacognosy at the Philadelphia College of Pharmacy. Upon Professor Kraemer's resignation in 1917, he was made acting professor and in 1918 elected professor of botany and pharmacognosy and director of the microscopical laboratory, which position he still occupies. In 1919 he received the honorary degree of Ph.M. from the Philadelphia College of Pharmacy.

Heber W. Youngken is a member of several college fraternities, including the honorary Sigma XI. He is a member of leading scientific societies in pharmacy, chemistry, and botany, and an active worker in most of them, and a frequent contributor to scientific literature. His principal research work has been done in connection with genus *Myricaceæ*, upon which several valuable monographs have been contributed. He is the author of a "Pharmaceutical Botany," now in its third edition, and a very comprehensive work on "Pharmacognosy" issued in

1921. He is editor of the section on pharmaceutical botany and pharmacognosy of Botanical Abstracts, and is a member of the Board of Control of the same publication. He was elected secretary in 1920 and chairman in 1921 of the scientific section of the American Pharmaceutical Association.

### Charles H. LaWall

Instructor in Theory and Practice of Pharmacy, 1900-1917; Instructor in Pharmaceutical Arithmetic, 1904-1914; Associate Professor of Theory and Practice of Pharmacy, 1906-1918; Professor of Theory and Practice of Pharmacy, 1918- ; Dean, 1918-1920; Dean of Pharmacy, 1920-

Charles Herbert LaWall was born at Allentown, Pa., May 7, 1871. His father, John J. LaWall, was a pharmacist, who, in 1876, moved his family to Bloomsburg, Pa., where young LaWall obtained his early education, graduating from the high school and taking a college preparatory course at the Bloomsburg State Normal School.

In 1888 he began an apprenticeship in the wholesale and retail drug firm of Moyer Brothers of Bloomsburg. In 1891, he matriculated at the Philadelphia College of Pharmacy, and at the same time entered the employ of the Smith, Kline and French Co., wholesale druggists of Philadelphia, with whom he remained while attending college.

He graduated in pharmacy in 1893, and after a year's further experience in retail drug stores of Atlantic City, N. J., and Centralia, Pa., he re-entered the employ of Smith, Kline and French Co., and was attached to the laboratory staff as assistant chemist.

In 1900 he was appointed instructor in theory and practice of pharmacy by Professor Joseph P. Remington. In 1903, he left the Smith, Kline and French Co. and in addition to his college-work became associated with Dr. Henry Leffmann, in analytical work, to whose practice he succeeded after a few years, upon the retirement of Dr. Leffmann.

He received the degree of master in pharmacy, in course, in 1905 for original work upon vegetable coloring matters, and the following year, was made associate professor of theory and practice of pharmacy in addition to acting as instructor.

Upon the death of Professor Remington in 1918, he became professor of theory and practice of pharmacy and dean of the Faculty.

In 1904 he was made chemist to the Department of Agriculture of Pennsylvania, which position he still holds, having during this time examined thousands of food and drug samples and appeared in court in hundreds of cases, some of which were of great importance. In 1906 he was appointed one of the chemists called upon occasionally to do special work in the enforcement of the Federal Food and Drugs Act by Dr. Harvey W. Wiley, then chief chemist of the Bureau of Chemistry of the U. S. Department of Agriculture, which position he held until Dr. Wiley's retirement in 1912.

From 1909 to 1915 he was also consulting chemist to the Pennsylvania State Department of Health, and since 1907 has been one of the chemists of the Pennsylvania Board of Pharmacy. In 1910 he was elected a member of the Committee of Revision of the Pharmacopoeia, and was made secretary of that body and chairman of the sub-committee on inorganic chemicals. In 1918, after the death of Professor Remington, he was elected chairman of the Committee of Revision, to serve out the decade. In 1909 he became one of the associate editors of the United States Dispensatory, and assisted in preparing the twentieth edition of that work. He is now the pharmaceutical and chemical editor of the same work. He is joint author with Dr. Henry Leffmann of an elementary text book on "Organic Chemistry," particularly intended for pharmaceutical and medical students, which appeared in 1905.

He has been a member of the Committee on National Formulary since 1906.

In 1920 he was again elected a member of the Committee on Revision of the Pharmacopoeia, and again elected its secretary. He is also chairman of the sub-committee on reagents and test solutions.

For many years he was chairman of the committee of papers and queries of the Pennsylvania Pharmaceutical Association, and was president of that association in 1911. He has also occupied a number of important offices in the American Pharmaceutical Associa-

tion, and was president of the organization in 1919. He was a member of the Auxiliary Committee on Drugs and Medicine of War Industries Board, and co-operated with the Pennsylvania Food Administration authorities in the enforcement of emergency regulations. He is a frequent contributor to the scientific, educational and historical literature of his profession.

Charles H. LaWall is a member of the Society of Chemical Industry, the American Chemical Society, the Philadelphia Botanical Club, the Pennsylvania Botanical Society, the American Association for the Advancement of Science, and many other scientific organizations. He is, also, affiliated with the Masonic order, being a past master of Corinthian Lodge, No. 368, F. and A. M., and is a member of the Franklin Inn Club of Philadelphia.

### E. Fullerton Cook

Assistant Director of the Pharmaceutical Laboratory, 1900-1918; Instructor in Commercial Pharmacy, 1902- ; Associate Professor of Operative Pharmacy, 1915-1918; Professor of Operative Pharmacy and Director of Pharmaceutical Laboratory, 1918.

Ernest Fullerton Cook, son of Rev. Herman S. Cook, a Lutheran Minister, was born at Lionville, Pa., February 1, 1879. He was educated in the public schools of Waynesboro, Pa., and was graduated from the high school in 1895. He then entered the pharmacy of Mentzer and Clugston, of Waynesboro, as an apprentice. In 1897 he matriculated at the Philadelphia College of Pharmacy and worked in the drug store of George M. Beringer, of Camden, N. J., during the first two years of his college course, and in the drug store of W. S. Froehlich of Germantown, Philadelphia, during the final year. He was graduated from the Philadelphia College of Pharmacy in 1900, with honors, receiving the degree of P.D.

In October, 1900 he was made assistant director of the Pharmaceutical Laboratory, succeeding Frank G. Ryan, who had resigned. He also became assistant and secretary to Professor Remington in his literary and pharmacopœial revision work, which position he held until the death of Professor Remington in 1918.

In 1902 he was appointed instructor in commercial training in the College and later assumed complete charge of the course, which has been much augmented and developed under his supervision. From 1901 to 1905 he assisted with much important work pertaining to the Eighth Decennial Revision of the United States Pharmacopœia, making many experiments upon galenical preparations, such as fluid extracts, tinctures, syrups, etc.

He assisted in the establishment of the Dispensing Laboratory of the College in 1903, and later assumed full charge of this branch of the teaching work.

In the preparation of the fourth, fifth and sixth revisions of Remington's Practice of Pharmacy he assisted Professor Remington, being made assistant editor of that important work, and also, of the nineteenth and twentieth revisions of the United States Dispensary.

In 1918 while Professor LaWall was filling out the decennial term as chairman of the Revision Committee of the United States Pharmacopœia, after Professor Remington's death, he was one of the members elected to the membership in the Committee of Revision to fill vacancies. With his long years of experience and association with Professor Remington, Professor Cook presented to the Tenth Decennial Pharmacopœial Convention in May, 1920, a proposed comprehensive plan of revision which was so sound and practical that he was not only elected a member of the United States Pharmacopœial Revision Committee, but was the unanimous choice of that body for the important post of chairmanship, which is now engaging much of his time. He is also an active worker upon the Committee on Revision of the National Formulary.

He was the Executive-Secretary of the Committee on Centennial Celebration of the Philadelphia College of Pharmacy in 1920-1921, devoting untiring energy to the furtherance of the work of that committee, the labors of which culminated in the Centennial Week Celebration of June, 1921.

E. Fullerton Cook is a member of many pharmaceutical organizations, and a frequent attendant upon meetings and contributor to their programs, especially on subjects connected with operative pharmacy and commercial training in pharmacy.



**Louis Gershenfeld**

Assistant Professor of Bacteriology and Hygiene, 1917-1918; Acting Professor of Bacteriology and Hygiene, 1919-1920; Professor of Bacteriology and Hygiene, 1920-

Louis Gershenfeld was born in Philadelphia on December 25, 1893. His early education was obtained in the public schools of his native city and he graduated with honors from the Southern Manual Training School in 1912 and was awarded one of the city scholarships to the Philadelphia College of Pharmacy and Science. During the later years of his high-school work he had obtained some pharmaceutical experience after school hours and during vacation. He completed a three-year course of instruction in the Philadelphia College of



LOUIS GERSHENFELD

Pharmacy in 1915 and graduated with the degree of P.D. He was awarded the Clayton French Fellowship after his graduation, being the first recipient of that honor. During the succeeding two years, he took up post graduate work at the College and also attended courses and took special instruction in scientific subjects at Jefferson Medical College. In 1917, he was awarded the degree of B.Sc. in Pharmacy and Chemistry at the Philadelphia College of Pharmacy, being the first recipient of this degree at that institution.

Immediately after his graduation, he was appointed assistant professor in bacteriology and hygiene in the College, which position he held for two years, when he was promoted to acting professor, and in 1920 to professor in the same department, and he is also teacher of clinical chemistry.

During the World War, he acted as chemist, bacteriologist and director of the chemical laboratory at the Hog Island Shipbuilding Plant. He also performed valuable services as bacteriologist for the Intelligence Department of the U. S. Army, and for several of the

U. S. Army camps. The U. S. Food Administration utilized his services as microscopist in enforcing the rules and regulations regarding substitutes in bread.

In 1920 he was awarded the degree of Ph.M., in course, for postgraduate research work, by the Philadelphia College of Pharmacy.

Louis Gershenfeld is a member of the American Pharmaceutical Association, the Pennsylvania Pharmaceutical Association, the Philadelphia College of Pharmacy and Science, and other important scientific and professional organizations.

### Frank G. Ryan

Assistant in Pharmacy, 1887-1889; Instructor in Pharmacy and Assistant Director of Pharmaceutical Laboratory, 1889-1900; Instructor in Commercial Training, 1899-1900.

Frank Gibbs Ryan was born at Marcellus Falls, New York, on December 26, 1861. He was educated in the public schools of Elmira. At the age of fifteen he engaged in the drug business. During the year 1880-1882, he was employed as a drug clerk with Brown and Dawson, pharmacists of Syracuse.



FRANK G. RYAN

In 1882 he came to Philadelphia and matriculated at the College and graduated in 1884, the subject of his thesis being "Magnesii Carbonas."

In 1887 he became an assistant in pharmacy at the College, and after the optional course in commercial training was established in 1899, at the suggestion of Professor Remington, it was placed in Ryan's charge. This was an entirely new departure in pharmaceutical education and attracted wide attention, but within a few years its value was demonstrated, and it was made a part of the regular curriculum of the College.

The College, in 1889, gave him the title of instructor in pharmacy and assistant director of pharmaceutical laboratory; at the same time he lectured in pharmacy in the Woman's Medical College of Philadelphia. In 1900 he relinquished teaching and accepted the position of chief pharmacist with Parke, Davis and Company, a step pregnant with important possibilities. His advancement was phenomenal and yet logical by reason of the fact that he was always courteous, yet forceful, and possessed unusual administrative capacity together with wide scientific knowledge. In less than seven years, he became a director of the corporation, then secretary, then vice-president and then president, which position he filled for thirteen years, or until his demise on April 20, 1920.

He joined the American Pharmaceutical Association in 1892, and was elected secretary of the section on scientific papers the same year, and in 1899-1900 was chairman of the section. He served as chairman of the Committee on Weights and Measures for a number of years and was a staunch advocate of the metric system. He took an active interest in the organization and work of the American Drug Manufacturers' Association and for the first two years of its existence served as president.

In the civic life of the City of Detroit he was an active factor. He was a member of five of the leading clubs of the city and served a term as president of the Detroit Club and of the Country Club. He was a deep student of economic and political affairs, and his opinion was highly esteemed. During the World War, his advice on drug matters was frequently sought by the governmental authorities.

He is survived by a daughter, Mrs. Charles A. Dean, Jr., of Detroit, and a grandson Charles A. Dean, 3rd.

Frank G. Ryan's outstanding characteristics, in addition to his unusually high character and ability, were his quickness of perception, promptness of decision, intense earnestness and close application to work. As Remington once said, "Ryan never left uncompleted any task he undertook; he covered every detail of every problem," and with these characteristics, he was also sympathetic and warm-hearted, and won the respect and admiration of his associates and the affection of a host of friends. And he loved his Alma Mater "even unto death," for in his will he bequeathed to her one hundred shares of the stock of Parke, Davis and Company.

### Josiah C. Peacock

Instructor in Chemical Laboratory, 1892-1898; Assistant Director of Chemical Laboratory, 1898-1899.

Josiah Comegys Peacock was born at Millington, Maryland, August 24, 1869, attended the public school of his native town and entered the drug business in April, 1885.

He came to Philadelphia in February, 1888, and matriculated at Philadelphia College of Pharmacy in the fall of the same year, and became a student-assistant in the chemical laboratory in September, 1889. He was graduated in pharmacy in April, 1891, and finished the special course of chemistry in April, 1892.

He entered the employ of Parke, Davis and Company at Detroit in April, 1892, but in the following October returned to Philadelphia College of Pharmacy as instructor in the chemical laboratory.

During the next few years, he was associated with Professor Henry Trimble in a study of the tannins, and in developing the laboratory courses in chemistry of the College.

After the death of Professor Trimble in 1898, he directed, under the supervision of Professor Samuel P. Sadtler, for the following term, the chemical laboratory and special courses.

Re-entering the retail drug business as a proprietor in 1899, he continued in the same until 1918, when he sold his business; since which time he has been associated with technical industries requiring chemical knowledge.

In 1900 he married Bertha L. DeGraffe, a graduate in pharmacy of the P. C. P., class of 1896, and of the special chemistry course of 1897.

He is a member of Philadelphia College of Pharmacy, and of the American Pharmaceutical Association since 1892. He joined the Pennsylvania Pharmaceutical Association in 1906;



was first vice-president of the same in 1914-1915; was chairman of the section on practical pharmacy and dispensing in the American Pharmaceutical Association in 1918; member of board of trustees of Philadelphia College of Pharmacy since 1917; and chairman of the Centennial Committee on College Membership of the College, 1920-1921. He was a member of the National Pharmaceutical Service Association, serving as treasurer. On June 10, 1921, at the annual meeting of Pennsylvania Pharmaceutical Association held in Philadelphia, he was elected president for the ensuing year.



JOSIAH C. PEACOCK

The honorary degree of master in pharmacy was conferred upon him by the College on June 15, 1921.

Mr. Peacock has contributed a number of papers dealing with plant analyses, plant principles, and problems in practical dispensing; in some of these, Mrs. Peacock has collaborated.

Josiah C. Peacock's earnestness, loyalty and hard work on behalf of his Alma Mater, especially as a member of the Board of Trustees and as chairman of the committee on membership, has won for him the warmest regard of a host of friends.

### Charles E. Vanderkleed

Lecturer on Chemical Control, 1916-

Charles E. Vanderkleed was born on a farm near LaFayette, Indiana, on April 24, 1875. His early education was obtained in the public schools of LaFayette. He entered Purdue University at the age of fourteen and graduated at the head of the Ph.G. class in 1895. After spending one year in the retail drug store of Wills, Yeager, Best and Co., LaFayette,

he returned to Purdue University as student-assistant in chemistry. He obtained the following post graduate degrees for work done in the Department of Chemistry of Purdue University, Ph.C. 1896, B.Sc. 1889, A.C. 1901. He served as a chemical expert in important toxicologic and other cases in the Indiana courts during these post-graduate years of study.

In 1901 he became analytical chemist for Sharp and Dohme, of Baltimore, and acted also as demonstrator of pharmacy in the Medical School of Johns Hopkins University in 1901-1902. He was elected professor of chemistry at the Woman's Medical College of Baltimore in 1902, but did not take the position as he went to Philadelphia in that year to become chief chemist and chemical director for the H. K. Mulford Co., which position he held for fifteen years.

During part of this period he delivered a course of lectures on drug chemistry in the Department of Pharmacy of the Medico-Chirurgical College in 1908, and was made professor of analytical chemistry in that institution in 1914. After the merger of the Medico-Chirurgical College with the Philadelphia College of Pharmacy in 1916, he became lecturer on chemical control at the latter institution, which position he still holds.



CHARLES E. VANDERKLEED

In 1915, during the early part of the World War, he made an extensive business trip for the H. K. Mulford Company to Holland, Germany, Austria, Denmark, Sweden, Switzerland and Italy.

In 1918 he became associated with the Hercules Powder Co. in connection with special research on organic chemical derivatives from kelp. In 1919 he resigned this position to devote his entire time to the manufacture of artificial silk, in which he is the joint inventor of certain improved processes. He is chemist and secretary of the Cellulose Silk Company of America.

He is a joint author with Professors Green and Sturmer of several text books on chemistry, the author of the chapter on Strychnos alkaloids in Allen's Commercial Organic Analysis, and has been an extensive contributor of valuable scientific papers in pharmacy and chemistry.

Charles E. Vanderkleed is a member of numerous pharmaceutical and chemical societies, having been for many years chairman of committee on drug market of the Pennsylvania

Pharmaceutical Association, and he is an ex-chairman of the scientific section of the American Pharmaceutical Association. He is also a member of many clubs and fraternities, including the Masonic order. He was a member of the Committee of Revision of the Pharmacopœia of 1910-1920. He takes a deep interest in civic affairs in his town (Collingswood, N. J.) and is president of the Board of Education.

### Robert P. Fischelis

Lecturer on Commercial Pharmacy, 1916-1921.

Robert P. Fischelis was born in Philadelphia in 1891 and received his early education in the Philadelphia public schools, graduating from the Northeast High School in 1908. He immediately entered as an apprentice the pharmacy of James Huston at Thirteenth and Montgomery Avenue, Philadelphia, and matriculated in September, 1909, in the Department of Pharmacy of the Medico-Chirurgical College. He graduated from the Ph.G. course in 1911, obtaining the faculty gold medal during both junior and senior years for the highest general average. He also took the Stanislaus Pharmacy Prize, the Meeker Chemistry Prize, and the Alumni Practical Pharmacy Prize. He then took post graduate work in the Department of Chemistry of the Medico-Chirurgical College and graduated as Ph. C. with honors in 1912.



ROBERT P. FISCHELIS

In the meantime he had been pursuing liberal arts courses in Temple University and by 1912 had obtained sufficient credits to merit the degree of B.Sc. from the Medico-Chirurgical College.

He became assistant to Dr. Sturmer in September, 1912, in the Department of Pharmacy of the Medico-Chirurgical College and occupied the positions of instructor in pharmacy, pharmaceutical arithmetic, and organic chemistry. During the summer of 1913 he acted as Registrar of the Medical, Dental, and Pharmacy Schools of the College. He continued his advanced studies in chemistry and pharmacy and in 1913 he completed the requirements for the degree Ph.D., which was then conferred upon him.

In June 1914, he resigned his teaching positions to become assistant editor of the *Druggists Circular*, New York, which position he held until 1916, when he became a member of the scientific staff of the H. K. Mulford Co. He held this position until 1918 when he



entered the Chemical Warfare Service of the U. S. Army as sergeant. He was promoted to sergeant, first class, and was recommended for a commission before the signing of the armistice in 1918.

In 1919 he opened an office for consulting work in New York, specializing in the preparation of technical literature for the chemical and pharmaceutical industries, which he is still conducting.

When the Medico-Chirurgical College of Pharmacy merged with the Philadelphia College of Pharmacy, he became lecturer on commercial pharmacy in the latter. In 1920 he received the degree of Ph.M., in course, for an original dissertation on *Combretum Sundaicum*. In June, 1920, he became a member of the editorial staff of the *Journal of Industrial and Engineering Chemistry*, of the American Chemical Society, which position still occupies part of his time. In 1921 he became dean and professor of theory and practice of pharmacy in the New Jersey College of Pharmacy at Newark, N. J.

He is a member of the American Chemical Society, American Pharmaceutical Association, Pennsylvania Pharmaceutical Association (of which he was Secretary from 1916 to 1919 and President in 1919-1920), Philadelphia College of Pharmacy (also Alumni Association), New Jersey Pharmaceutical Association, the Chemist's Club of New York, and the Kappa Psi and Beta Phi Sigma fraternities.

Robert P. Fischelis is an active worker in many professional organizations and has been chairman of important committees and sections in them. He is a frequent attendant upon and contributor to the programs of chemical and pharmaceutical associations, being a forceful speaker with a good vocabulary and a wide fund of information. He is at present chairman of the committee on co-operative publicity of a number of scientific organizations.

### Francis E. Stewart

Lecturer on Pharmacy Laws, 1916-

Francis E. Stewart was born in Albion, N. Y., on September 13, 1853, and is a descendant of the Perthshire Stewarts. He was educated at Cortland County Academy, Homer, N. Y., and at Oberlin College, Ohio. He was graduated from the Philadelphia College of Pharmacy in 1876 with the degree of Ph.G., and immediately took up the study of medicine, graduating at Jefferson Medical College in 1879. Later, he took post graduate work at the University of Pennsylvania. Following his graduation in medicine, he practiced for a time in New York City, where he occupied a number of important positions on medical committees and charity organizations. His specialty has been pharmacology, and the supervision of pharmacial and pharmaco-chemical industries by the Federal Government has been his life-long ambition.

From 1885 to 1891, he resided in Wilmington, Delaware, where he occupied a prominent position in the scientific and educational life of the community. From 1891 to 1894, he was connected with sanitarium work at Watkins Glen, New York. In 1894, he organized a scientific department for Frederick Stearns and Company, Detroit, Michigan. In 1898, he became chairman of the Medical Board of Merck and Co., and editor of Merck's Archives. He then went to California and assisted in organizing the National Bureau of Medicines, which later developed into the Council on Pharmacy and Chemistry of the American Medical Association.

Following his graduation at the Philadelphia College of Pharmacy, he was, for a time, a quiz master in pharmacy and chemistry for the Alumni Association. He has also occupied teaching positions in Jefferson Medical College and the Woman's Medical College. Later, he became professor of materia medica and botany and physiology in the Medico-Chirurgical College, and was awarded the honorary degree of Phar.D., in that institution in 1914. In 1916 he was made lecturer on pharmacy laws at the Philadelphia College of Pharmacy. He is at present Director of the Scientific Department of the H. K. Mulford Co.

Francis E. Stewart is a chairman of important committees in the Pennsylvania Pharmaceutical Association and other scientific bodies. He is a member of many important professional and scientific organizations, and of the Masonic order, and an elder in the Presbyterian Church. He is the author of a quiz compend of pharmacy, and a frequent contributor to phar-



FRANCIS E. STEWART

maceutical and medical literature. He is historian and a life member of St. Andrew's Society of Philadelphia, has traveled extensively, and numbers among his professional and personal friends many leaders in medicine and pharmacy at home and abroad. His hobby is the study of patents and trademarks as related to medicine and pharmacy and he is a recognized authority on this subject.

### Henry Leffmann

Lecturer on Research, 1920-

Henry Leffmann was born September 9, 1847, in Philadelphia, and was the fourth son of Henry Leffmann, a German Jew, and Sarah Ann Paul, of Doylestown, a Hicksite Friend.

His education was obtained in the Philadelphia public schools. He entered the Philadelphia High School in 1861, but was prevented by illness from graduating with his class. His diploma was afterward conferred honoris causa and dated 1865.

His teaching experience began in 1864 when he became pupil assistant in the chemical laboratory of the Philadelphia High School. In 1865 he became assistant to Dr. Rand, Professor of Chemistry at Jefferson Medical College, and continued in that position until 1870. During this period he took a course in medicine at Jefferson and was awarded the degree of M.D. in 1869. For many years succeeding he held positions of honor, trust and profit in connection with his profession, of which the following is a bare synopsis:

Assistant in the chemical laboratory of Dr. Charles Cresson, 1870-1872.

Quiz teacher at Jefferson Medical College, 1870-1882.

Lecturer on Toxicology at Jefferson Medical College, 1875-1880.

Chemist to Coroner of Philadelphia, 1875-1880 and 1885-1897.

Lecturer on Botany at Wagner Free Institute of Science, 1874-1875.

Lecturer on Chemistry at Wagner Free Institute of Science, 1875-1885.

Professor of Chemistry at Wagner Free Institute of Science, 1885-1903 (later honorary).

Assistant Professor of Chemistry, Central High School, 1876-1880.

Professor of Chemistry, Artisans' Night School, 1877-1879.

Microscopist of Pennsylvania State Board of Agriculture, 1877-1905.

## 430 First Century of the Philadelphia College of Pharmacy

Editor of Medical Bulletin, 1880-1881.

Recording Secretary of Philadelphia County Medical Society, 1881-1885.

Editor of Philadelphia Polyclinic, 1883-1888.

Demonstrator of Chemistry, Philadelphia College of Dental Surgery, 1882-1884.

Demonstrator of Chemistry, Jefferson Medical College, 1884-1885.

Professor of Chemistry, Philadelphia Polyclinic, 1883-1898 (later emeritus).

Professor of Chemistry, Philadelphia College of Dental Surgery, 1884-1899 (later emeritus).

Port Physician of Philadelphia, 1884-1887 and 1891-1892.

Member of Assay Commission, 1889.

Member of Philadelphia Quarantine Commission, 1892.

Pathological Chemist, Jefferson Medical College Hospital, 1887-1905.

President of Engineers' Club, 1901.

Vice president, Society of Public Analysts (Great Britain) 1901-1902.

Professor of Chemistry, Woman's Medical College, 1888-1916.

President of Medical Jurisprudence Society, 1890.

Member of Board of Directors, Mercantile Library Company, 1902-

Member of Board of Trustees, Wagner Free Institute of Science, 1903-



HENRY LEFFMANN

In 1874 he had conferred upon him the honorary degree of doctor of philosophy by the Wagner Free Institute of Science and in 1884 he received the degree of doctor of dental surgery from the Philadelphia College of Dental Surgery.

In 1920 he became associated with the work of the Philadelphia College of Pharmacy and Science as Lecturer on Research.

Henry Leffmann has been an active member of many scientific societies and a voluminous writer of technical books and a contributor to pharmaceutical and chemical literature; and is one of the foremost figures in chemical research, not only in Philadelphia, but nationally, and with this he has taken a deep interest in public questions and actively identified himself with movements for the betterment of public interests. He has been not only an exceedingly able chemist, but an exceedingly good citizen.



**Howard Kirk**

Lecturer on Commercial Law, 1920-

Howard Kirk was born in Philadelphia in 1886 and was educated in the Philadelphia Grammar and High Schools. From 1902 to 1907 he was connected with the Whitall Tatum Company in a clerical capacity and in the latter year entered the law office of Harold B. Beitler, Esq. as stenographer. He later acted as court stenographer and in the meantime pursued his studies at the Temple University Evening School of Law. He was admitted to



HOWARD KIRK

the Philadelphia Bar in 1913. In 1916 he joined the Pennsylvania National Guard and served on the Mexican border in Troop A, First Pennsylvania Cavalry. He later attended training school at Fort Niagara and graduated in 1917 as second lieutenant of cavalry. He was later transferred to the Infantry and promoted to first lieutenant. He saw active service abroad in 1918 and was promoted to a captaincy in October, 1918.

At the close of the World War he became connected with the Bureau of Municipal Research in Philadelphia and in 1920 re-entered law practice with Attorneys McIlheny and Lamberton and in 1921 opened an office of his own for the practice of his profession. He became associated with the work of the Philadelphia College of Pharmacy in 1920 as Lecturer on Commercial Law, which position he still holds. He is secretary of the Law Association of Philadelphia and was Secretary of the Campaign Committee of Senator George Wharton Pepper.

**John E. Cook**

Quiz Master in Materia Medica, 1873-1877.

John Eacritt Cook was born March 6, 1853, in Philadelphia, and was educated in the public schools of that city. He graduated from the Philadelphia College of Pharmacy in 1873 and immediately became quiz master in materia medica and assistant to Professor John M. Maisch. He resigned this position in 1886 to become professor of materia medica and botany in the Powers College of Pharmacy, which position he still held at the time of his death in 1890. He was a brilliant lecturer and devoted much of his time to the subjects of physics and electricity, appearing frequently before the Philadelphia Electrical Society.

**Charles F. Zeller**

Quiz Master in Pharmacy, 1881-1886.

Charles Frederick Zeller was born in Philadelphia, May 6, 1858, and was educated in the public schools of that city. At the age of fourteen he became an apprentice in pharmacy with the firm of Beates and Miller of Philadelphia. He attended the courses of lectures at the Wagner Free Institute of Science and at the early age of eighteen became assistant to



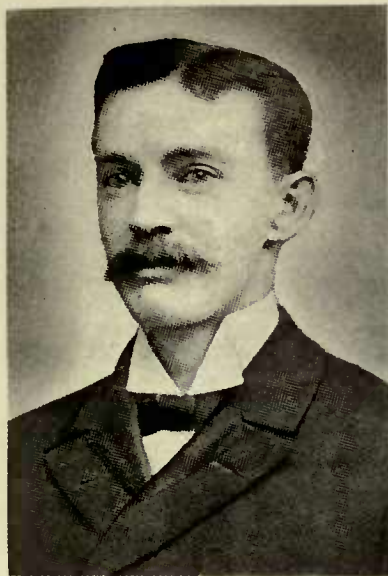
CHARLES F. ZELLER

Professor Joseph P. Remington at his pharmacy at Thirteenth and Walnut Streets. This association with Professor Remington remained uninterrupted until Mr. Zeller's death. In 1881 he became assistant to Professor Remington at the College, and quiz master in pharmacy and also occupied the position of Curator of the Museum for a number of years. He died suddenly April 7, 1886, after a brief but brilliant career.

**J. Louis D. Morison**

Assistant in Microscopy and Pharmacognosy, 1894-1902; Instructor in Materia Medica, 1898-1902.

John Louis Dales Morison was born in Camden, New Jersey on September 21, 1866. He received his early education in the public schools of Camden, and the Lauterbach Academy of Philadelphia. He graduated from the Philadelphia College of Pharmacy in 1888, with the grade of distinguished, and immediately commenced the study of medicine at Jefferson Medical College, from which he was graduated in 1891. He was connected with the Department of Materia Medica and Microscopy at the Philadelphia College of Pharmacy for a number of years, and during that time was actively identified with the work of the Alumni Association, which he served as President in 1896. He was a regular attendant at Executive Board meetings of that body, and was chairman of the Committee on Social Meetings for many years. He left the College work to pursue post graduate work in pharmacodynamics, but after traveling extensively for a few years he succumbed to a chronic affection which had for some time menaced his health and from which he has since suffered to such an extent as to make the bright promise of his earlier years an unfulfilled dream.



J. LOUIS D. MORISON

**William S. Weakley**

Assistant in Botany and Pharmacognosy, 1899-1903.

William Stair Weakley was born in York, Pennsylvania, on October 4, 1879. He entered the Philadelphia College of Pharmacy in 1896, and was graduated with the degree of doctor



WILLIAM S. WEAKLEY

in pharmacy (P.D.) in 1899. He wrote a thesis on "Crocus and Its Adulterants," which won for him the pharmacognosy prize of twenty-five dollars.



Immediately after his graduation he became assistant in the Department of Botany and Pharmacognosy and occupied this position until 1903. He resigned from the College to take up the study of medicine in Jefferson Medical College, from which institution he was graduated in 1906. Since then he has been practicing medicine in York, Pennsylvania.

### Elmer E. Wyckoff

Instructor in Analytical Chemistry, 1902-1904.

Elmer E. Wyckoff is a native of Ohio. He obtained his early education in the public schools of that state and later in Vermillion Institute and in Valparaiso University, Indiana. After an apprenticeship and experience in pharmacy which enabled him to register in three states, he left the retail business and entered the manufacturing line. In 1899 he came to Phila-



ELMER E. WYCKOFF

delphia to study chemistry at the Philadelphia College of Pharmacy. In 1902 he became instructor in analytical chemistry and organized the first quiz class in the College in that branch. In 1903 he completed his chemistry course and in 1904 resigned his instructorship.

He then became chief chemist and director of the analytical and manufacturing laboratories of Lehn and Fink, New York. He is a member of the American Pharmaceutical Association and has frequently made valuable contributions to the scientific literature of pharmacy.

### E. Russell Kennedy

Instructor in Materia Medica, 1902-1904.

Edwin Russell Kennedy was born at Stovertown, Ohio, in November, 1871. He was educated at Zanesville, Ohio, to which city his parents had removed when he was very young. He entered the Philadelphia College of Pharmacy in 1891 and graduated therefrom in 1893. He then went to Charleston, West Virginia, where he practiced pharmacy until 1896, when he returned to Philadelphia and matriculated at the Jefferson Medical College. From here he graduated in 1899 with the degree of M.D. He was resident physician at the Jefferson Hospital during the year following his graduation, and was subsequently appointed demonstrator of materia medica and pharmacy at the Jefferson Medical College. In 1910 he became Chief Resident Physician of Jefferson Hospital. He became instructor in materia medica at the Philadelphia College of Pharmacy following the resignation of Dr. J. Louis D. Morison, in which position he continued until ill health forced him to resign in 1904.



E. RUSSELL KENNEDY

**Herbert J. Watson**

Instructor in Botany and Pharmacognosy, 1903-1904

Herbert J. Watson was born October 12, 1879, in Wilmington, Delaware. His early education was obtained in public and private schools of his native city supplemented by a five-year course at Hamitt's Art School.



HERBERT J. WATSON

He was a pharmacy apprentice in the store of his father, Herbert K. Watson, one of the pioneer pharmacists of Wilmington.

He then commenced his technical education by taking the regular pharmacy course at the Philadelphia College of Pharmacy, graduating in 1901 as Doctor in Pharmacy (P.D.), and capturing the microscopic research prize for original work on "The Color Standards of the U. S. P."

He completed a special chemistry course at his Alma Mater, which had been pursued in part while he was studying pharmacy and later took special work in chemistry at the University of Pennsylvania and post-graduate work in bacteriology and microscopy at the Philadelphia College of Pharmacy.

In 1903 he accepted an instructorship at the College in the Department of Botany and Pharmacognosy which he held for one year, resigning in order to take a position in the State Laboratory of Delaware, at Newark, Del. Later (1904) he was promoted to the position of State Bacteriologist, and in 1910 he was made a collaborating chemist of the United States Department of Agriculture. He still holds both of these positions and is actively connected with the enforcement of food and drug laws of his native state.

### Joseph W. Ehman

Instructor in Analytical Chemistry, 1904-

Joseph William Ehman was born in Lycoming County, near Williamsport, Pa., in 1874. He served an apprenticeship for three years with Milton Huber, of Williamsport, pharmacist, beginning in 1891, and in 1894 matriculated at the Philadelphia College of Pharmacy. He graduated in 1896 with the degree of Ph.G., and returned to Williamsport where he re-en-



JOSEPH W. EHMAN

tered the employ of his preceptor. In 1899 he returned to the College to take up a post graduate course in chemistry, and after the completion of two full years of work he obtained the certificate of proficiency in chemistry.

For several succeeding years he obtained considerable experience along industrial lines in pharmacy with Robert A. Hance, of Philadelphia, and J. T. Milliken & Co., of St. Louis, both manufacturing pharmacists. He also spent a year of research work on refractory zinc ores with G. O. Angell.



In 1904 he accepted the position of instructor in analytical chemistry at the College, and during the succeeding years he has earned the admiration of the students of that department for his almost encyclopedic knowledge of his subject and the clarity of his explanations of reactions and calculations.

### Edwin L. Newcomb

Instructor in Botany and Pharmacognosy, 1905-1910.

Edwin Leigh Newcomb was born in Vineland, N. J., October 18, 1882. His father was engaged in the nursery and fruit growing business, and it was here he received his first lesson in botany.

His early education was obtained in Vineland where he graduated from the high school in 1901. He then entered the drug store of Dr. Joseph A. Conwell of Vineland, and later matriculated at the Philadelphia College of Pharmacy.



EDWIN L. NEWCOMB

During his second year in College, he took a special course in bacteriology and for the succeeding two years was closely connected with the work of the Vineland sewage disposal plant, where the copper sulphate method of purifying sewage was being tried out under the direction of Dr. George T. Moore of the United States Department of Agriculture. During his third year in College, he acted as instructor in botany and pharmacognosy, being the first undergraduate to be given such an important position. He graduated with honors in 1905 and during the following summer made an extensive tour of the west, bringing back many interesting botanical specimens, which were presented to the College.

During the two years following his graduation, he acted also as consulting and constructing engineer for the Vineland Sewage Disposal plant and during the period of this work, filed many valuable reports and acted as expert witness in important suits involving technical testimony on water purification and sewage disposal.

During the summer of 1907 he took up special work at the University of Pennsylvania in chemistry and German. He did considerable work during the next few years upon the experimental cultivation of medicinal plants, and in 1910 accepted the instructorship in botany and pharmacognosy of the Department of Pharmacy of the University of Minnesota. Since he has been connected with the latter institution his rise has been rapid. He is now professor of botany and pharmacognosy and has charge of the extensive medicinal plant garden of the University of Minnesota. He is editor of the *Northwestern Druggist*, and an active member of the Minnesota State Pharmaceutical Association, the Committee of Revision of the Pharmacopœia, and the Committee on National Formulary.

### Alfred Heineberg

Instructor in Materia Medica, 1905-1917.

Alfred Heineberg was born in Selma, Alabama, July 30, 1877. He obtained his early education in the public schools of his native town. In 1892 he entered the pharmacy of Shields and Co. of Selma, and continued in their employ until he matriculated at the Philadelphia College of Pharmacy in 1896. In 1899 he was graduated as a P.D., with honor and received the Robinson Medal for the highest average in theoretical and practical chemistry.

He then matriculated at the Jefferson Medical College and was graduated from that institution in 1902, again with honor and received a gold medal for proficiency in surgery. After serving a year as interne at Jefferson Hospital, he entered upon the practice of his pro-



ALFRED HEINEBERG

fession in Philadelphia. Shortly afterwards, he was appointed assistant in the department of materia medica and therapeutics of Jefferson Medical College. In 1905 he was appointed instructor in materia medica of the Philadelphia College of Pharmacy, still retaining his private practice and his connection with Jefferson Medical College. He continued as instructor in the Philadelphia College of Pharmacy until 1917 when he resigned.

His rise in his profession has been rapid. He is operating surgeon and upon the consulting staff of several of the foremost hospitals of Philadelphia at the present time, and is a member of the Philadelphia County Medical Society, the Pennsylvania State Medical Association, and the American Medical Association.

### Wallace S. Truesdell

Instructor in Latin, 1905-

Wallace S. Truesdell was born in Benton Centre, New York, November 5, 1860. His early education was obtained at Cook Academy, Montour Falls, New York, from which he was graduated in 1882. The same year he entered the University of Rochester, graduating in 1886 with the degree of bachelor of arts, carrying off several prizes during the course. In 1889, his Alma Mater conferred upon him the degree of master of arts.

He then spent a year in post-graduate study at Johns Hopkins University, in the study of languages, devoting especial attention to Sanskrit. In 1902 he went abroad and spent several months of study in Germany. He has made teaching his life work, devoting his attention very largely to the languages, for which he is well fitted by his studies and the teaching of Latin, Greek and German.



WALLACE S. TRUESDELL

In 1886-1887 he taught at Canandaigua Academy, Canandaigua, N. Y., and in 1890-1891 at the Worcester Academy, Massachusetts. In 1891 he became a teacher in the well known Germantown Academy of Philadelphia, and in addition to his duties in that institution, he has acted as instructor in Latin at the Philadelphia College of Pharmacy since 1905.

### Joseph L. Wade

Assistant Instructor in Analytical Chemistry, 1907-1918.

Joseph Louis Wade was born in Bridgeport, Montgomery County, Pa., June 16, 1884. He attended the public and high schools of Bridgeport and was graduated from the latter in 1901.

He served an apprenticeship of four years in pharmacy, matriculating at the Philadelphia College of Pharmacy in 1902, and graduating in 1905, with the degree of doctor of pharmacy. He then took post graduate work in the chemical laboratory and was granted the certificate of proficiency in chemistry in 1907.

In the fall of the same year, he accepted an offer to become assistant instructor in analytical chemistry of the College and continued in this position until 1918 when he resigned to take up industrial work.





JOSEPH L. WADE

**Armin K. Lobeck**

Instructor in Botany and Pharmacognosy, 1911-1914.

Armin K. Lobeck was born August 16, 1886, in New York City. His early education



ARMIN K. LOBECK

was obtained in the schools of his native city. Between 1902 and 1905 he obtained practical commercial training and experience in New York business houses. He entered Columbia University, during this period, and graduated in 1911 with the degree of A.B.

In 1911 he became instructor in botany and pharmacognosy in the Philadelphia College of Pharmacy, which position he occupied until 1914. During this period he obtained his A.M. from Columbia University, and in 1915 again entered Columbia for post-graduate work, obtaining the degree of Ph.D., in 1917. From 1916 to 1918, he was an instructor in Columbia University in extension teaching and summer school work.

During 1917, 1918 and 1919, he was attached to the United States Department of Agriculture and during the League of Nations Conference was connected with the American Commission to Negotiate Peace, at the Paris headquarters. At the close of his government service, in 1919 he became assistant professor of physiography of the University of Wisconsin, a position which he still holds.

### Philip F. Fackenthal

Instructor in Pharmacognosy, 1913-1915.

Philip Frederick Fackenthal was born in Philadelphia, May 21, 1887, and was educated in the public and high schools of that city. He entered the Philadelphia College of Pharmacy in 1910 and was graduated with the degree of doctor in pharmacy (P.D.) in 1913. Im-



PHILIP F. FACKENTHALL

mediately after his graduation he became instructor in pharmacognosy and occupied this position until 1915. During the World War he was with the 7th Trench Mortar Battalion and saw active service in France. At the close of the war he became associated with the Department of Pharmacy of the Medical College of Virginia in Richmond, Virginia, and is at present instructor in materia medica in that institution.

### Anton Hogstad, Jr.

Instructor in Botany, 1914-1916.

Anton Hogstad, Jr., was born February 21, 1893, at Neenah, Wisconsin. His grammar school education was obtained in the public schools of his native town. In 1907 his family removed to Lafayette, Pennsylvania. Mr. Hogstad entered the Conshohocken High School, and graduated therefrom in 1910.

In 1911 he entered the employ of Shoemaker and Busch. He then became interested in the Philadelphia College of Pharmacy matriculating in 1911, and graduating in 1914 with the degree of P.C. During his senior year at the College, he was appointed student assistant in the microscopical laboratory. Upon his graduation, he was awarded the microscopical research prize and the materia medica prize. Immediately following his graduation, he was appointed instructor in botany and pharmacognosy in the College, which position he held until 1916.

Entering the employ of the H. K. Mulford Co., he was made assistant in the hay fever department of the biological laboratories at Glenolden, Pa. Later, he succeeded Dr. Youngken as manager of this department, which position he held until May, 1917.



ANTON HOGSTAD, JR.

In the fall of 1917, he was appointed instructor in botany and pharmacy at the South Dakota State College at Brookings, South Dakota. The following year he was appointed instructor in pharmacy, and in 1920 associate professor in that branch. During the period from 1917 to the present time, he has had charge of the medicinal and poisonous plant investigations gardens, which were developed under his management. At the present time, he has charge of the teaching work in the South Dakota State College in botany, pharmacognosy and materia medica. He has also completed post graduate work leading to the degrees of M.S. and B.Sc.

He is a member of the American Pharmaceutical Association and a collaborator of Botanical Abstracts.

He was a delegate to the Pharmacopœial Convention of May, 1920, and has recently been appointed as one of the auxiliary workers on the sub-committee on botany and pharmacognosy of the Committee of Revision of the Pharmacopœia.

#### W. F. Haase, Jr.

Instructor in Botany and Pharmacognosy, 1915-1917.

William Frederick Haase, Jr., was born in Philadelphia on April 12, 1894. His early education was obtained in the Robert Morris School and the Central Manual Training School, both of Philadelphia. He was awarded a scholarship in the Philadelphia College of Pharmacy.



He served his pharmaceutical apprenticeship with Herr and Roach, Philadelphia and entered the Philadelphia College of Pharmacy in 1912, graduating with high honors in 1915 with the degree of doctor in pharmacy (P.D.), capturing many prizes.



WILLIAM F. HAASE, Jr.

He was Royal Chancellor of the Phi Theta Sigma Fraternity in 1914-1915. During his senior year he was student assistant in the Department of Botany and Pharmacognosy and after his graduation continued in the same department as instructor. He occupied this position until 1917 when he joined the laboratory staff of McKesson and Robbins, New York. In 1918 he assumed the directorship of the pharmacognosy and analytical laboratories of Penick and Ford, New York, and is still occupying this position.

#### Ivor Griffith

Instructor in Pharmaceutical Arithmetic, 1916- ; Instructor in Pharmacy, 1917-

Ivor Griffith was born January 3, 1891, in Rhiwlas, North Wales, Great Britain, the son of Rev. John and Ann Griffith. His early education was obtained in the elementary schools and in the normal school of his native town. When he was sixteen years of age the entire family came to America and settled in Bangor, Pa. Here he attended the high school for one year and gained drug store experience and a love for pharmacy in the store of E. K. Eisenhart, a graduate of the Philadelphia College of Pharmacy, who encouraged him to attend the College.

He came to Philadelphia in 1910 and was employed by Richard H. Lackey while he attended College, from which he was graduated in 1912 with the degree of P.D. He became pharmacist to the Stetson Hospital immediately after graduation, and, beginning with 1913, spent his spare time in the private laboratory of Professor Charles H. LaWall, assisting in analytical and experimental work. In 1916, he was made instructor in pharmaceutical arithmetic at the Philadelphia College of Pharmacy, and in 1917 succeeded Professor LaWall as instructor in pharmacy, when the latter took up the duties of the late Professor Remington.

In 1919, he gave up his work in Professor LaWall's private laboratory, to become serologist and clinical chemist as well as pharmacist of the Stetson Hospital, still retaining, however, his teaching position at the College.

Among his many activities he has found time to be secretary and later president of the Philadelphia Branch of the American Pharmaceutical Association, and department editor of "Notes and Queries" of the "American Druggist."

He is at present also lecturer on chemistry and bacteriology to the Nurses Training School of the Stetson Hospital, and chairman of the section on practical pharmacy and dispensing of the American Pharmaceutical Association.

He is a member of the Masonic order, of the Kappa Psi Fraternity and the Welsh Society of Philadelphia.

At the Centennial Commencement of the College, he received the degree of master in pharmacy for original research in serology. He is a frequent contributor to pharmaceutical literature, both scientific and otherwise, and is a facile illustrator as well as a ready writer; in 1921 he was elected editor of the *American Journal of Pharmacy*, a position for which he is peculiarly well-qualified.

### Chalmers J. Zufall

Instructor in Botany and Pharmacognosy, 1916-1917.

Chalmers J. Zufall was born in Frankfort, Indiana, May 1, 1885. His parents moved to La Fayette, Indiana, when he was very young and he obtained his early education in the public schools of that city, graduating from the high school in 1903. In the autumn of that year, he entered Purdue University and took the general science course from which he was graduated with the bachelors degree in 1907.



CHALMERS J. ZUFALL

From 1907 to 1913 he taught biology and chemistry in the high school of Salem, Ohio.

From 1913 to 1915 he was attached to the scientific staff of the Eli Lilly Co., of Indianapolis, Indiana, as pharmacognocist. During this period, he obtained the degree of master of science from Purdue University, and returned to that institution as instructor in biology for 1915-1916.

In the fall of 1916 he became instructor of pharmacognosy in the Philadelphia College of Pharmacy, leaving that institution in 1917 to enter the government service as pharmacognocist to the Bureau of Chemistry, Department of Agriculture. He was stationed at the Food and Drug Laboratory of New York City for a number of years, where he made microscopic examinations of crude drugs, spices and foods offered for import, as well

as those entering interstate commerce, and is now at Purdue University as professor of pharmacognosy.

He is a member of the American Pharmaceutical Association and the New York Microscopical Society.

### J. Edward Brewer

Instructor in Chemistry, 1916-1917.

J. Edward Brewer was born in Hamilton, Pa., on February 16, 1890. Graduating from the Reynoldsville, Pa., high school in 1907, he taught in the public schools of that town for two years. He graduated from the Medico-Chirurgical College in 1911, receiving the degree of Ph.G., and took a year's post graduate work in chemistry, obtaining the Ph.C. degree in 1912.



J. EDWARD BREWER

He was a chemist in the analytical laboratory of the Smith, Kline and French Co., for two years, after which he became instructor in chemistry in the Department of Pharmacy of the Medico-Chirurgical College in 1915, continuing in that position until the merger with the Philadelphia College of Pharmacy in 1916, when he became an instructor in chemistry in the latter for the greater portion of the college year immediately preceding the outbreak of the World War. Since 1917 he has been connected with the Chemical Service Laboratories at Conshohocken, Pa., as chief chemist.

### Paul S. Pittenger

Instructor in Biologic Assaying, 1916-

Paul Stewart Pittenger was born in Easton, Pennsylvania, and graduated from the Easton Public Schools and Lerch's Preparatory School of that city. In 1909 he graduated from the Pharmacy Department of the Medico-Chirurgical College, and in 1910 from the Chemistry Department of the same institution. In 1911 he received the degree of doctor of pharmacy (Phar.D.) for post graduate work in pharmacodynamics at the Medico-Chirurgical College, and in 1919 he received the degree of master in pharmacy, in course (Ph.M.), from the Philadelphia College of Pharmacy for post graduate work in his chosen field.

He became demonstrator of bacteriology in the Medico-Chirurgical College immediately after his graduation in 1908 and the following year became demonstrator and quiz master in botany and pharmacognosy. In 1911 he accepted the position of special lecturer in pharmacodynamics and physiological standardization of drugs in his Alma Mater



and at the time of the merger with the Philadelphia College of Pharmacy in 1916 was transferred to the same position in the latter institution. He then was made instructor in biologic assaying, which position he still holds in connection with his work along the same lines with the firm of H. K. Mulford Company, with whom he has occupied a responsible position on the scientific staff for some years, being director of the pharmacodynamic research laboratories.



PAUL S. PITTENGER

He is a member of the Committee of Revision of the U.S.P. (X), Chairman of the Committee on Physiologic Testing of the American Pharmaceutical Association, and Chairman of the Committee on Digitalis, American Drug Manufacturers' Association. His researches upon the bio-chemistry of drugs have attracted wide attention, and he is the author of a text book on Bio-chemic Drug Assay Methods. He is a member of various professional and scientific societies and a frequent contributor to scientific literature.

### Ralph R. Foran

Instructor in General and Analytical Chemistry, 1917-1918; Instructor in Technical Chemistry, 1919-

Ralph Richard Foran was born at Easton, Pa., on November 19, 1893. His early education was obtained in the Easton public schools; he graduated from high school in 1912.

He entered the Philadelphia College of Pharmacy in 1914, after having spent some time in the pharmacy of C. L. Bachman, Easton, Pa.

In 1917 he graduated with the degree of P.D., and accepted an instructorship in his Alma Mater in the department of general and analytical chemistry, which position he held during the session of 1917-1918.

He left his position at the College in 1918, and entered the Development Division of the Chemical Warfare Service of the U. S. Army and served in this division through the World War, being stationed in a chemical manufacturing plant in Cleveland, Ohio.

At the close of the war, he re-entered the teaching corps of the Philadelphia College of Pharmacy, and became instructor in technical chemistry, in place of Mr. Wade who had left the previous year, which position he still occupies.

He is a member of the American Pharmaceutical Association, the American Chemical Society, the Pennsylvania Pharmaceutical Association, and the Philadelphia College of Pharmacy and Science.



RALPH R. FORAN

**M. Hollenbach Gold**

Instructor in Botany and Pharmacognosy, 1917-1918.

M. Hollenbach Gold was born in Philadelphia, September 18, 1895, and was educated in the public schools. His pharmaceutical preceptor was Philip Gole of Philadelphia, with



M. HOLLENBACH GOLD

whom he served a four years' apprenticeship. In 1914 he matriculated at the College, and in June, 1917, was graduated with the degree of P.D. During his senior year, he was student assistant to Professor Henry Kraemer in the Department of Pharmacy and Pharmacognosy.

At graduation, he was awarded the microscopical research prize, the Maisch botany prize, the prize certificate in pharmacognosy and the materia medica prize, and became instructor in botany and pharmacognosy. In the same year, he entered Hahnemann Medical College for a two year science course preparatory to the study of medicine. In November, 1917, he enlisted in the Medical Reserve Corps of the United States Army, and was later transferred to the Students' Army Training Corps. In 1917 he engaged in the business of retail pharmacist at 58th and Delancey Streets, West Philadelphia, meanwhile completing his premedical course. He entered upon the study of medicine at Jefferson Medical College in the autumn of 1919, and at present is pursuing that course in addition to conducting his pharmacy. Mr. Gold is a member of the Philadelphia College of Pharmacy and Science.

### Mitchell Bernstein

Instructor in Materia Medica, 1917-1921.

Mitchell Bernstein was born in Philadelphia on March 26, 1888. He attended the Philadelphia public schools and graduated from the Central Manual Training High School in 1906 and was awarded a scholarship to the Philadelphia College of Pharmacy. He commenced the study of pharmacy in the latter institution the same year and graduated in 1909 with the degree of P.D., carrying off the highest honors of his class by winning the Procter Prize,



MITCHELL BERNSTEIN

the Kappa Psi Medal and the Alumni Gold Medal. During the time of his attending College, his preceptor in pharmacy was Luther S. Henkel. He was acting librarian of the College during the summer of 1910.

In October 1910, he began the study of medicine at the Jefferson Medical College, from which he was graduated in 1914, carrying off the out-patient prize in obstetrics. From May, 1914 until May, 1915, he was a resident physician at the Philadelphia General Hospital, after which time he entered private practice. He was appointed assistant demonstrator of medicine at the Jefferson Medical College, clinical assistant, Department of Medicine, Jefferson Medical College Hospital in 1917, and instructor in materia medica at the Philadelphia College of Pharmacy in the same year. During the World War he served as medical advisor to the draft board.

He is a member of the American Medical Association, the American Pharmaceutical Association, the Pennsylvania Pharmaceutical Association and other professional bodies.



**Benjamin H. Hoffstein**

Student Assistant in Botany and Pharmacognosy, 1917; Instructor in Botany and Pharmacognosy, 1918-1920.

Benjamin Herman Hoffstein was born in Philadelphia, December 13, 1897. He was educated in the public schools, and in the spare time after school hours and during the summer vacations received his first botanical instruction at the Wainwright School Garden. This instruction covered a period of four years and gave him a working knowledge of practical horticulture as applied to several hundred plants of economic importance.

His interest in drug plants led him to matriculate as a student in pharmacy in the Department of Pharmacy of the Medico-Chirurgical College in 1915. The merger of this institution with the Philadelphia College of Pharmacy took place in 1916, so Mr. Hoffstein became



BENJAMIN H. HOFFSTEIN

a graduate of the latter institution of the Ph.G. class of 1917. He continued his studies in pharmacy by taking a post graduate course, receiving the degree of pharmaceutical chemist in 1918.

During the later period of his instruction he was a student assistant in the Department of Botany and Pharmacognosy, and immediately after his graduation accepted an instructorship in the same department. During the summer of 1918 he was in the employ of the H. K. Mulford Company as botanist. He has been one of the collaborators of Botanical Abstracts since July, 1920, and is a member of several school organizations and fraternities, and of the Pennsylvania Pharmaceutical Association.

**Nathan A. Simpson**

Instructor in Botany and Pharmacognosy, 1918-1919.

Nathan Alexander Simpson is a native of Newark, Ohio. He entered the Medico-Chirurgical College as a student in 1912, and was graduated with the degree of graduate in pharmacy (Ph.G.) in 1914, and with the degree of pharmaceutical chemist (Ph.C.) in 1916. He served as instructor in the Department of Botany and Pharmacognosy during the session of 1918-1919.

## 450 First Century of the Philadelphia College of Pharmacy

During the World War he was a private in the Chemical Warfare Service at Nela Park and Willoughby, Ohio. He was chemist in the employ of Smith, Kline and French



NATHAN A. SIMPSON

Company for a time and has held similar positions with the Castle Kid Company and with Stephen F. Whitman and Son.

### Edward J. Hughes

Instructor in General and Analytical Chemistry, 1919-

Edward James Hughes was born in Delta, York Co., Pa., on February 13, 1891. The following year his family moved to Wilkes-Barre, Pa., where he obtained his education in the public schools.

In 1905 he entered the employ of W. D. White and Co., pharmacists, of Wilkes-Barre, continuing in that position until 1913, when he matriculated for a course in pharmacy at the Philadelphia College of Pharmacy.

During the three years in which he was a student at the College, Mr. Hughes was employed at the Llewellyn Pharmacy of Philadelphia. He graduated in 1916, with the degree of P.D., carrying off the Kappa Psi and Alumni gold medal and the William B. Webb prize. After graduation, he passed the Pennsylvania Board of Pharmacy for registration as a pharmacist and returned to Wilkes-Barre to enter the employ of W. D. White and Co. He continued in this position until July, 1918, when he entered the U. S. Army and served as a sergeant, first class in the medical department. During the period of his service he was employed mainly in doing analytical work in the laboratory connected with the Surgeon General's office examining drug and chemical supplies. He was discharged from the army on May 2, 1919, and again returned to Wilkes-Barre and entered the employ of W. D. White and Co.

In the fall of 1919 he accepted the instructorship in general and analytical chemistry at the Philadelphia College of Pharmacy, which position he occupies at present.

He is a member of several pharmaceutical societies and is corresponding secretary of the Philadelphia Choral Society.





EDWARD J. HUGHES

**Adley B. Nichols**

Student Assistant in Operative Pharmacy, 1917-1918; Assistant in Operative Pharmacy, 1919-1920. Instructor of Operative Pharmacy, 1920-



ADLEY B. NICHOLS

Adley Bonisteel Nichols was born in Kaukauna, Wisconsin, on March 24, 1896. His early education was obtained in part at the public schools of Kaukauna, his native town, and in part at the public schools of Green Bay, Wisconsin, where his family lived in 1908; he was graduated from the high school of the latter place in 1913.



In 1914 and 1915 he worked in the pharmacy of R. L. McDonald of Green Bay, Wisconsin. He matriculated in 1915 at the Philadelphia College of Pharmacy from which he graduated in 1917, with degree of Ph.G. The following winter he became student assistant in the Operative Pharmacy Laboratory, and also took a post-graduate course, leading to the degree of Phar.D., which he obtained in 1918.

Since his graduation he has been connected with the Operative Pharmacy Laboratory, and now holds the position of instructor, having had charge of much of the work of the department while Professor Cook was engaged in the arduous duties of the Executive-Secretaryship of the Committee on Centennial Celebration.

He is a member of the American Pharmaceutical Association, the Pennsylvania Pharmaceutical Association, and the Philadelphia College of Pharmacy and Science. He is also a member of the Philadelphia Choral Society and its treasurer. Mr. Nichols is associated with Professor Cook in various activities including the work on the revision of the Pharmacopœia.

### Marin S. Dunn

Instructor in Botany and Pharmacognosy, 1920-

Marin Sheppard Dunn, was born at Merchantville, N. J., December 23, 1898, He was educated in Philadelphia, graduating from Central High School in January, 1917, and winning the John Weaver Prize.



MARIN S. DUNN

He entered the University of Pennsylvania in 1917, and graduated with the degree of A.B. in 1920. During the summer of 1917, he was assistant chemist at the Bethlehem Steel Works, Bethlehem, Pa., and was in the U. S. Army in 1918.

He is a member of the Sigma XI Honorary Scientific Society and the National Entomological Society. In September, 1920, he accepted an instructorship in the Department of Botany and Pharmacognosy of the Philadelphia College of Pharmacy and Science, and occupies that position at the present time.

**Clarence A. Wesp**

Instructor in Accounting, 1921-

Clarence Arthur Wesp was born in Rochester, New York, June 4, 1882. He was educated in the elementary schools of Rochester, New York, and completed the bookkeeping and stenography courses of the Rochester Business Institute. Later he entered the academic course of the University of Rochester and was graduated from the New York University



CLARENCE A. WESP

School of Commerce, Accounts and Finance, with the degree of bachelor of commercial science. He later did post graduate work in his chosen calling at Harvard University and also at the University of Pennsylvania. He has been acting as a consulting expert for many business concerns and is at present instructor in commercial subjects in Northeast High School, Philadelphia, and dean of the School of Accounting and Business Administration of the Philadelphia Y. M. C. A., and a member of the accountancy commission of the Y. M. C. A. Schools of America. He is a member of the Society of Friends, and is affiliated with a number of fraternal orders and clubs. Since 1920 he has been conducting the work in the Commercial Department of the College.

**Edward T. Hahn**

Assistant in Pharmaceutical Laboratory, 1895-1900.

Edward Titus Hahn was born in Easton, Pa., May 1, 1874, and spent his early years in that city, graduating from the Easton High School and serving his apprenticeship with Alfred N. Richards of the same place.

He matriculated at the Philadelphia College of Pharmacy in 1893 and graduated in 1895 with the degree Ph.G. After his graduation he served as assistant in the pharmaceutical laboratory under Professor Joseph P. Remington until 1900. He then entered the employ of R. A. Hance, manufacturing pharmacist, and devoted some time to a study of manufacturing methods, particularly of fluidextracts and elixirs. Believing that there was greater opportunity for advancement in selling than in manufacturing pharmaceuticals, in 1902, he be-

came associated with the firm of H. K. Mulford and Co., and after twenty years of service is now dean of the sales force and instructor of new salesmen in the science and art of salesmanship.

He was an organizer and charter member of the Philadelphia Drug Club, located for some years at 512 Arch Street. He has been one of the active members of the Pennsylvania Pharmaceutical Association for many years and was one of the organizers of the Traveling



EDWARD T. HAHN

Men's Auxiliary and was elected president of that organization. He is a member of the American Pharmaceutical Association, the Philadelphia Association of Retail Druggists, and a number of social organizations. He is a frequent contributor to the programs of the Pennsylvania Pharmaceutical Association, his papers usually being along the lines of salesmanship.

### John J. Bridgeman, Jr.

Assistant in Botany and Pharmacognosy, 1908-1912.

John Joseph Bridgeman, Jr., was born October 3, 1879, in Philadelphia and his early life was spent working on the farm with his father, attending school in Philadelphia whenever possible. In 1898, he entered the employ of Julius Wolgemuth as apprentice, and took night school courses to supplement his preliminary education. Later, he entered the employ of Wm. G. Toplis, who at that time was doing bacteriological work at one of the Philadelphia experimental filtration plants.

In 1905 he matriculated at the Philadelphia College of Pharmacy, graduating in 1908 with the degree of P.D. During his second year in College, he became student assistant to Professor Henry Kraemer in the department of botany and pharmacognosy, and continued as full-time assistant after his graduation until 1912. He then went back to the retail drug business, at first in West Chester, Pa., and later in Bryn Mawr, Pa. In 1915 he entered the employ of E. R. Squibb and Sons Co., on the detail staff, and traveled extensively for them until 1920, when he was assigned to eastern territory exclusively. Mr. Bridgeman was much interested in athletics while in College, and with Harry R. Godshall offered a silver loving cup to be awarded in succeeding years for athletic prowess and skill.



While he was at the Philadelphia College of Pharmacy he was a very energetic worker for the interests of the students, and their welfare and progress. He co-operated in the establishing of a weekly college newspaper in 1909, circulated among the students and faculty



JOHN J. BRIDGEMAN, JR.

in the College, and called the Students Weekly Bulletin. This was discontinued about a year after he left the College.

Mr. Bridgeman is one of the leaders of the Squibb sales-force and resides in Rosemont, Pa.

### Adam Hastings Fitzkee

Assistant in Pharmaceutical Laboratory, 1916-1917.

Adam Hastings Fitzkee was born September 27, 1884, in Wrightsville, Pa., a town on the lower Susquehanna, where he spent his boyhood days. He obtained his preliminary education in the Wrightsville High School, from which he was graduated in 1912, later taking a year of post graduate work in Latin and German. During the latter years of his high school work, he obtained pharmaceutical experience in the store of G. S. Tinsley.

In 1913 he entered the Philadelphia College of Pharmacy from which he was graduated in 1916 with the degree of P.D. During his spare time while attending College, he worked in the store and laboratory of Charles Leedom, of Philadelphia. In the fall of 1916, Mr. Fitzkee became associated with the teaching work of the College as assistant in the Pharmaceutical Laboratory. During the summer months, he aided in preparing copy for the second volume of the sixth edition of Remington's Practice of Pharmacy.

Shortly after the declaration of war upon Germany by the United States, Mr. Fitzkee took the preliminary examinations for admission into the U. S. Aviation Service. He passed all tests successfully and was ordered to report for duty September 4, 1917, at Fort Wood, N. Y. From here he was sent to the University of Toronto for ground school training, thence to France for the completion of his instruction. On May 26, 1918, he arrived at the American Front and served as a Lieutenant of the 139 Aero Squadron until the signing of the Armistice, taking part in numerous engagements and bombing raids into enemy territory. He was sent home in January, 1920, as a casual and was honorably discharged from the Army shortly after.



ADAM HASTINGS FITZKEE

In the spring of 1920, he entered the employ of Eli Lilly and Co., of Indianapolis, and is at present Production Superintendent of the company.

He is a member of the American Pharmaceutical Association.

**Luther A. Buehler**

Assistant in Operative Pharmacy, 1920-

Luther Alexander Buehler was born February 9, 1897, at Wernersville, Berks Co., Pa., of Pennsylvania German ancestry, his father being a physician in his native town. He attended



LUTHER A. BUEHLER

the public schools of Wernersville and later the high school of West Reading, Pa. In June, 1913, Mr. Buehler entered the employ of Bamford and Kemp, Reading, Pa., where he remained until he entered the Philadelphia College of Pharmacy in the fall of 1915.

He was awarded the Henry and William P. Troth Scholarship and while attending the courses in the College, was employed by Ernest A. Troth. He enlisted in Base Hospital Unit No. 20 of the University of Pennsylvania, on May 17, 1917, and served with this organization throughout the World War as clinical laboratory technician. At the close of the war, he resumed his studies at the Philadelphia College of Pharmacy, and graduated in 1920, with the degree of Phar.B., being awarded the prize in chemical control. He is associated with Professor Cook in revision work on the Pharmacopœia, and since 1920 has been assistant in operative pharmacy.

### William Schleif

Director of Physical Education and Medical Examiner, 1910-1913.

William Schleif was born in Milwaukee, Wisconsin, in 1868, and received his early education in the Milwaukee grammar school and high schools.

He came to Philadelphia to study pharmacy and graduated in 1889, receiving the degree of Ph.G. He later took up the study of medicine, and was graduated in 1895 from the Medical Department of the University of Pennsylvania. During his student work at the University, he became assistant instructor in pharmacy and after his graduation was made demon-



*Photo by E. Goldensky.*

WILLIAM SCHLEIF

strator of pharmacy and materia medica, in which position he continued until 1910. He was a resident physician at the University Hospital from 1895 to 1897, and also took the post graduate work of the Polyclinic Hospital.

In 1910 he became Director of Physical Education and Medical Examiner of the Philadelphia College of Pharmacy, in which position he continued until 1913.

He is author of a text book on "Materia Medica and Therapeutics," which has gone through three editions, and a small book on the "Administration of Drugs."

He has been in medical practice in Philadelphia since 1897, and has been physician of the Sixth District of Philadelphia since 1918.



**W. Ward Beam**

Instructor in Physical Education, 1910-1913; Director of Physical Education, 1913-1915.

William Ward Beam, son of Alexander F. Beam, and Camilla W. Beam, was born in Philadelphia on April 3, 1865.

He received his early education in the West Philadelphia Academy, and was employed for a time by Rosengarten and Sons.

In 1885 he matriculated at the Philadelphia College of Pharmacy as a special student in chemistry, but becoming interested in physical education, he gave up the study of chemistry to make gymnastic teaching his life work, and for this he exhibited peculiar aptitude, having



W. WARD BEAM

not only an unusually fine physical development, but unusual technical skill in promoting the physical development of others; for a number of years he has followed this occupation with marked success; he has been frequently the "announcer" of many athletic meets of universities, colleges and schools.

When the Philadelphia College of Pharmacy made physical education a part of its curriculum in 1910, it made Mr. Beam an instructor in physical education, and in 1913 the director of the department; he introduced many special features of gymnastic exercises, which won for him high favor among the students, so much so that the class of 1913 dedicated its class book to him.

EXPLANATORY NOTES

The biographies in the pages following were written up chiefly from data supplied by the persons concerned. A number of graduates, doubtless some of prominence, either declined or failed to accede to our requests to contribute such data and as a consequence some of the sketches seem to be unduly short.

The name of the graduate appears in the class with which he received his diploma, though in many instances the course of instruction may have been completed one or more years previously.

A star (\*) before a name denotes that the individual is deceased.

In the case of married women graduates, the name under which the degree was received is given first, with the married name immediately following in parenthesis.

In the case of men who have changed their names since graduation, the name under which the degree was received is given first, with the new name immediately following in parenthesis.

Sp. before the year of graduation denotes that the person completed a course for which no degree was conferred, but for which a certificate was given.

ABBREVIATIONS

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| <p>A. A. A. S.—American Association for the Advancement of Science.<br/>                 A. E. F.—American Expeditionary Forces.<br/>                 A. of O.—Army of Occupation.<br/>                 A. Ph. A.—American Pharmaceutical Association.<br/>                 Acad.—academy.<br/>                 Ad.—address.<br/>                 Agt.—agent.<br/>                 Amer.—American.<br/>                 Art.—artillery.<br/>                 Assn.—association.<br/>                 Assoc.—associate.<br/>                 Asst.—assistant.<br/>                 B. P. O. E.—Benevolent Protective Order of Elks.<br/>                 Bact.—bacteriology.<br/>                 Bldg.—building.<br/>                 Bot.—botany.<br/>                 Btn.—battalion.<br/>                 Capt.—captain.<br/>                 Chem.—chemical, chemistry.<br/>                 Chm.—chairman.<br/>                 Co.—county, company.<br/>                 Col.—colonel.<br/>                 Coll.—college.<br/>                 Com.—committee.<br/>                 Con.—convention.<br/>                 Cpl.—corporal.<br/>                 D. S. C.—Distinguished Service Cross.<br/>                 Dept.—department.<br/>                 Detach.—detachment.<br/>                 Disp.—dispensary.<br/>                 Dist.—district.<br/>                 Div.—division.<br/>                 Engrs.—engineers.<br/>                 Evac.—evacuation.<br/>                 Exec.—executive.<br/>                 F. A.—Field Artillery.<br/>                 F. H.—Field Hospital.<br/>                 Frat.—fraternity.<br/>                 G. A. R.—Grand Army of the Republic.<br/>                 Gen.—general.<br/>                 H. S.—high school.<br/>                 Hist.—historical.<br/>                 Hon.—honorary.<br/>                 Hosp.—hospital.<br/>                 I. O. O. F.—Independent Order of Odd Fellows.<br/>                 Inf.—infantry.<br/>                 Ins.—insurance.<br/>                 Inst.—institute.<br/>                 Instr.—instructor.<br/>                 Jeff.—Jefferson.<br/>                 K. of C.—Knights of Columbus.<br/>                 K. of G. E.—Knights of the Golden Eagle.</p> | <p>K. of P.—Knights of Pythias.<br/>                 L. O. O. M.—Loyal Order of Moose.<br/>                 Lab.—laboratory.<br/>                 Lieut.—lieutenant.<br/>                 Maj.—major.<br/>                 Mat. Med.—materia medica.<br/>                 Med. Assn.—Medical Association.<br/>                 Med. Coll.—medical college.<br/>                 Mem.—member.<br/>                 Mfg.—manufacturing.<br/>                 Mfr.—manufacturer<br/>                 Mgr.—manager.<br/>                 N. F.—National Formulary.<br/>                 N. G.—National Guard.<br/>                 N. G. P.—National Guard of Pennsylvania.<br/>                 Nat.—natural.<br/>                 Natl.—National.<br/>                 O. T. C.—Officers Training Corps.<br/>                 Ord.—ordnance.<br/>                 P. O. S. of A.—Patriotic Order of Sons of America.<br/>                 Ph.M.—Master in Pharmacy.<br/>                 Pharm.—pharmaceutical.<br/>                 Phys.—physician.<br/>                 Pres.—president.<br/>                 Prof.—professor.<br/>                 Prop.—proprietor.<br/>                 Pub.—public.<br/>                 Pvt.—private.<br/>                 Reg.—regiment.<br/>                 Repub.—Republican.<br/>                 Res.—resident.<br/>                 Rev.—revision.<br/>                 S. A. T. C.—Students' Army Training Corps.<br/>                 Sch.—school.<br/>                 Sec.—section.<br/>                 Secy.—secretary.<br/>                 Sgt.—sergeant.<br/>                 Soc.—society.<br/>                 Spec.—special.<br/>                 Surg.—surgeon.<br/>                 Tech.—technology.<br/>                 Thes.—thesis.<br/>                 Treas.—treasurer.<br/>                 U. S. A.—United States Army.<br/>                 U. S. M. C.—United States Marine Corps.<br/>                 U. S. N.—United States Navy.<br/>                 U. S. N. R. F.—United States Naval Reserve Force.<br/>                 U. S. P. H.—United States Public Health.<br/>                 Univ.—university.<br/>                 Vice-pres.—vice-president.<br/>                 Vol.—volunteer.<br/>                 Y. M. C. A.—Young Men's Christian Association.</p> |
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CHAPTER XII.

BIOGRAPHICAL LIST OF GRADUATES OF THE PHILADELPHIA COLLEGE OF PHARMACY, AND OF THE DEPARTMENT OF PHARMACY AND CHEMISTRY OF THE MEDICO-CHIRURGICAL COLLEGE.

GRADUATES OF THE PHILADELPHIA COLLEGE OF PHARMACY.  
(CLASS LIST)

1826

- \*Charles H. Dingee, Ph.G.  
*Thes.*, Autimony and Its Preparations.  
First student to receive diploma of the College.  
For many years in drug and commission business in Philadelphia with John Henry Dingee, Class of 1828. Deceased, December 30, 1879.
- \*Charles H. McCormick, Ph.G.  
*Thes.*, Papaver Somniferum.
- \*William Sharp, Ph.G.  
*Thes.*, Cantharides.

1827

- \*Alexander Dawson, Ph.G.  
*Thes.*, Cantharides.

1828

- \*George D. Coggeshall, Ph.G.  
*Thes.*, Opium.  
Served in various official positions in N. Y. College of Pharmacy, 1st Vice-pres. of A. Ph. A. 1853. Delegate to National Pharmacopoeial Convention in 1852. Deceased, November 5, 1891.
- \*John Henry Dinges, Ph.G.  
*Thes.*, Mercury and Its Preparations.  
For many years in drug and commission business with Charles H. Dingee, Class of 1826, in Philadelphia. Deceased, August 13, 1879.

- \*Charles Hathwall, Ph.G.  
*Thes.*, Cinchona.

1829

- \*John C. Allen, Ph.G.  
*Thes.*, Prunus Virginiana.  
Deceased, August 9, 1896.
- \*Joseph H. Brooks, Ph.G.  
*Thes.*, Opium and the Dregs of Laudanum.  
Deceased, September 5, 1879.
- \*William R. Fisher, Ph.G.  
*Thes.*, Iodine and Its Preparations.  
Prof. of Chemistry, P. C. P., 1841-42. Deceased, 1842. (See page 401.)
- \*Roheson Moors, Ph.G.  
*Thes.*, Hepatica Triloba.
- \*Charles E. Pleasants, Ph.G.  
*Thes.*, Opium.
- \*Joseph Scattergood, Ph.G.  
*Thes.*, Quercus Falcata.  
Deceased, June 9, 1877.
- \*Franklin R. Smith, Ph.G.  
*Thes.*, Bicarbonate of Soda.

1830

- \*Edward Brooks, Ph.G.  
*Thes.*, Cortex Prunus Virginiana.
- \*Charles D. Hendry, Ph.G.  
*Thes.*, Polygala Senega.  
Deceased, April 25, 1869.
- \*Dillwyn Farrish, Ph.G.  
*Thes.*, Rhei and Its Preparations.  
President of P. C. P. from 1869 to 1885. Deceased, September 17, 1886. (See page 360.)
- \*Isaac Jones Smith, Ph.G.  
*Thes.*, Laudanum.

1832

- \*John Bringhurst, Ph.G.  
*Thes.*, Sanguinaria Canadensis.
- \*Richard M. Reeve, Ph.G.  
*Thes.*, Gillenia Trifoliata.

1833

- \*Samuel W. Brown, Ph.G.  
*Thes.*, Benzoin and Benzoic Acid.
- \*William P. Hansford, Ph.G.  
*Thes.*, Ointments.
- \*Edward Hopper, Ph.G.  
*Thes.*, Cantharides.  
Retail pharmacist at 3d St. above Chestnut, Phila. Later studied law and was admitted to the Bar in 1839. Solicitor for P. C. P. a number of years. Deceased, August 7, 1893.
- \*Thomas J. Husband, Ph.G.  
*Thes.*, Galipea Officialis.  
For many years conducted a retail drug business in Phila. Mem. Board of Trustees P. C. P. Mr. Husband's name is inseparably connected with the preparation known as "Husband's Magnesia." Deceased, January 21, 1898.
- \*Thomas H. Powers, Ph.G.  
*Thes.*, Extemporaneous Pharmacy.  
Mem. of firm of Powers and Weightman (now Powers-Weightman-Rosengarten Co.). Served on P. C. P. Board of Trustees from 1835 to 1841, filling the position of Secy. to the Board from 1835-1838. Deceased, November 20, 1878.
- \*Samuel Simes, Ph.G.  
*Thes.*, Datura Stramonium.  
Retail druggist at 12th and Chestnut Sts., Phila., for many years; also treas. Penna. Salt Mfg. Co. Deceased, March 6, 1885.
- \*Joseph C. Turnpenny, Ph.G.  
*Thes.*, Nicotiana Tabacum.  
In drug business at 10th and Spruce Sts., Phila., for 30 yrs. Mem. Board of Trustees P. C. P. for a number of years, serving as treas. from 1842-1850. Deceased, June 15, 1892.

\***Watson J. Welding, Ph.G.**  
*Thes.*, Digitalis Purpurea.

1834

\***William Barker Chapman, Ph.G.**

*Thes.*, Ipecacuanba.  
Graduated in medicine from Ohio Med. Coll. 1839. Elected Pres. A. Ph. A., 1854. Served during Civil War as surgeon in the U. S. Army. Deceased, October 10, 1874.

\***Augustine J. L. Duhamel, Ph.G.**

*Thes.*, Iodine and Its Combinations.  
Commenced study of pharmacy with Elias Durand. Became a member of P. C. P. in 1840 and served on Board of Trustees until time of death. Deceased, December 21, 1846.

\***William Ellis, Ph.G.**

*Thes.*, Bicyanide of Mercury.  
Nephew of Chas. Ellis (for many years Pres. of P. C. P.), with whom he began the study of pharmacy. Became associated with firm of Chas. Ellis and Co. as partner. Retired from active business in 1874. Deceased, October 13, 1881.

\***Alfred Gullou, Ph.G.**

*Thes.*, Fermentation.  
Deceased, August, 1840.

\***Stephen Procter, Ph.G.**

*Thes.*, Prunus Virginiana.  
Brother of William Procter, Jr. Graduated in medicine, 1843. Deceased, March 26, 1868.

\***Ambrose Smith, Ph.G.**

*Thes.*, Acetate of Zinc.  
Began study of pharmacy with his cousin, Daniel B. Smith (for many years, Pres. of P. C. P.). Retail pharmacist in Phila. Served as treas. of P. C. P. twenty-one and a half years. Deceased, July 15, 1884.

\***Samuel P. Thompson, Ph.G.**

*Thes.*, Secale Cornutum.

\***John H. Tilghman, Ph.G.**

*Thes.*, Cimicifuga Racemosa.

\***David B. Trimble, Ph.G.**

*Thes.*, Colchicum.

\***Joseph Trimble, Ph.G.**

*Thes.*, Manna.  
Member of firm, E. and C. Yarnall, wholesale druggists. Deceased, July 30, 1884.

1835

\***James Cockburn, Jr., Ph.G.**

*Thes.*, Cornus Florida.

\***Jonathan Evans, Jr., Ph.G.**

*Thes.*, Egyptian Opium.  
Deceased, July 5, 1841.

\***James Hopkins, Ph.G.**

*Thes.*, Some Preparations of Iron.  
Retail pharmacist at Broad and Chestnut Sts., Phila., until 1849, when he purchased a seat on the Phila. Stock Exchange. Deceased, August 10, 1887.

\***William R. Kitchen, Ph.G.**

*Thes.*, Ichthyocolla.

\***Clement J. Lee, Ph.G.**

*Thes.*, Sanguinaria Canadensis.  
Learned drug business with Chas. Ellis and Co. After graduation formed partnership with brother under firm name of F. and C. J. Lee, at Port Elizabeth, N. J. Deceased, December 23, 1890.

\***Isaac J. Martin, M.D., Ph.G.**

*Thes.*, American Senna.  
Entered apothecary business with Edward B. Garrigues. Removed to Maryland and conducted a seminary, at the same time practicing medicine. Connected with the Methodist Episcopal Church and was licensed to preach in 1849. Deceased, December 15, 1892.

\***Anthony J. Olmstead, Ph.G.**

*Thes.*, Musk.

Learned apothecary business with Frederick Brown. In 1837 or 1838 entered wholesale drug business in connection with dyestuffs. Retired, 1856. Deceased, January 30, 1888.

\***Richard Price, Ph.G.**

*Thes.*, Senega.

Retail pharmacist at 5th and Spruce Sts., Phila. Deceased, November 27, 1888.

\***Charles S. Shreve, Ph.G.**

*Thes.*, Gillenia.

1836

\***Henry C. Blair, Ph.G.**

*Thes.*, Hypericum Perforatum.

Retail pharmacist at 8th and Walnut Sts., Phila. Mem. Board of Trustees, P. C. P.; A. Ph. A. Deceased, August 20, 1862.

\***John W. Simes, Jr., Ph.G.**

*Thes.*, Solanum Dulcamara.

For many years retail pharmacist in Phila. Deceased, December 29, 1892.

\***Joseph M. Turner, Ph.G.**

*Thes.*, Symplocarpus Fœtidus.

1837

\***James L. Elliott, M.D., Ph.G.**

*Thes.*, Magnolia Glauca.

\***John Y. Goodyear, Ph.G.**

*Thes.*, Neutral Mixture.

Retail pharmacist at 6th and Pine Sts., Phila. Deceased, June 15, 1884.

\***William L. Hasbrouck, Ph.G.**

*Thes.*, Angostura Bark.

Learned drug business with his uncle, John Price Wetherill, Phila. Graduated in medicine and practiced in St. Louis, Mo. Served during Civil War as Assistant Surgeon of 23d Kentucky Regiment, with rank of Lieutenant. Deceased, September 9, 1893.

\***Benjamin F. Hoeckley, Ph.G.**

*Thes.*, Iodide of Potassium.

Served apprenticeship with Daniel B. Smith and William Hodgson, Jr., wholesale druggists. After graduation studied conveyancing and became connected with the Integrity Title Insurance, Trust and Safe Deposit Co. Deceased, February 15, 1896.

\***Robert J. Kennedy, Ph.G.**

*Thes.*, Serpentina Virginia.

\***Thomas R. F. Mitchell, Ph.G.**

*Thes.*, Veratrum Viride.

\***Gustavus Ober, Ph.G.**

*Thes.*, Spigelia Marilandica.

\***William Procter, Jr., Ph.G.**

*Thes.*, Lobelia Inflata.

Prof. of Pharmacy, P. C. P. (See page 402.) Deceased, February 10, 1874.

1838

\***Henry Brooks, Ph.G.**

*Thes.*, Ipomoea Jalapa.

\***Thomas W. Harris, Ph.G.**

*Thes.*, The Analysis of Mineral Waters.

\***William Edwin Knight, Ph.G.**

*Thes.*, Chrysanthemum Parthenium.

Retail pharmacist at 10th and Locust Sts., Phila., over 40 years. Deceased, June 9, 1892.

\*Claudius B. Linn, Ph.G.

*Thes.*, Aralia Nudicaulis.  
In drug business with Henry Troth and Co., subsequently becoming a member of firm Potts and Linn, 3d St. below Market, Phila. At one time pres. Phila. Drug Exchange. Deceased, March 6, 1889.

\*Robert Barnhill Potts, Ph.G.

*Thes.*, Capsicum Annuum.  
Deceased, June 22, 1865.

\*Richard Rushton, Ph.G.

*Thes.*, Asarum Canadensis.

\*Charles W. Simons, Ph.G.

*Thes.*, Eupatorium Perfoliatum.

\*A. Dickinson Woodruff, M.D., Ph.G.

*Thes.*, Kino.  
Deceased, January 31, 1881.

\*Henry W. Worthington, Ph.G.

*Thes.*, Veratrum Viride.  
Deceased, October 20, 1866.

1839

\*Thomaa Haines, Ph.G.

*Thes.*, False Article of Drymis Winteri.

\*Thomaa C. Hopkins, Ph.G.

*Thes.*, Delphinium Consolida.

\*Walter Shinn, Ph.G.

*Thes.*, Convolvulus Panduratus.

1840

\*William H. Corae, M.D., Ph.G.

*Thes.*, Arrow Root.

\*John W. Douglas, Ph.G.

*Thes.*, Fraxera Walteri.

\*Albert S. Letchworth, Ph.G.

*Thes.*, Protoioides of Mercury.  
Deceased, March 7, 1902.

\*Benjamin I. Ritter, Ph.G.

*Thes.*, Cucumis Citrullus.  
Deceased, 1872.

1841

\*J. Crswford Dawes, Ph.G.

*Thes.*, Different Preparations of Morphia.  
Retail pharmacist at 11th and Locust Sts., Phila. In 1870 elected secy. and treas. of Phila. and Gray's Ferry Passenger Railway Co. Deceased, June 26, 1891.

\*Caleb H. Needles, Ph.G.

*Thes.*, Juniperus Sabina.  
Graduate of Haverford Coll. Retail pharmacist in Phila. for many years. 1st Pres. Phila. Retail Druggists Assn. Mem. and one of the founders of Union League Club, Phila. Deceased, October 10, 1884.

1842

\*Peter Babb, Ph.G.

*Thes.*, Sabbatia Angularis.

\*William G. Baker, Ph.G.

*Thes.*, Cornus Florida.  
Retail pharmacist, Lancaster, Pa., from 1845-1890. Deceased, December 28, 1890.

\*William J. Carter, Ph.G.

*Thes.*, Unguentum Hydrargyri Nitratis.

\*P. Adolph Grotjans, Jr., Ph.G.

*Thes.*, Podophyllum Peltatum.  
Deceased, 1850.

\*William J. Jenks, Ph.G.

*Thes.*, Juniperus Virginiana.  
President of P. C. P. 1900-1900. (See page 364.)  
Deceased, October 21, 1904.

\*Edward Parrish, Ph.G.

*Thes.*, Stacte Caroliniana.  
Prof. of Pharmacy, P. C. P. (See page 404.)  
Deceased, September 9, 1872.

\*William Henry Schively, Ph.G.

*Thes.*, Chia Seed.  
In 1848 formed partnership with Edward Weiss for importing of drugs, dyes and chemicals. Deceased, October 19, 1893.

\*Laurence Turnbull, M.D., Ph.G.

*Thes.*, Populus Tremuloides.  
Graduated in medicine Jeff. Med. Coll., 1845. Otologist to Jeff. Hosp., Phila. Lecturer on chemistry as applied to the arts in Franklin Inst., Phila. As authority on diseases of the ear achieved great distinction. For thirty years physician in Dept. of Diseases of Eye and Ear in Howard Hosp., Phila. Author. Deceased, October 24, 1900.

\*Samuel P. Wetherill, Ph.G.

*Thes.*, Junglans Cineræ.  
Great grandson of Samuel Wetherill, 1st manufacturer of white lead in U. S. His experience while in the employ of the New Jersey Zinc Co. led to the invention in 1852, of the "Wetherill Furnace." At the outbreak of the Civil War joined Harlan's Light Cavalry, subsequently the 11th Penn., and was commissioned captain, Aug. 19, 1861, promoted to major, Oct. 1, 1861. At the close of the war brevetted lieutenant-colonel for gallant and meritorious service. Prominent in Masonic circles. Deceased, June 24, 1890.

1843

\*Caverly Boyer, Ph.G.

*Thes.*, Asclepias Tuberosa.

\*Edward Donnelly, M.D., Ph.G.

*Thes.*, Phytolacca Decandra.  
Graduated in medicine, 1854. Served as army surgeon during Civil War. Practiced medicine in Pittsburgh and San Francisco. Deceased, November, 1891.

\*Daniel S. Jonea, Ph.G.

*Thes.*, Arum Triphyllum.  
Retail pharmacist 12th and Spruce Sts., Phila. Elected trustee of P. C. P. in 1850. Pres. Piedmont Coal and Iron Co. Also Pres. Bridgeport Coal Co. Deceased, May 12, 1893.

\*Joshua S. Jones, Ph.G.

*Thes.*, Cimicifuga Racemosa.

\*Andrew McKim, Ph.G.

*Thes.*, Cypripedium Pubescens.

\*Jacob Lybrand Smith, Ph.G.

*Thes.*, Aralia Nudicaulis.  
Deceased, December 28, 1902.

1844

\*Robert C. Brodie, Ph.G.

*Thes.*, Copaiba.  
In retail drug business in Phila., 56 years. Many years Treas. of Phila. Wholesale Drug Co. Masonic affiliation. Deceased, January 4, 1906.

\*Robert Caulton Davis, Ph.G.

*Thes.*, Cantharis Vesicatoria.  
Served apprenticeship with Chas. Ellis (Pres. of P. C. P.). After graduation entered business at 16th and Vine Sts., Phila. Masonic affiliation. Deceased, August 24, 1888.

\*Thomaa Estlack, Jr., Ph.G.

*Thes.*, Spigelia.  
Deceased, February 24, 1902.



- \***George H. Mitchell, Ph.G.**  
*Thes.*, Podophyllum Peltatum.
- \***William St. Clair Nichols, Ph.G.**  
*Thes.*, Citric Acid and Its Compounds.
- \***Alfred Bower Taylor, Ph.G.**  
*Thes.*, The Air Pump.  
Graduated from Univ. of Penna., 1841. Retail pharmacist at 11th and Walnut Sts., and at 1015 Chestnut St., Phila. In 1848, appointed Inspector of Drugs for the Port of Phila. Elected 1st Secy. of A. Ph. A. Pres. A. Ph. A., 1890. Mem. Board of Trustees P. C. P. 21 years. Corresponding Secy. of P. C. P. 36 years. Received degree Ph.M. 1887. Mem. Com. of Rev. of U. S. P., 1860-90 inc. In practical pharmacy was first to propose the use of cacao butter as a base for suppositories. Deceased, 1898.
- \***Silas Hough Wentz, Ph.G.**  
*Thes.*, Erigeron Philadelphicum.  
Deceased, March 3, 1854.
- \***Thomas S. Wiegand, Ph.G.**  
*Thes.*, Aristolochia Reticulata.  
Librarian P. C. P. (See page 392.) Deceased, August 10, 1909.
- 1845
- \***Caleb R. Keeney, Ph.G.**  
*Thes.*, Rubus Villosus.  
Retail pharmacist at 16th and Arch Sts., Phila., 65 years. Deceased, February 1, 1911.
- \***Thomas Leidy, Ph.G.**  
*Thes.*, Scutellaria Integrifolia and Hyssopifolia.  
Deceased, April 27, 1870.
- \***Joseph A. McMaken, Ph.G.**  
*Thes.*, Marrubium Vulgaris.
- \***William Norwood Needles, Ph.G.**  
*Thes.*, Cornus Florida.  
Retail pharmacist at Broad and Vine Sts., Phila., for several years, after which established firm of Allan and Needles, Delaware Ave. and Chestnut St., and carried on the oil business for 28 years. Deceased, April 17, 1894.
- \***William Barber Webb, Ph.G.**  
*Thes.*, Rubus Villosus.  
Retail pharmacist in Phila. for many years. Mem. Board of Trustees of P. C. P. 22 years. Elected treas. of the College, 1889. Deceased, February 10, 1894.
- 1846
- \***Jacob L. Baker, Ph.G.**  
*Thes.*, Sabbatia Angularis.  
Deceased, April 27, 1880.
- \***John Dickson, Ph.G.**  
*Thes.*, Camphora.
- \***Robert England, Ph.G.**  
*Thes.*, Gillenia Trifoliata.  
Retail pharmacist at 10th and Catharine Sts., Phila. for nearly 50 years. Mem. Board of Trustees of P. C. P. Elected a member of Phila. Board of Health in 1855. Pres. 3d Sectional Sch. Board. Mem. Pharmaceutical Examining Board of Phila. 1872. Masonic affiliation. Deceased, March 29, 1896.
- \***Hiram C. Lee, Ph.G.**  
*Thes.*, Impurities of Carbonate of Zinc.
- \***George W. Patrick, M.D., Ph.G.**  
*Thes.*, Bromine.  
Deceased, October 29, 1874.
- \***Robert M. Patterson, Ph.G.**  
*Thes.*, Morphia.  
Retail pharmacist in Phila. for many years. Deceased, January 21, 1882.
- \***Thomas James Scott, Ph.G.**  
*Thes.*, Syrupus Ipecacuanhae.  
Retail pharmacist in Lexington, Ky. until outbreak of Civil War, when he served as Hosp. steward in Col. Dudley's 21st Reg. of Kentucky Volunteers. At the close of the war he became an artist. Deceased, March 22, 1888.
- \***Benjamin R. Smith, Ph.G.**  
*Thes.*, Diospyros Virginiana.
- \***Charles F. Stoeber, Ph.G.**  
*Thes.*, Hedera Helix.
- \***John A. Whartenby, Ph.G.**  
*Thes.*, Matico.
- \***Peter T. Wright, Ph.G.**  
*Thes.*, Leontodon Taraxacum.  
Deceased, June 1, 1870.
- 1847
- \***Charles Bullock, Ph.G.**  
*Thes.*, Kalmia Latifolia.  
President of P. C. P. from 1885 to 1900. (See page 363). Deceased, March 21, 1900.
- \***James H. Crew, Ph.G.**  
*Thes.*, Apocynum Androsaemifolium.
- \***Evan T. Ellis, Ph.G.**  
*Thes.*, Fluidextract of Valerian.  
Son of Charles Ellis, who for a number of years was Pres. of P. C. P. Graduate of Haverford College in 1844. Mem. Board of Trustees, P. C. P. Mem. A. Ph. A. Deceased, October 11, 1913.
- \***T. Curtis C. Hughes, Ph.G.**  
*Thes.*, Uva Ursi.  
Deceased, October, 1878.
- \***Samuel Lenher, Ph.G.**  
*Thes.*, Gentiana Purpurea.  
Deceased, August 20, 1870.
- \***John R. Lewis, Ph.G.**  
*Thes.*, Podophyllum Peltatum.
- \***G. Graves Loudon, Ph.G.**  
*Thes.*, Hydro-Alcoholic Extracts
- \***Charles S. Rush, Ph.G.**  
*Thes.*, Displacement.  
Deceased, July 27, 1904.
- \***Alfred K. Scholl, Ph.G.**  
*Thes.*, Helianthemum Canadense.
- \***Alfred Lafayette Taylor, Ph.G.**  
*Thes.*, Unguentum Hydrargyri Oxidi Rubri et Unguentum Gallae.
- \***N. Spencer Thomas, Ph.G.**  
*Thes.*, Emplastrum Plumbi.  
Served apprenticeship with Robert Shoemaker. After graduation manufactured pharmaceuticals at New Market and Canal Sts., Phila. Removed to Painted Post, N. Y. Deceased, March 30, 1890.
- 1848
- \***John R. Andrews, Ph.G.**  
*Thes.*, Leontodon Taraxacum and Extract.
- \***Samuel M. Bines, Ph.G.**  
*Thes.*, Lactucarium.  
Deceased, December 20, 1917.
- \***Charles M. Cornell, Ph.G.**  
*Thes.*, Kino.  
Deceased, March 26, 1895.

**\*Franklin Chapman Hill, Ph.G.**

*Thes.*, Pharmacy and Medicine. Served apprenticeship with Prof. Edward Parrish. Retail pharmacist at 11th and Mt. Vernon Sts., Phila. Later became a civil engineer. Served for a time as curator of Princeton College Museum. Deceased, November 5, 1890.

**\*James Laws, Jr., M.D., Ph.G.**

*Thes.*, Syrupus.

**\*Edmund Pollitt, Ph.G.**

*Thes.*, Eupatorium Perfoliatum. Retail pharmacist at Front and Christian Sts., and at 16th and Bainbridge Sts., Phila. Inspector of Drugs at the Port of Phila. Also Pres. of 3d Ward Sch. Board. Deceased, July 1, 1893.

**\*Charles A. Santos, Ph.G.**

*Thes.*, Eonymus Atropurpureus. Retail pharmacist, Norfolk, Va. Pres. Va. State Pharm. Assn. Mem. Va. State Board of Pharmacy. Deceased, April 13, 1896.

**\*John A. Springer, Ph.G.**

*Thes.*, Eupatorium Perfoliatum.

**\*George F. Wiggan, Ph.G.**

*Thes.*, Cephalanthus Occidentalis. Associated with firm of Chas. Ellis and Son. Removed to Mahanoy City, Pa., and became a coal operator. Returned to Phila. and became a director of the Phila. Coal and Iron Co. Also director of Mechanics National Bank, Phila. Deceased, June 4, 1891.

**\*Charles M. Wilkins, Ph.G.**

*Thes.*, Coptis Trifolia.

1849

**\*Charles L. Bache, Ph.G.**

*Thes.*, Ficus Carica.

**\*Samuel L. Costill, Ph.G.**

*Thes.*, Sanguinaria Canadensis.

**\*Edmund A. Crenshaw, Ph.G.**

*Thes.*, Capsicum. Graduated, Haverford College. Served apprenticeship with Smith and Hodgson. In 1849, with Chas. Bullock (Pres. of P. C. P.), bought out firm of Smith and Hodgson, and under firm name Bullock and Crenshaw continued the business. Hon. Mem. Phila. Drug Exchange. Deceased, Feb. 19, 1894.

**\*Charles Hartzell, Ph.G.**

*Thes.*, Asclepias Tuberosa.

**\*Samuel Hastings, Ph.G.**

*Thes.*, Anthemis Nobilis.

**\*William W. D. Livermore, Ph.G.**

*Thes.*, Cornus Florida.

**\*T. Morris Perot, Ph.G.**

*Thes.*, Chloroform. Served apprenticeship with Jenks and Ogden. Later entered employ of Chas. Ellis and Co. In 1851 went into business at 4th and Market Sts., Phila. Later entered into partnership with his father in old malting establishment founded by Anthony Morris in 1687, the oldest commercial house in America. Mem. P. C. P. Board of Trustees; Chm. of the Board from 1882-1901. Pres. of Mercantile Library 41 years; Pres. Woman's Medical College 25 years; Pres. Penna. Soc. for Prevention of Cruelty to Children; Pres. Exec. Com. Municipal Reform Assn.; Mem. Citizen's Municipal Assn.; Historical Soc.; Franklin Inst., etc. Deceased, November 15, 1902.

**\*Oscar Steele, Ph.G.**

*Thes.*, Aralia Spinosa.

**\*Isaac W. Stokes, Ph.G.**

*Thes.*, Aralia Spinosa. Deceased, September 15, 1906.

**\*Avery Tobey, Ph.G.**

*Thes.*, Prinos Verticillatus.

1850

**\*Samuel S. Bunting, Ph.G.**

*Thes.*, Amygdalus. Served apprenticeship with Jos. C. Turnpenny. After graduating became partner of Mr. Turnpenny until 1864, when he purchased the business. Mem. P. C. P. Board of Trustees. Elected Treas. of the College 1871. Held this position 18 years. Deceased, August 15, 1890.

**\*Horace Conté, Ph.G.**

*Thes.*, The Cultivation of Coffee.

**\*Benjamin B. Davis, Ph.G.**

*Thes.*, Tannic Acid. Entered drug business with Chas. Ellis. Removed to Montgomery, Ala., and engaged in the hardware business. Deceased, August 18, 1888.

**\*Isaac C. Jones, Ph.G.**

*Thes.*, The Pharmaceutical Treatment of Cinchona.

**\*Joseph Laidley, Ph.G.**

*Thes.*, Pharmaceutical Preparations. Deceased, 1861.

**\*Charles S. Rand, Ph.G.**

*Thes.*, The Relative Positions of the Medical and Pharmaceutical Professions.

**\*Samuel E. Shinn, Ph.G.**

*Thes.*, Glycerin. Deceased, February 3, 1855.

1851

**\*J. Henry Abbott, Ph.G.**

*Thes.*, Panax Quinquifolium.

**\*Charles Shreve Braddock, Ph.G.**

*Thes.*, Salix Babylonica. Pioneer grower of cranberries in New Jersey. Active with Phila. Sanitary Commission during Civil War. Deceased, December 1, 1912.

**\*James B. Campbell, Ph.G.**

*Thes.*, Tincture of Colchicum.

**\*George Canby, Ph.G.**

*Thes.*, Phosphate of Ammonia and Magnesia with Lime.

**\*Alfred A. B. Dursand, Ph.G.**

*Thes.*, Hydrastis Canadensis.

**\*William D. Elliott, Ph.G.**

*Thes.*, Cimicifuga Racemosa.

**\*John D. Finley, Ph.G.**

*Thes.*, The Syrups of the Pharmacopœia.

**\*Samuel S. Garrigues, Ph.G.**

*Thes.*, Matricaria. After graduation studied at the Universities of Berlin and Gottingen. Received Ph.D. degree. Engaged in manufacture of chemicals used in photography in Phila. Removed to Michigan, 1869. Appointed Salt Inspector in Michigan. Served as assistant surgeon to 29th Mich. Volunteers during Civil War. Mem. Franklin Inst.; A. Ph. A.; Acad. of Natural Sciences, etc. Deceased, 1889.

**\*David F. Goodyear, Ph.G.**

*Thes.*, Nepeta Cataria.

**\*Louis Hughes.**

*Thes.*, Fluid Extracts.

**\*William King, Ph.G.**

*Thes.*, Commercial Varieties of Sarsaparilla. Deceased, January 2, 1903.

**\*Louis DeBarth Kuhn, Ph.G.**

*Thes.*, Pharmaceutical Ethics.

**\*Thomas H. Montgomery, Ph.G.**

*Thes.*, Scammony.

**\*Weather'll Peterson, Ph.G.**

*Thes.*, Eupatorium Perfoliatum.

- \*Robert Ramsden, Ph.G.**  
*Thes.*, Phytolacca Decandra.
- \*John C. Savery, Ph.G.**  
*Thes.*, Fluid Extract of *Serpentaria*.  
Soon after graduation left the drug business to practice law in Phila. Deceased, August 1, 1888.
- \*James Stratton, Ph.G.**  
*Thes.*, Pharmacy.  
In employ of Powers and Weightman until 1855, when he opened a pharmacy in Bordentown, N. J. Mem. N. J. Pharm. Assn.; Pres., 1873. Deceased, March 23, 1883.
- \*William Taylor, Ph.G.**  
*Thes.*, Fluid Extracts.
- \*Henry M. Troth, Ph.G.**  
*Thes.*, Phytolacca Decandra.
- 1852
- \*T. Roberts Baker, Ph.G.**  
*Thes.*, *Secale Cornutum*.
- \*David F. Burton, Ph.G.**  
*Thes.*, *Stillingia Sylvatica*.
- \*Cipriano Canedo, Ph.G.**  
*Thes.*, *Imperatoria Struthium*.
- \*John L. Davis, Ph.G.**  
*Thes.*, *Chimaphila*.
- \*George M. Gormly, Ph.G.**  
*Thes.*, Progress of Chemistry.
- \*Samuel D. Hendel, Ph.G.**  
*Thes.*, *Geranium Maculatum*.  
Member of firm Leitch and Hendel, prominent pharmacists of St. Louis, Mo. Mem. A. Ph. A. Deceased, January 23, 1871.
- \*William Heyser, Ph.G.**  
*Thes.*, *Cornus Florida*.
- \*John Holden, Ph.G.**  
*Thes.*, *Arctostaphylos Uva Ursi*.
- \*Alfred Jones, Ph.G.**  
*Thes.*, Narcotic Plants Grown in the United States.
- \*J. H. M. Morris, Ph.G.**  
*Thes.*, *Frasera*.
- \*Richard Peltz, Ph.G.**  
*Thes.*, Syrup of *Asafetida*.  
Prominent in municipal government of the City of Phila. Deceased, January 26, 1918.
- \*Joseph S. Perot, Ph.G.**  
*Thes.*, *Cortex Pruni Virginiana*.  
Deceased, 1906.
- \*Bradford Ritter, Ph.G.**  
*Thes.*, *Ferrum*.  
Retail pharmacist at 13th and Walnut Sts., Phila. Later entered wholesale business at Front and Market Sts. At time of death was connected with Powers and Weightman's Chemical Works. Deceased, August 11, 1873.
- \*Matthew M. Selfridge, Ph.G.**  
*Thes.*, *Kalmia Latifolia*.  
Entered wholesale drug house of John Gilbert and Co. Remained with this firm until 1857, when he opened a retail pharmacy in Bethlehem, Pa. In 1872, returned to Phila. and became a member of firm of John Gilbert and Co. Deceased, May 23, 1881.
- 1853
- \*Alexander Bachman, Ph.G.**  
*Thes.*, Tannic and Gallic Acids.  
Spent greater part of his life as teacher, publisher and composer of music. Deceased, June 6, 1913.
- \*Charles T. Bonsall, Ph.G.**  
*Thes.*, Stearoptene of the Oil of Monarda.
- \*Elijah Cheston, Jr., Ph.G.**  
*Thes.*, *Arctium Lappa*.
- \*John W. Davis, Ph.G.**  
*Thes.*, *Sanguinaria Canadensis*.
- \*John H. Faunce, Ph.G.**  
*Thes.*, Camphor.
- \*Frederick Gutekunst, Ph.G.**  
*Thes.*, History of Electro-Metallurgy and Its Application to Pharmacy.  
Prominent photographer in Phila. Deceased April 27, 1917.
- \*J. Henry Harres, Ph.G.**  
*Thes.*, *Salix*.
- \*Edward H. Ogden, Ph.G.**  
*Thes.*, *Asclepias Tuberosa*.  
Deceased, December 9, 1903.
- \*Oscar Pollard, Ph.G.**  
*Thes.*, *Cannabis Indica*.
- \*J. Lindley Pyle, Ph.G.**  
*Thes.*, *Rhus Radicans*.  
Retail pharmacist, Brooklyn, N. Y. Deceased 1866.
- \*Edward T. Robinson, Ph.G.**  
*Thes.*, Syrupus Ferri Iodidi and Tar Beer.
- William Savery, Jr., Ph.G.**  
*Thes.*, *Rumex Crispus*.
- \*John F. Shaeff, Ph.G.**  
*Thes.*, *Coptis Trifolia*.  
Entered drug business with Samuel F. Troth and Co. Left drug business after graduation and entered coal business with Samuel M. Bines. Class of 1848. Mem. Union League Club, Phila. Franklin Inst.; Apprentices' Library Co. Deceased, February 13, 1895.
- \*Charles F. Shrom, Ph.G.**  
*Thes.*, *Prinos Verticillatus*.  
Deceased, October 31, 1870.
- \*Turner H. Southall, Ph.G.**  
*Thes.*, An Analysis of California Cinnabar.
- \*Hennell Stevens, Ph.G.**  
*Thes.*, Glycerin.
- \*William J. Watson, Ph.G.**  
*Thes.*, *Rhus Glabrum*.  
Deceased, 1874.
- 1854
- \*Maurice W. Alexander, Ph.G.**  
*Thes.*, *Melissa*.
- \*Thomas H. Barr, Ph.G.**  
*Thes.*, *Magnesia*.
- \*Mortimer H. Bickley, Ph.G.**  
*Thes.*, *Eupatorium Perfoliatum*.  
Engaged in iron and steel business in addition to conducting a drug store in Chester, Pa. Deceased, April 1, 1911.
- \*James L. Bispham, Ph.G.**  
*Thes.*, *Potassii Phosphas*.  
Deceased, April 3, 1918.
- \*Henry C. Bower, Ph.G.**  
*Thes.*, *Ricinus Communis*.  
After graduation became a chemical broker, also a manufacturer of glycerin. Received Elliott Cresson Medal from Franklin Inst. for the process of the utilization of crude glycerin. Author of numerous articles on chemical subjects. Mem. Board of Managers of Franklin Inst.; A. Ph. A., etc. Deceased, March 26, 1896.



- \*John Broughton, Ph.G.**  
*Thes.*, Preparations of the Salts of Nickel.
- Thomas M. Clark, Ph.G.**  
*Thes.*, Opium.
- Richard S. Cox, Ph.G.**  
*Thes.*, Juglans Cinera.
- \*Robert K. Dillard, Ph.G.**  
*Thes.*, Spigelia Marilandica.
- Charles H. Eggert, Ph.G.**  
*Thes.*, Manganese and Its Preparations.
- Louis M. Emanuel, Ph.G.**  
*Thes.*, Cassia.
- \*Edward Gaillard, Ph.G.**  
*Thes.*, Arnica Montana.  
Retail pharmacist at 11th and Montgomery Ave., Phila., for many years. Mem. A. Ph. A. Masonic affiliation. Deceased, March 30, 1891.
- Samuel Gerhard, Ph.G.**  
*Thes.*, The Adulteration of Drugs.  
Retail pharmacist since 1855 at cor. of E. Columbia Ave. and Belgrade St., Phila. At the time of the P. C. P. Centennial Celebration Mr. Gerhard was present as the oldest living graduate of the College.  
*Ad.*, E. Columbia Ave., and Belgrade St., Phila., Pa.
- \*Edward H. Hance, Ph.G.**  
*Thes.*, Chimaphila Umbellata.  
One of the pioneer manufacturers of pharmaceuticals in the U. S., entering that business in 1856. Mem. of firm Hance Brothers and White, Phila. Served two terms as Pres. of Phila. Drug Exchange and a number of years on Board of Directors. Mem. Phila. Board of Trade, etc. Deceased, December 14, 1914.
- \*Levi H. Harris, Ph.G.**  
*Thes.*, Chimaphila Umbellata.
- David S. Jacoby, Ph.G.**  
*Thes.*, Achillea Millefolium.
- Joseph L. Lemberger, Ph.G.**  
*Thes.*, Gillenia Trifoliata.  
Retail pharmacist. Senior mem. of firm Lemberger and Co. Charter mem. of Penna. Pharm. Assn.; Ex-pres. A. Ph. A.; Vice-pres. P. C. P. Mem. Board of Trustees Penna. State Asylum for Insane, Secy since 1892.; Mem. Board of Foreign Missions Reformed Church in U. S. Mem. and Pres. Lebanon Y. M. C. A. Served as Hosp. Steward in Civil War.  
*Ad.*, Lebanon, Pa.
- David Lewis, Jr., Ph.G.**  
*Thes.*, Gillenia Trifoliata Radix as Compared with Ipecacuanha.
- \*George H. Markley, Ph.G.**  
*Thes.*, Quassia.
- \*William J. Miller, Ph.G.**  
*Thes.*, Pareira Brava.  
Deceased, July 22, 1908.
- \*John H. Palethorp, Jr., Ph.G.**  
*Thes.*, Rudbeckia Laciniata.
- \*James T. Shinn, Ph.G.**  
*Thes.*, Seeds of Gossypium Herbaceum.  
Apprenticed to firm of Chas. Ellis and Co., wholesale and retail druggists. After graduation opened store at Broad and Spruce Sts., Phila. In 1859 elected a mem. of P. C. P. Board of Trustees. In 1894 made Treas. of the College. Served as Pres. of A. Ph. A. in 1880, of which he had been a member since 1860. Interested in many charitable organizations. Deceased, 1907.
- \*David L. Stackhous, Ph.G.**  
*Thes.*, Iris Versicolor.
- Henry C. Steever, Ph.G.**  
*Thes.*, Helonias Dioica.
- William H. Thompson, Ph.G.**  
*Thes.*, Scoparius.
- \*John Wyeth, Ph.G.**  
*Thes.*, Chemical Constituents of Gillenia Trifoliata.  
After graduation entered into partnership with Henry C. Blair, Phila., from which he withdrew to go into business with his brother, F. H. Wyeth, with whom he conducted a large drug store on Walnut St., Phila. Here developed the manufacturing business which has ever since been successfully continued under the firm name, John Wyeth and Brother, Inc. Deceased, March 30, 1907.

1855

**\*James A. Armstrong, Ph.G.**

*Thes.*, Anthemis Cotula.  
Graduated in medicine Univ. of Penna. 1861. Joined Union Army and served 3 years in Civil War as surgeon. Practiced medicine in Camden, N. J. and for 15 years held office of Coroner and Inspector for State Board of Health. Deceased, October 31, 1885.

**\*William C. Bakes, Ph.G.**

*Thes.*, Spiraea Tomentosa.  
Served apprenticeship with Elias Durand, 6th and Walnut Sts., Phila. Served P. C. P. as Secy. of Board of Trustees a number of years. Deceased, August 29, 1886.

**\*Joseph W. Bancroft, Ph.G.**

*Thes.*, Prinos Verticillatus.

**Charles A. Bannwart, Ph.G.**

*Thes.*, Asclepias Incarnata.

**William H. Bassett, Ph.G.**

*Thes.*, Fluid Extracts and Their Preparation.

**\*Augustus D. Carroll, Ph.G.**

*Thes.*, Cimicifuga Racemosa.

**\*Jacob Dunton, Ph.G.**

*Thes.*, Action of Schuykilt Water on Lead Pipe.  
Deceased, January 18, 1897.

**\*Charles W. Epting, Ph.G.**

*Thes.*, Caulophyllum Thalictroides.  
Deceased, October 18, 1916.

**\*Robert F. Fairthorne, Ph.G.**

*Thes.*, The Active Principle of the Hop.  
Deceased, October 22, 1883.

**\*J. Clarkson Griffith, Ph.G.**

*Thes.*, Menispermum Virginicum.  
Deceased, 1914.

**\*James Perkins Hoffecker, Ph.G.**

*Thes.*, Eupatorium Perfoliatum.  
More than 40 years a leading pharmacist of Smyrna, Del. Treas. of town of Smyrna, and Treas. Board of Sch. Directors. Deceased, 1909.

**\*M. Henry Kollock, Ph.G.**

*Thes.*, Gelsemium Sempervirens.

**\*Thomas Lancaster, Ph.G.**

*Thes.*, Syrup of Proto-Nitrate of Iron.

**\*Edmund D. Lawall, Ph.G.**

*Thes.*, The Bitter Principle in Gentian.

**\*James C. Leamy, Ph.G.**

*Thes.*, Iris Versicolor.

**Hermann Leuchsenring, Ph.G.**

*Thes.*, Phellandrium Aquaticum.

**George W. McFee, Ph.G.**

*Thes.*, Euphorbia Ipecacuanha.

**\*Henry Mittnacht, Ph.G.**

*Thes.*, Cocculus Palmatus.

**\*David U. Morgan, Ph.G.**

*Thes.*, Lead and Its Compounds.  
Deceased, January 3, 1889.

- \*Charles W. Pedrick, Ph.G.**  
*Thes.*, *Asclepias Tuberosa*.
- \*Elliston L. Perot, Ph.G.**  
*Thes.*, *Cassia Marilandica*.  
Deceased, 1906.
- \*Henry N. Rittenhouse, Ph.G.**  
*Thes.*, *Buchu*.  
Served apprenticeship with Wm. Hodgson, Jr. After graduation manufactured extract of licorice root. Mem. Board of Trustees, P. C. P. Deceased, June 24, 1905.
- \*Alonzo Robbins, Ph.G.**  
*Thes.*, *Optical Properties of Fecula*.  
Retail pharmacist at 11th and Vine Sts., Phila. Mem. Board of Trustees, P. C. P. Received Ph.M. degree 1890. Mem. Penna. State Pharmaceutical Examining Board; A. Ph. A., etc. Deceased, December 1, 1896.
- John H. Buch, Ph.G.**  
*Thes.*, *Gillenia*.
- \*William T. Wenzell, Ph.G.**  
*Thes.*, *Corydalis Formosa*.  
Graduated in medicine LaCrosse Med. Coll. Received Ph.M. degree from P. C. P. in 1887. 1872-98 Prof. of Chem. and Toxicology, California College of Pharmacy; 1875-1880, Prof. of Chem. in Med. College of the Pacific, and from 1897-1902, in Cooper Med. College. Mem. A. Ph. A.; Vice-pres. in 1874. Mem. San Francisco Board of Pharmacy. Chemist to United Appraisers Stores from 1899 until time of death. Deceased, July 31, 1913.
- \*Joseph Evans Young, Ph.G.**  
*Thes.*, *Cicuta Maculata*.
- 1856
- John M. Banes, Ph.G.**  
*Thes.*, *Relative Strengths of Tinctures of Opium*.
- \*Robert Battey, Ph.G.**  
*Thes.*, *Gossypium Herbaceum*.  
Graduated in medicine. Became distinguished as a surgeon. Deceased, 1891.
- \*Issac R. Beam, Ph.G.**  
*Thes.*, *Capsicum Annuum*.
- \*John W. Biddle, Ph.G.**  
*Thes.*, *Apocynum Androsæmifolium*.  
Deceased, June 2, 1916.
- \*John T. Chenoweth, Ph.G.**  
*Thes.*, *Cimicifuga Racemosa*.  
Deceased, June 15, 1915.
- \*William Trevetts Cummlings, Ph.G.**  
*Thes.*, *Cuminum Cyminum*.
- John M. Dickson, Ph.G.**  
*Thes.*, *Euphorbia Hypericifolia*.
- \*Theodore Dilks, Ph.G.**  
*Thes.*, *Chimaphila Umbellata*.  
Succeeded Henry M. Zollickoffer in the business of retail pharmacist at 6th and Pine Sts., Phila. Deceased, November 26, 1863.
- \*William Evans, Jr., Ph.G.**  
*Thes.*, *Acorus Calamus*.
- \*Herman Gerhart, Ph.G.**  
*Thes.*, *Ergota*.
- Joseph T. Guthrie, Jr., Ph.G.**  
*Thes.*, *Sabbatia Angularia*.
- \*James Henry Harte, Ph.G.**  
*Thes.*, *Euphorbia Ipeacuanha*.  
Retail pharmacist in New Orleans, La., for many years. Deceased, October 14, 1882.
- Hugh H. Hlgsbee, Ph.G.**  
*Thes.*, *Saponaria Officinalis*.
- \*William H. Z. Kearney, Ph.G.**  
*Thes.*, *Eupatorium Perfoliatum*.
- John H. Kendall, Ph.G.**  
*Thes.*, *Cornus Florida*.
- James McBride, Ph.G.**  
*Thes.*, *Asclepias Tuberosa*.
- \*Dillwyn Parrish Pancoast, Ph.G.**  
*Thes.*, *Ilex Opaca*.
- Woodman S. Paynter, Ph.G.**  
*Thes.*, *Aralia nudicaulis*.
- \*E. Raphael Perrot, Ph.G.**  
*Thes.*, *Triosteum Perfoliatum*.  
Deceased, April 9, 1917.
- William H. Pratt, Ph.G.**  
*Thes.*, *Xanthoxylum Fraxineum*.
- \*George J. Scattergood, Ph.G.**  
*Thes.*, *Castor Oil Beans*.  
Continued dye business of Scattergood and Carter. One of the leaders of the Phila. Yearly Meeting of Orthodox Friends, and one of the managers of Westtown Boarding School. Deceased, July 16, 1914.
- \*Andrew J. Shick, Ph.G.**  
*Thes.*, *Extractum Panax Quinquifolium*.
- \*Francis H. Sliddall, Ph.G.**  
*Thes.*, *Coptis Trifolia*.  
Soap manufacturer. Deceased. February 1, 1907.
- \*William Bellingham Stanhops, Ph.G.**  
*Thes.*, *Gillenia Trifoliata*.
- \*William A. Thompson, Ph.G.**  
*Thes.*, *Dorstenia Contrayerva*.  
Served as hospital steward during Civil War. Later became associated with drug firm of Lee and Osgood, with whom he remained 44 years. Masonic affiliation. Deceased, October, 1909.
- \*William Richard Warner, Ph.G.**  
*Thes.*, *Cantharis Vittata* and *Mylabris Cichorii*.  
Immediately after graduation traveled through Penna., delivering series of lectures on scientific subjects. Later opened a store at 2d and Girard Ave., Phila., and became engaged in manufacturing pharmaceuticals, selling out his retail business. Removed to 154 N. 3d St., Phila., and manufactured sugar-coated pills and granules. In 1876 the firm removed to a six-story building on Market St. and later located at Broad and Wallace Sts. Deceased, April 3, 1901.
- \*Thomas Weaver, Ph.G.**  
*Thes.*, *Helianthemum Canadensis*.
- \*Adam H. Wilson, Ph.G.**  
*Thes.*, *Albumen*.
- 1857
- \*James R. Baker, Ph.G.**  
*Thes.*, *Radix Zedoaria*.
- George Blinkhorn, Ph.G.**  
*Thes.*, *Erythroea Centaminum*.
- \*Ferris Bringham, Ph.G.**  
*Thes.*, *Apis Calaminiaris*.  
Retail pharmacist of Wilmington, Del. Vice-pres. A. Ph.A. Pres. Wilmington Fountain Soc. Deceased, March 16, 1871.
- \*Noah B. Brower, Ph.G.**  
*Thes.*, *Tinctures*.
- Jonathan H. Bunn, Ph.G.**  
*Thes.*, *Arnica Montana*.
- \*James M. Caldwell, Ph.G.**  
*Thes.*, *Strychnos Ignatia*.  
Deceased, August 9, 1906.

**\*Samuel Campbell, Ph.G.**

*Thes.*, Lycopus Virginicus.  
Retail pharmacist 911 Walnut St., Phila. Later  
supt. fluid-extract dept. of John Wyeth and Bro.  
Also employed by Henry K. Wampole and Co., as  
supt. of laboratories. Deceased, February 19, 1892.

**Frank B. Dancy, Ph.G.**

*Thes.*, Malambo.

**Joseph F. de Choudens, Ph.G.**

*Thes.*, Liquor Tartarii Boraxatii.

**William S. Fleming, Ph.G.**

*Thes.*, Bean of St. Ignatius.

**\*Charles West Hancock, Ph.G.**

*Thes.*, The True Position of the Druggist.  
Retail pharmacist, West Phila. Masonic affilia-  
tion. Mem. A. Ph. A.; Penna. Pharm. Assn. De-  
ceased, July 18, 1909.

**\*C. Collin Hughes, Ph.G.**

*Thes.*, Colchici Semen.  
Retail pharmacist, Phila. Deceased, December 4,  
1888.

**John F. Kaufman, Ph.G.**

*Thes.*, Essential Oils.

**\*Albert D. McConaughy, Ph.G.**

*Thes.*, Juglans Cinerea.

**Jacob B. McMullen, Ph.G.**

*Thes.*, Cytisus Scoparius.

**T. L. Maassenburg, Ph. G.**

*Thes.*, Rubus Villosus.

**\*Jamea R. Mercein, Ph.G.**

*Thes.*, Cornus Sericea.  
Deceased, April 16, 1904.

**John T. Mercer, Ph.G.**

*Thes.*, Asclepias Tuberosa.

**Leander Neal, Ph.G.**

*Thes.*, Comptonia Asplenifolia.

**\*Joseph G. Richardson, Ph.G.**

*Thes.*, Veratrum Viride.  
Graduated in medicine, Univ. of Penna. Prac-  
ticed a number of years at Union Springs, N. Y.,  
returned to Phila., and occupied the chair of hy-  
giene at the Univ. of Penna. Mem. Phila. Board  
of Health and of various medical and hygienic  
societies in the U. S. and in Europe. Deceased,  
November 13, 1886.

**Frederick Rohrbacher, Ph.G.**

*Thes.*, Pulvis Senna Composita.

**Peter Schurk, Jr., Ph.G.**

*Thes.*, Matico.

**J. Pedro Seuret, Ph.G.**

*Thes.*, Adiantum Pedatum.

**\*Jsmes Henry Steen, Ph.G.**

*Thes.*, Spigelia Marilandica.

**Horace B. Taylor, Ph.G.**

*Thes.*, Capsicum.

**\*J. Bloomfield Wetherill, Ph.G.**

*Thes.*, Barosma Crenata and Barosma Serratifolia.  
Retail pharmacist in Memphis, Tenn., a number of  
years. Later studied theology and was connected  
with Episcopal churches in Rome, Italy, Newark,  
N. J., and New York City. Deceased, December  
6, 1886.

**Joseph Young, Ph.G.**

*Thes.*, Rhus Toxicodendron.

**Jacob B. Zieber, Ph.G.**

*Thes.*, Stillingia Sylvatica.

1858

**Frederick J. Brown, Ph.G.**

*Thes.*, Fœonia Officialis.

**Raphael Cabe, Ph.G.**

*Thes.*, The Progress of Pharmacy.

**John W. Cadbury, Ph.G.**

*Thes.*, Podophyllin.

Retired.

*Ad.*, 441 Locust Ave., Germantown, Phila., Pa.

**John E. Carter, Ph.G.**

*Thes.*, Colchicia.

Retired. Entered business with Carter and Scatter-  
good, mfg. chemists 1858. Partner 1859. Retired  
1912. Mem. P. C. P. since 1859. Mem. Franklin  
Inst.; Acad. Nat. Sciences; Historical Soc. of  
Penna.; Amer. Microscopical Soc.; A. A. A. S.;  
Alumni Assn. P. C. P.  
*Ad.*, 5356 Knox St., Germantown, Phila., Pa.

**\*Joseph K. Corson, Ph.G.**

*Thes.*, Podophyllum Peltatum.

Graduated in medicine. Entered Medical Corps  
of 6th Penna. Reserves in 1861. Served during  
Civil War. In 1867 joined Regular Army Med.  
Corps. Received major's commission. Retired  
1897. Received Medal of Honor for heroic work.  
Deceased, July 24, 1913.

**George H. Dick, Ph.G.**

*Thes.*, Caloric.

**\*Edward Reese Fall, Ph.G.**

*Thes.*, Formic Acid.

Graduated in medicine, Univ. of Penna. Served  
as assistant surgeon in Union Army during Civil  
War. Later entered stock brokerage business.  
Charter mem. of Art Club, Phila. Deceased. Sep-  
tember 15, 1916.

**Francis A. Figueroa, Ph.G.**

*Thes.*, Cerasus Serotina.

**\*Peter P. Fucha, Ph.G.**

*Thes.*, Hedera Helix.

After graduation, changed name to Fox. De-  
ceased, April 24, 1914.

**\*Amos Hansell, Ph.G.**

*Thes.*, Colchicia and Veratria.

Retail pharmacist, 20th and Market Sts., Phila.  
Deceased, November 6, 1890.

**B. B. Henshey, Ph.G.**

*Thes.*, Gillenia Trifoliata.

**\*F. Victor Heydenreich, Ph.G.**

*Thes.*, Capsicum Annum.

At time of death was senior partner of wholesale  
drug house at 30 William St., New York City.  
Deceased, May 4, 1879.

**William Hollemback, Ph.G.**

*Thes.*, Radix Sumbuli.

**E. W. Inskeep, Ph.G.**

*Thes.*, Podophyllum Peltatum.

**George L. Jameson, Ph.G.**

*Thes.*, Ceanothus Americanus.

**\*Washington Laycock, Ph.G.**

*Thes.*, Chimaphila Umbellata.

**Charles A. McDermott, Ph.G.**

*Thes.*, Chimaphila Umbellata.

**John Q. Miles, Ph.G.**

*Thes.*, Gossypium Herbaceum.

**Albert V. Nolen, Ph.G.**

*Thes.*, Veratrum Viride.

**Robert H. Saller, Ph.G.**

*Thes.*, Colchicin.

**Oliver G. Sherman, Ph.G.**

*Thes.*, Collodion.



- \***Lewis T. Sillyman, Ph.G.**  
*Thes.*, Eryngium Aquaticum.
- \***Isaac Whitehouse Smith, Ph.G.**  
*Thes.*, Extractum Krameiz.
- \***Hallam H. Spencer, Ph.G.**  
*Thes.*, Crystalline Principle Found in Marrubium Vulgare.
- John J. Stell, Ph.G.**  
*Thes.*, Matico.
- \***William Beatty Thompson, Ph.G.**  
*Thes.*, Pharmacy.  
Retail pharmacist at 17th and Mt. Vernon Sts., Phila. Later employed by John Wyeth and Bro. Mem. P. C. P. Board of Trustees and Recording Secy. of College. Mem. A. Ph. A. Deceased, December 7, 1906.
- Frank J. Tourtelot, Ph.G.**  
*Thes.*, Polygonum Hydropiper.
- William H. Warner, Ph.G.**  
*Thes.*, Anthemis Cotula.
- \***Thomas D. Weiser, Ph.G.**  
*Thes.*, Leptandra Virginica.
- Pierce B. Wilson, Ph.G.**  
*Thes.*, Gossypii Herbacci Radix.
- \***Edward Zeitler, Ph.G.**  
*Thes.*, Gelsemium Sempervirens.
- 1859
- Harvey Allen, Ph.G.**  
*Thes.*, Podophyllin.
- \***William F. Buchanan, Ph.G.**  
*Thes.*, Abietæ-Oleum Terebinthinae.
- \***Thomas R. Coombe, Ph.G.**  
*Thes.*, The Mining and Smelting of Lead in Illinois.  
Retail pharmacist, West Phila., until 1880, when he retired. Deceased, December 11, 1886.
- \***Charles G. Dodson, Ph.G.**  
*Thes.*, Agathotes Chirayta.  
Associated for many years with Frederick Brown, Class of 1861, in wholesale and retail drug business at 5th and Chestnut Sts., Phila. Deceased, March 16, 1915.
- \***Powhatan E. Dupuy, Ph.G.**  
*Thes.*, Proximate Analysis of Plants.
- \***Charles L. Eherle, Ph.G.**  
*Thes.*, Pyrus Malus.  
Deceased, October 4, 1914.
- William Eyre, Ph.G.**  
*Thes.*, Hydrastis Canadensis.
- \***William T. Garwood, Ph.G.**  
*Thes.*, The Solubility of the Astringent Extracts.
- Henry F. Geyer, Ph.G.**  
*Thes.*, Acetic Acid.  
Purchasing Agt., Delaware River Chemical Works, Phila., 41 years. Retail pharmacist 19 years. Served as Sgt. Battery A. (Keystone) Artillery, 1859-62; Sgt. L. Co., 32nd Penna. Militia 1863; 1st Lieut. H. Co. 196th Penna. Vol. 1864.  
*Ad.*, Delaware River Chemical Works, Foot of Morris Street, Phila., Pa.
- \***David W. Harry, Ph.G.**  
*Thes.*, Liatris Spicata.  
Deceased, April 10, 1914.
- \***Joseph Augustus Helntzelman, Ph.G.**  
*Thes.*, Anagallis Arvensis.  
For many years a practicing physician and pharmacist at 2000 Ridge Ave., Phila. Prominent in the Masonic fraternity and various German organizations. Deceased, October, 19, 1915.
- \***Charles L. Jefferson, Ph.G.**  
*Thes.*, Eryngium.  
Deceased, April 16, 1902.
- Francis Kennedy, Ph.G.**  
*Thes.*, Stillingia.
- \***Thomas A. Lancaster, Ph.G.**  
*Thes.*, A Chemical Investigation of Certain Acid Vegetable Juices.
- \***Alexander Hope McLeroth, Ph.G.**  
*Thes.*, Lactucarium.
- \***Thomas Noble, Ph.G.**  
*Thes.*, Thuja Occidentalis.  
Served as hospital steward during Civil War. Afterwards connected with the revenue service. Deceased, December 27, 1885.
- George K. Richards, Ph.G.**  
*Thes.*, Petroselinum Sativa.
- \***James W. Robbins, Ph.G.**  
*Thes.*, Podophyllum Peltatum.
- \***Roland Seeger, Ph.G.**  
*Thes.*, Hydrargyri Iodidum.
- \***Theophilus H. Smith, Ph.G.**  
*Thes.*, Helianthemum Canadense.  
Enlisted in the 15th Penna. Cavalry during Civil War. Participated in many battles. Deceased, September 28, 1910.
- \***John Ward, Ph.G.**  
*Thes.*, Hyosciamia.  
Studied medicine and practiced in North Carolina until the breaking out of the Civil War, when he came north and served in the hospitals. Later located in Bristol, Pa., and opened a drug store. Deceased, March 26, 1895.
- 1860
- \***William D. Bell, Ph.G.**  
*Thes.*, Manganese and its Oxides.
- \***Joseph P. Bolton, Ph.G.**  
*Thes.*, Geranium Maculatum.  
Graduated in medicine Jeff. Med. Coll. Demonstrator of chemistry at Jeff. Med. Coll. and assistant neurologist at Jeff. Hosp. Author. Deceased, February 24, 1906.
- John W. Boyd, Ph.G.**  
*Thes.*, Cytisus Scoparius.
- John E. Bryan, Ph.G.**  
*Thes.*, Diospyros Virginiana.
- John Claypoole, Ph.G.**  
*Thes.*, Grana Paradisi.
- Francis A. Colman, Ph.G.**  
*Thes.*, Gelatines.
- Cincinnati M. Cowell, Ph.G.**  
*Thes.*, Capsicum Annuum.
- William Pryor Creecy, Ph.G.**  
*Thes.*, Liquidambar Styracifluae.
- \***Thomas H. Franklin, Ph.G.**  
*Thes.*, Chimaphila Umbellata.  
Deceased, January 9, 1900.
- Herman Fritsch, Ph.G.**  
*Thes.*, Carypha Pumos.  
Physician.  
*Ad.*, 625 Vine Street., Phila., Pa.
- \***Charles Fronefield, Jr., Ph.G.**  
*Thes.*, Phellandrium Aquaticum.  
Deceased, 1895.
- James J. Gegan, Ph.G.**  
*Thes.*, Phytolacca Decandra.

- \***Jacob F. Haehnlen, Jr., Ph.G.**  
*Thes.*, Achillea Millefolium.
- \***Frederick A. Keffer, Ph.G.**  
*Thes.*, Sabhatia Angularis.
- \***Henry B. Kemble, Ph.G.**  
*Thes.*, Stillingia Sylvatica.
- Ferdinand Link, Ph.G.**  
*Thes.*, Practical Arrangement of a Drug and Prescription Store.
- J. L. McIlvaine, Ph.G.**  
*Thes.*, Vinum Ipecacuanhæ.
- \***William Macpherson, Ph.G.**  
*Thes.*, Chelidonium Majus.  
After graduation, entered Jeff. Med. Coll. but at the outbreak of the Civil War, passed an examination as assistant surgeon and went to the front, serving all through the war. Retail pharmacist in Phila., 35 years. Masonic affiliation. Deceased, October 13, 1895.
- \***Alexander M. Mecray, Ph.G.**  
*Thes.*, Leptandra Virginica.
- \***George A. Newman, Ph.G.**  
*Thes.*, Caulophyllum Thalictroides.  
Manufacturer. Deceased, July 23, 1921.
- \***William G. Parrish, Ph.G.**  
*Thes.*, Podophyllum Peltatum.
- \***Edwin Rulon, Ph.G.**  
*Thes.*, Cortex Caryæ Amaræ.
- \***John F. Sheridan, Ph.G.**  
*Thes.*, Foreign and American Ipecacuanha.
- \***Hermann A. Vogelhach, Ph.G.**  
*Thes.*, Regnum Vegetabile.  
Enlisted in 27th Reg. Penna. Volunteers. Commissioned 1st Lieut. Promoted to Capt. Served about two years in Civil War. Retail pharmacist in Phila. until 1878, when he removed to Florida. Deceased, November 15, 1887.
- Joseph Wagner, Ph.G.**  
*Thes.*, Asclepias Tuberosa
- \***James G. Wells, Ph.G.**  
*Thes.*, Geranium Maculatum.
- \***John Wendel, Ph.G.**  
*Thes.*, Spora læ Lycopodii.
- James Wilson, Ph.G.**  
*Thes.*, Druggists and Drugs.
- Jonas Winter, Ph.G.**  
*Thes.*, Oleum Arachis Hypogea and Oleum Sinapis.
- 1861
- \***James Maxwell Abernethy, Ph.G.**  
*Thes.*, Investigation of the Resinoids.  
Retail pharmacist, Jersey City, N. J. Received A.M. degree from Lafayette Coll. Mem. A. Ph. A. Deceased, January 16, 1911.
- \***George D. Blomer, Ph.G.**  
*Thes.*, Nepeta Cataria.
- \***Frederick Brown, Jr., Ph.G.**  
*Thes.*, The Comparative Value of the Commercial Varieties of Aloes.  
Graduated from Univ. of Penna. Entered the store of his father at 5th and Chestnut Sts., Phila. Later opened a store of his own at 9th and Chestnut Sts. In 1864 re-entered the store of his father. In 1890, desiring to devote his entire time to the manufacture of "Brown's Essence of Jamaica Ginger," sold the store to Chas. G. Dodson, Class of 1859. Pres. Laurel Hill Cemetery Co. Deceased, September 25, 1894.
- \***F. Benjamin Carhonell, Ph.G.**  
*Thes.*, The Honey Bee.  
Deceased, 1862.
- \***William P. Clothier, Ph.G.**  
*Thes.*, Eonymus Atropurpureus.  
Physician. Graduated in medicine, Univ. of Buffalo, 1875. Practiced in Buffalo. Deceased, February 5, 1922.
- \***Charles H. Cressler, Ph.G.**  
*Thes.*, Ergot of Zea Maize.  
Retail pharmacist, Chambersburg, Pa. One of the original members of Penna. Pharm. Assn.; Pres. in 1884. Mem. A. Ph. A. Deceased, January 29, 1890.
- \***Charles F. Dare, Ph.G.**  
*Thes.*, Scoparius.  
Retail pharmacist, Bridgeton, N. J. Ex-pres. of N. J. Pharm. Assn. Deceased, May 16, 1918.
- \***George H. Davis, Ph.G.**  
*Thes.*, Cimicifuga Racemosa.
- \***William H. Evans, Ph.G.**  
*Thes.*, Alettris Farinosa.  
Deceased, August 24, 1919.
- \***Robert Gibson, Ph.G.**  
*Thes.*, Gossypium Herbaceum.
- William H. Giffard, Ph.G.**  
*Thes.*, Powdered Extract of Hyoscyamus.
- William H. H. Githens, Ph.G.**  
*Thes.*, Pharmaceutical Preparations.  
Physician. Graduated in medicine, Univ. of Penna., 1866. Served in Civil War. Ad., 1524 Chestnut St., Phila., Pa.
- William D. Harrison, Ph.G.**  
*Thes.*, Magnolia Glauca.
- \***George E. Hayes, Ph.G.**  
*Thes.*, Some Narcotic Extracts.
- T. Jefferson Hedges, Ph.G.**  
*Thes.*, Helianthemum Canadense.
- \***Emile Heydenreich, Ph.G.**  
*Thes.*, Phosphate of Sesquioxide of Iron.  
Senior mem. of importing house of E. Fongera and Co., New York City. Mem. A. Ph. A. Deceased, March 16, 1911.
- W. Ralph Higinbotham, Ph.G.**  
*Thes.*, Frasera Walteri.
- Howard C. Kearney, Ph.G.**  
*Thes.*, Geranium Maculatum.
- \***James Kemble, Ph.G.**  
*Thes.*, Cucurbita Citrullus.  
Retail pharmacist a number of years. Later studied medicine and at the time of his death was a practicing physician. Deceased, August 3, 1883.
- \***Charles Letts, Ph.G.**  
*Thes.*, Radix Sumbul.
- \***Lewis Levy, Ph.G.**  
*Thes.*, Juglans Cinerea.  
Veteran of Confederate Army. Deceased, February 21, 1920.
- \***John C. Long, Ph.G.**  
*Thes.*, The Resins and Aqueous Extract of Jalap.  
Deceased, July 7, 1896.
- James H. McKee, Ph.G.**  
*Thes.*, Ergota.  
Physician.  
Ad., 6623 McCallum St., Phila., Pa.
- William E. F. Mason, Ph.G.**  
*Thes.*, Urtica Dioica.
- Brewer Mattocks, Ph.G.**  
*Thes.*, Asclepias Tuberosa.

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- \*James Mecray, Jr., Ph.G.  
*Thes.*, Buxus Suffruticosa.  
Deceased, February 9, 1916.
- \*Decatur Milligan, Ph.G.  
*Thes.*, Aletris Farinosa.  
Deceased, April 24, 1907.
- \*Wilson H. Pile, Jr., Ph.G.  
*Thes.*, Saccharum.
- \*Alfred J. Rankin, Ph.G.  
*Thes.*, Syrupus Rubi Villosi Compositus.  
Deceased, 1890.
- Joseph Beel, Ph.G.  
*Thes.*, Polygala Senega.
- \*Elam Rhoads, Ph.G.  
*Thes.*, Asclepias Tuberosa.
- \*Clayton French Richards, Ph.G.  
*Thes.*, Stillingia Sylvatica.  
Deceased, June 15, 1902.
- \*Nathaniel Richardson, Jr., Ph.G.  
*Thes.*, Arsenic.  
Associated with the Husband Magnesia business many years. Mem. Penna. Acad. Fine Arts. Ex-pres. Bucks Co. Natural Science Ass'n. Minister in the Society of Friends. Deceased, December 24, 1920.
- \*Thomas K. Scheller, Ph.G.  
*Thes.*, Spiraea Tomentosa.  
Deceased, January 1, 1911.
- \*Richard B. Sheridan, Ph.G.  
*Thes.*, Unguentum Mezerei.
- \*Robert J. Siddall, Ph.G.  
*Thes.*, Cimicifuga Racemosa.
- \*Ephraim K. Smith, Ph.G.  
*Thes.*, Eryngium Aquaticum.  
Pioneer in match manufacturing business and was the first in the U. S. to manufacture safety matches. Sec'y and Treas. of American Match Manufacturers Ass'n. One of the incorporators of the Diamond Match Co. Deceased, 1909.
- \*J. Melancthon Stoeber, Ph.G.  
*Thes.*, Calamina.  
During the Civil War served as Hospital Steward in the 55th Reg. Penna. Volunteers. 12 years proprietor of Broad St. Station Pharmacy, Phila. Masonic affiliation. Deceased, December 8, 1906.
- Charles Tuller, Ph.G.  
*Thes.*, Indigo.
- \*William Henry Weatherly, Ph.G.  
*Thes.*, Oleum Gossypii.
- Charles Woods, Ph.G.  
*Thes.*, Polygonatum Uniflorum.
- 1862
- \*William M. Allen, Ph.G.  
*Thes.*, Eupatorium Perfoliatum.  
Deceased, March 5, 1887.
- \*Henry Blithe, Ph.G.  
*Thes.*, Chemistry.  
Retail pharmacist, Phila., 51 years. Deceased, November 20, 1916.
- \*Albert P. Brown, Ph.G.  
*Thes.*, Matico.  
Retail pharmacist, Camden, N. J. In charge of Microscopical Lab. of Alumni Assn. Served on Executive Board of P. C. P. Alumni Assn., acting as Vice-pres. in 1872; Rec. Sec'y. N. J. Pharm. Assn. from 1876 to 1884; Pres. 1885; Sec'y N. J. State Board of Pharmacy. Mem. A. Ph. A. Masonic affiliation. Deceased, April 19, 1892.
- \*W. G. Buchanan, Ph.G.  
*Thes.*, The Relative Amount of Extract in Commercial Aloes.
- Edward D. Chipman, Ph.G.  
*Thes.*, Baptisia Tinctoria.  
Retired, 1913. Pharmacist, Howard Hosp., Phila., after graduation. Retail pharmacist 17 years. Sec'y and Gen. Mgr., Goshen Pharmacal Co., 22 years. Mem. Goshen City Council and Pres. Sch. Board. Served 3 years as Hosp. Steward 121st Penna. Volunteers, Army of the Potomac, during Civil War.  
*Ad.*, Grass Valley, Calif.
- Charles D. Collom, Ph.G.  
*Thes.*, Cornus Florida.
- William H. Cooper, Ph.G.  
*Thes.*, Cytisus Scoparinus.
- \*Robert W. Dickson, Ph.G.  
*Thes.*, Agathotes Chirayta.  
In employ of Powers and Weightman. Deceased, March 18, 1885.
- \*C. Lewis Diehl, Ph.G.  
*Thes.*, Salvia Officialis.  
After graduation entered employ of John Wyeth and Bro. At outbreak of Civil War enlisted in Anderson Cavalry and remained in service until the Battle of Stone River, where he was severely wounded and given his discharge. Having recuperated from his wounds he again entered the government service as Assistant Chemist in the U. S. Army Laboratory at Phila. At the close of the war, went to Chicago, and later accepted the position as manager of the Louisville Chem. Works at Louisville, Ky. In 1869 opened a drug store in Louisville. Retired in 1904. Mem. A. Ph. A. In 1866 was elected Chm. of Com. on Progress of Pharmacy. 1871 elected 1st Vice-pres. of the association, and in 1874 elected president. In 1872 the A. Ph. A. elected him to newly created office of Reporter on Progress of Pharmacy, a position he occupied almost continuously until 1915. 1st Pres. of Louisville College of Pharmacy from 1870-1881; also occupied Chair of Pharmacy. P. C. P. conferred the degree Ph.M. upon him in 1887. Mem. Kentucky Board of Pharmacy. Chm. N. F. Rev. Com.; Mem. U. S. P. Rev. Com. Deceased, March 25, 1917.
- \*Edward T. Dobbins, Ph.G.  
*Thes.*, Anthemis Nobilis.  
Mem. firm John Wyeth and Bro., Mfg. Pharmacists. Mem. P. C. P. Board of Trustees. Mem. Union League Club; Phila. Country Club, etc. Deceased, February 12, 1906.
- \*Marcus C. Fetter, Ph.G.  
*Thes.*, Asparagus Officialis.  
Chief Burgess of old borough of West Bethlehem, Pa. Mem. Advisory Board Bethlehem Trust Co. Deceased, May 1, 1914.
- \*Theophilus Fischer, Ph.G.  
*Thes.*, Gelsemium Sempervirens.
- Richard T. Hand, Ph.G.  
*Thes.*, Phytolacca Decandra.
- George Hansell, Ph.G.  
*Thes.*, Iodinium.
- Molton E. Hornbeck, Ph.G.  
*Thes.*, Lactucarium.
- \*Henry H. Jacobs, Ph.G.  
*Thes.*, Panax Quinquefolium.  
In 1862 enlisted as private in Co. L. Anderson Troop. Captured by Confederate Army at Murfreesboro. Paroled and sent to Camp Chase, Ohio. Later detailed for service at U. S. Army Lab., Phila. In 1865 established firm of Phillips and Jacobs, manufacturers of photographic chemicals, in Phila. Deceased, March 24, 1886.



**\*Henry W. Leslie, Ph.G.**

*Thes.*, Fluid Extract of the Bark of the Root of Pomegranate.  
Graduated in medicine, after having practiced pharmacy for a number of years in Bristol, Pa., and in Phila. Deceased, February 14, 1882.

**Adolph W. Miller, Ph.G.**

*Thes.*, Anemone Ludoviciana.  
Wholesale druggist, Pres. Aschenbach and Miller, Inc. Graduated in medicine Univ. of Penna. Ph.D. degree Univ. of Penna. Formerly Demonstrator and Lecturer on Pharmacy and Asst. Prof. of Mat. Med. Univ. of Penna.; Ex-pres Botanical Soc. of Penna.; Pres. Soc. of Doctors of Philosophy, Univ. of Penna.; Corres. Secy. P. C. P. Ad., 860 N. 5th Street, Phila., Pa.

**\*Wesley W. Mullen, Ph.G.**

*Thes.*, Rubus Villosus.

**\*William H. Naulty, Ph.G.**

*Thes.*, Chemistry and Drugs.  
Deceased, July 22, 1902.

**\*George R. Parry, Ph.G.**

*Thes.*, Gillenia Trifoliata.

**\*Henry Thomas Peck, Ph.G.**

*Thes.*, Monsel's Salt.  
Enlisted as private in 118th Penna. Vols. in 1862. Promoted to 1st Lieut. 1864. Retail pharmacist in Phila. until 1882, when he graduated in medicine at Jeff. Med. Coll. Relinquished drug business and devoted entire time to practice of medicine in Phila. Deceased, June 23, 1892.

**\*Thomas A. Rex, Ph.G.**

*Thes.*, Ferri Subcarbonas.  
Graduated in medicine Univ. of Penna. Practiced in Pittsburgh, Pa., from 1866-1905, when he retired and moved to California. Deceased, March 31, 1916.

**Theodore A. St. Clair, Ph.G.**

*Thes.*, Radix Galangal Minoris.

**Christian Schmidt, Ph.G.**

*Thes.*, Saponification.

**Jacob Senneff, Ph.G.**

*Thes.*, Chimaphila Umbellata.

**\*Richard M. Shoemaker, Ph.G.**

*Thes.*, Arnica Montana.  
Pres. Robt. Shoemaker and Co., Inc., Wholesale Druggists. 1865 made 1st Treas. of Alumni Assn., P. C. P.; Treas. P. C. P. 8 years; Pres. Phila. Drug Exchange, 1890; Honorary Director, 1891. Deceased, September 8, 1921.

**\*Bennett L. Smedley, Ph.G.**

*Thes.*, Baptisia Tinctoria Radix.  
Learned drug business with Amos H. Yarnall. After graduation conducted a drug store at 21st and Vine Sts., Phila. Elected a mem. of City Council in 1892, and served on the Select Council until time of death. Deceased, December 30, 1909.

**\*George M. Smyser, Ph.G.**

*Thes.*, Ptelea Trifoliata.

**\*Clayton H. Wills, Ph.G.**

*Thes.*, The Relative Quantity of Volatile Oil Contained in the Short and Long Leaf Buchus.

**\*David L. Witmer, Ph.G.**

*Thes.*, Helianthemum Canadense.  
Retail pharmacist until 1895. Deceased, November 30, 1921.

1863

**\*G. Adolphus Bachman, Ph.G.**

*Thes.*, The Apothecary's Position.  
For some years after graduation practiced pharmacy. Graduated in medicine Jeff. Med. College and practiced in Phila. Mem. Amer. Med. Assn. Deceased, January 9, 1907.

**Christian Berger, Ph.G.**

*Thes.*, Helleborus Niger.

**Franklin Coggins, Ph.G.**

*Thes.*, Cucurbita Pepo.

**\*George W. Eldridge, Ph.G.**

*Thes.*, Oxycoccus Macrocarpus.  
One of the original members of P. C. P. Alumni Assn. and assisted in its organization in 1864. Deceased, June 25, 1885.

**\*Daniel S. Fox, Ph.G.**

*Thes.*, Preparations from the Root of Podophyllum Peltatum.  
Retail pharmacist in Phila. and Reading, Pa. Deceased, September 5, 1893.

**\*George M. Hambricht, Ph.G.**

*Thes.*, Cortex Radicis Myrica Cerifera.

**C. Ferdinand Hoffman, Ph.G.**

*Thes.*, Morus Alba.

**\*James Kenworthy, Ph.G.**

*Thes.*, Krameria, Geranium, Etc.  
Deceased, 1881.

**\*Joseph C. Kirkbride, Ph.G.**

*Thes.*, Chimaphila Umbellata.  
Retail pharmacist St. Louis, Mo. Mem. A. Ph. A. Pres. St. Louis College of Pharmacy, 1886. Deceased, May 6, 1887.

**\*Paul Frederick Lehbach, Ph.G.**

*Thes.*, Alcoholic Fermentation.  
Mem. Board of Trustees N. Y. Coll. of Pharmacy. Deceased, April 28, 1884.

**\*William McIntyre, Ph.G.**

*Thes.*, Leonurus Cardiaca.  
Retail pharmacist in Phila. Director 31st Sectional Sch. Board. School Controller in 31st Ward, 15 years. Mem. Board of Education. Mem. P. C. P. Board of Trustees; A Ph. A.; Penna. Pharm. Assn.; Treas. Phila. Branch A. Ph. A. Received degree Ph.M. from P. C. P. in 1908. Masonic affiliation. Deceased, February 1, 1913.

**Alfred Mellor.**

*Thes.*, Æsculus Hippocastanum.  
Retired. Pres., Mellor and Rittenhouse Co., until 1902. 1st Vice-pres. MacAdams and Forbes Co. until 1919. Mem. A. Ph. A.; Franklin Inst. Fellow Royal Soc. of Arts. Served in Civil War with First Troop Phila. City Cavalry. Ad., 152 W. Walnut Lane, Germantown, Phila., Pa.

**Elijah S. Morell, Ph.G.**

*Thes.*, Pittosporum Tobira.

**\*Talbot C. Murray, Ph.G.**

*Thes.*, Commercial Lactucarium.  
Deceased, September 18, 1891.

**\*Earl Penn Rohrer, Ph.G.**

*Thes.*, Chlorate of Potash.

**James Ruan, Ph.G.**

*Thes.*, Cucurbita Pepo Seminis.

**\*Edwin R. Smith, Ph.G.**

*Thes.*, Medicinal Compounds of Iron with Albumen.  
Graduated from scientific dept. Monmouth College, 1860. Associated with father in drug business in Monmouth, Ill. Mem. A. Ph. A. Deceased, November 10, 1868.

**Jason P. Thomas, Ph.G.**

*Thes.*, Agathotes Chirayta.

**\*F. A. Tilge, Ph.G.**

*Thes.*, Symplocarpus Fetidus.  
Mem. of firm F. A. Tilge and Bro., importers of druggists' sundries, Phila. Deceased, November 10, 1889.

**\*Edwin Tomlinson, Ph.G.**

*Thes.*, Eupatorium Perfoliatum.

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**\*John B. Trednick, Ph.G.**

*Thes.*, *Euonymus Purpureus*.  
Pharmacist 55 years in Brooklyn, N. Y. Served in Navy during Civil War. Deceased, April 26, 1916.

**Henry J. Weher, Ph.G.**

*Thes.*, *Sabbatia Angularis*.

## 1864

**\*Edward H. Buehler, Ph.G.**

*Thes.*, *Helianthemum Canadense*.  
In drug commission business in Chicago, Ill. Deceased, November 12, 1919.

**\*Oliver Buss, Ph.G.**

*Thes.*, *Podophyllum Peltatum*.

**\*Henry C. Croft, Ph.G.**

*Thes.*, *Rubus Villosus*.

**\*John M. Cunningham, Ph.G.**

*Thes.*, *The Art of the Apothecary*.  
Retail pharmacist in Pottstown, Pa., and Phila. for a number of years. Mem. Penna. House of Representatives 1885-87. Deceased, January 4, 1893.

**\*Albert E. Ebert, Ph.G.**

*Thes.*, *Caulophyllum Thalictroides*.  
After graduation studied in Munich and received degree Ph.D. in 1867. In 1868 began drug business in Chicago, Ill. From 1869-1874 editor of *The Pharmacist and Chemical Record*, Chicago. At time of death departmental editor of *Meyer Bros. Druggist*. Elected 4th Vice-pres. of Pharmacopœical Convention of 1890. One of the founders of the Illinois Pharm. Assn. Mem. Ill. State Board of Pharmacy. Vice-pres. A. Ph. A. 1869; Pres. 1872. Author. Deceased, November 20, 1906.

**\*Hiram Gold, Ph.G.**

*Thes.*, *Euphorbia Ipecacuanha*.  
Graduated in medicine Jeff. Med. College 1867. Deceased, July 12, 1882.

**\*George Edward Jeannot, Ph.G.**

*Thes.*, *Acidum Benzoicum*.

**\*Edward C. Jones, Ph.G.**

*Thes.*, *Leptandra Virginica*.  
Mem. of firm Jones and Yarnall, Phila. In 1889, this firm was dissolved and he became associated with Robert Shoemaker and Co., Treas. P. C. P. Alumni Assn. from 1868 until time of death. Mem. P. C. P. Board of Trustees, 1874-1895; Mem. A. Ph. A.; Penna. Pharm. Assn.; Phila. Drug Exchange, etc. Deceased, May, 1895.

**\*Samuel Taylor Jones, Ph.G.**

*Thes.*, *Sarracenia Purpurea*.  
Retail pharmacist 15th and Race Sts., Phila., Pa. Deceased, March 14, 1880.

**\*S. Mason McCollin, Ph.G.**

*Thes.*, *Urtica Dioica*.  
Graduated in medicine Jeff. Med. College and for many years practiced in Phila. Deceased, February 24, 1917.

**\*Archibald C. McElroy, Ph.G.**

*Thes.*, *Quackery*.  
Deceased, April 26, 1921.

**\*Joseph E. Moore, Ph.G.**

*Thes.*, *Menispermum Canadense*.  
Many years a pharmacist in Jersey City, N. J. Deceased, November 24, 1916.

**\*Henry B. Morris, Ph.G.**

*Thes.*, *Comptonia Asplenifolia*.  
Deceased, July 27, 1910.

**Alfred W. Newton, Ph.G.**

*Thes.*, *Myrtle Wax*.

**\*George W. Notson, Ph.G.**

*Thes.*, *Rubus Villosus*.  
Retail pharmacist in Phila. Deceased, March 27, 1895.

**\*Christian Schultheis, Ph.G.**

*Thes.*, *Sodii Chloridum*.  
Deceased, April, 1917.

**\*J. Henry C. Simes, Ph.G.**

*Thes.*, *Prinos Verticillatus*.  
Deceased, September 25, 1907.

**\*Edwin Thomas, Ph.G.**

*Thes.*, *Ordeal Bean*.

## 1865

**\*Andrew Blair, Ph.G.**

*Thes.*, *Psidium Pyriferum*.  
In hardware business two or three years after graduation. Later assumed charge of drug business established by his father, H. C. Blair, Class of 1836, at 8th and Walnut Sts., Phila. With his brother H. C. Blair, Jr., the firm H. C. Blair's Sons was established. Later Andrew Blair assumed charge of store at 18th and Chestnut Sts. Trustee of Western Home for Poor Children; Trustee Presbyterian Hosp.; Trustee of General Assembly's Finance Com. of Presbyterian Church, etc. Deceased, April 16, 1898.

**\*Augustus P. Blomer, Ph.G.**

*Thes.*, *Eupatorium Perfoliatum*.  
Graduated in medicine Jeff. Med. College, 1872. Enlisted in 1st Reg. National Guards in 1866; Acting Asst. Surgeon of the National Grays 6th Reg. 1871-72. Asst. Surgeon of State Fencibles, 1872; reappointed 1883 and 1886. Deceased, April 25, 1892.

**\*Thomas C. Clark, Jr., Ph.G.**

*Thes.*, *The Trials and Difficulties of a Professional Life*.

**\*Edward A. Cornell, Ph.G.**

*Thes.*, *Polygonum Punctatum*.  
Retail pharmacist, Williamsport, Pa. Deceased, November 30, 1918.

**Andrew J. Ditman, Ph.G.**

*Thes.*, *Starch, Gluten and Fecula*.  
*Ad.*, 2 Barclay St., New York City.

**\*George A. Gross, Ph.G.**

*Thes.*, *Several Formulas of the United States Pharmacopœia*.

**\*James W. Harry, Ph.G.**

*Thes.*, *Sanguinaria Canadensis*.

**Marx M. Heller, Ph.G.**

*Thes.*, *Cypripedium Pubescens*.

**\*John F. Hillary, Ph.G.**

*Thes.*, *Causes and Effects of Health and Diseases*.

**\*Milton Huber, Ph.G.**

*Thes.*, *Phytolacca Decandra*.

**\*Francis Keen, Ph.G.**

*Thes.*, *Quaiaci Lignum*.

**\*Charles W. Kennedy, Ph.G.**

*Thes.*, *Arctostaphylos Uva Ursi*.  
Retail pharmacist a number of years. Later became a mercantile collector and continued in this business until the time of his death. Deceased, March 4, 1894.

**John B. Lindsay, Ph.G.**

*Thes.*, *Gossypii Radix Cortex*.

**\*James B. McElroy, Ph.G.**

*Thes.*, *Preparations of the Pharmacopœia*.

- \*James P. Milner, Ph.G.**  
*Thes.*, The Apothecary and the Physician. Enlisted on board the Hendrick Hudson, as Hospital Steward and served during part of Civil War. Graduated in medicine, Univ. of Penna., 1867. Practiced medicine and pharmacy in Phila. about 24 years. Masonic affiliation. Deceased, October 25, 1892.
- Americus H. Moser, Ph.G.**  
*Thes.*, Lactucarium.
- \*Charles B. Notson, Ph.G.**  
*Thes.*, Sanguinaria Canadensis. Retail pharmacist, St. Joseph, Mo. Vice-pres. St. Joseph Pharm. Assn. Deceased, April 17, 1870.
- Frederick C. Orth, Ph.G.**  
*Thes.*, Arnica Plaster. Retired. Retail pharmacist until 1917. *Ad.*, 7943 Frankford Ave., Holmesburg, Phila., Pa.
- \*David Preston, Ph.G.**  
*Thes.*, Capsicum Annuum.
- John W. Ranck, Ph.G.**  
*Thes.*, Datura Stramonium. Physician. Graduated in medicine Univ. of Penna., 1872. Volunteer, Med. Staff Red Cross; Masonic affiliation. *Ad.*, 4034 Germantown Ave., Phila., Pa.
- \*William H. Rinker, Ph.G.**  
*Thes.*, Geranium Maculatum. Deceased, April 26, 1904.
- \*Charles E. Rubincam, Ph.G.**  
*Thes.*, Ceanothus Americanus.
- Charles A. Rutherford, Ph.G.**  
*Thes.*, Potassii Iodidum.
- \*Wilson B. Smith, Ph.G.**  
*Thes.*, Sarracenia Purpurea.
- Edmund Vogelbach, Ph.G.**  
*Thes.*, Petroleum.
- John Thomas Walker, Ph.G.**  
*Thes.*, Medicine Puritas. Physician. Retail pharmacist until 1873. Mem. Volunteer Med. Service Corps. *Ad.*, 1606 N. 8th St., Phila., Pa.
- \*Frederick W. Wendel, Ph.G.**  
*Thes.*, Phosphorus and Its Compounds. Retail pharmacist, Phila. Deceased, May 5, 1871.
- \*H. Edward Wendel, Ph.G.**  
*Thes.*, Sambucus Canadensis. Retail pharmacist, Phila., 35 years. Masonic affiliation. Deceased, January 16, 1912.
- James T. White, Ph.G.**  
*Thes.*, Phytolacca Decandra. Adjuster of Accounts. Retail pharmacist until 1885. Mem. P. C. P.; Nat'l Pharmaceutical Service Assn. Masonic affiliation. *Ad.*, 1742 N. 61st Street, Overbrook, Phila., Pa.
- 1866
- \*William E. Allen, Ph.G.**  
*Thes.*, Gelsemium Sempervirens. Bank correspondent, proof-reader, confidential book-keeper and cashier. Deceased, August 25, 1922.
- \*Frank M. Barnitz, Ph.G.**  
*Thes.*, The Drug Business.
- \*Henry C. Blair, Ph.G.**  
*Thes.*, Cypripedium Pubescens.
- \*Isaac A. Braddock, Ph.G.**  
*Thes.*, The Dawn of Chemical Science. Served with Union Army during part of the Civil War. At one time one of the largest cranberry growers in N. J. Deceased, November, 1913.
- Hugh Campbell, Ph.G.**  
*Thes.*, The Druggist's Position. Retired. In wholesale drug business, Phila., 7 years. Retail pharmacist 40 years. Sch. director in Phila. and Osceola Mills, Pa. *Ad.*, Box 306, Norwich, Conn.
- Albert N. Dobbins, Ph.G.**  
*Thes.*, Cornus Florida. Banking and insurance. Retail pharmacist until 1895. Director Mt. Holly Nat'l Bank since 1888; Pres. since 1915. Pres. Columbus Water Co. since 1899. *Ad.*, Columbus, N. J.
- \*William W. Kneeshaw, Ph.G.**  
*Thes.*, Petroleum. After graduation established firm of Kneeshaw, Morris and Co., manufacturers of chemicals and pharmaceuticals, Phila. Deceased, May 4, 1909.
- \*William R. Laird, Ph.G.**  
*Thes.*, Pyrethrum Parthenium. Deceased, May 3, 1904.
- \*P. Wharton Levering, Ph.G.**  
*Thes.*, Phloridzin. Retail pharmacist, 1869-1910. Water Assessor of Jersey City, 1888-91. Served as Lieut. N. J. Nat'l Guard, 1875-80. Commissioner of Deeds for N. J. Masonic affiliation. Deceased, December 3, 1921.
- \*Robert C. Lippincott, Ph.G.**  
*Thes.*, Rheum Rhaponticum. Soon after graduation gave up drug business and became a wholesale lumber dealer. Pres. National Wholesale Lumber Dealers Assn. Director, Lehigh Valley R. R.; Union League Club; Penn National Bank; Penn Mutual Life Ins. Co. Deceased, October 5, 1916.
- \*William C. McPike, Ph.G.**  
*Thes.*, The Epidermis of Carya Alba. Pres. McPike Drug Co., Kansas City, Mo. Deceased February 3, 1911.
- \*Philip Lionel Milieman, Ph.G.**  
*Thes.*, Cunila Mariana. Retail pharmacist, Chicago, Ill. Deceased, May 8, 1884.
- \*John A. Milliac, Ph.G.**  
*Thes.*, Veratrum Viride. Retail pharmacist, Phila. Deceased, March 27, 1886.
- \*Thomas Mitchell Newbold, Ph.G.**  
*Thes.*, Sanguinaria Canadensis. Deceased, April 2, 1911.
- \*John S. Newton, Ph.G.**  
*Thes.*, Glycerin, Ferri Pyro-Phosphas and Tolu. Graduated in medicine Jeff. Med. Coll. 1867. Assistant prof. of chemistry Central High Sch. Phila., 1869-70. Deceased, August 18, 1894.
- \*Emlen Painter, Ph.G.**  
*Thes.*, Liriodendron Tulipifera. Retail pharmacist in San Francisco, Cal., a number of years. Influential in establishing California Coll. of Pharmacy, in which he held position of Prof. of Pharmacy and Dean. Later opened a store in New York City and continued the practice of pharmacy. Mem. A. Ph. A.; Vice-pres. in 1877 and 1881. Trustee N. Y. Coll. of Pharmacy. Deceased, January 15, 1890.
- Gustavus Pile, Ph.G.**  
*Thes.*, Unguentum Hydrargyri. Wholesale druggist. Trustee P. C. P. 20 years. Retail pharmacist 6 years. Mem. Exec. Com. 1st Ward Municipal League. Served as volunteer druggist in 12th Army Corps, Civil War. *Ad.*, 515 S. 42d Street, Phila., Pa.
- \*Robert Rau, Ph.G.**  
*Thes.*, Senna. Deceased, 1906.



# 476 First Century of the Philadelphia College of Pharmacy

- \*Joseph P. Remington, Ph.G.**  
*Thes.*, Our Alma Mater—Its Rise and Progress.  
 Prof. of Theory and Practice of Pharmacy,  
 P. C. P., 1874-1918. (See page 407.)
- \*Charles William Riley, Ph.G.**  
*Thes.*, Berberina.
- \*Joshua K. Robinson, Ph.G.**  
*Thes.*, Hamamelis Virginica.
- Hugh H. Ross, Ph.G.**  
*Thes.*, Water.  
*Ad.*, 543 Landis Ave., Vineland, N. J.
- Lucius E. Sayre, Ph.G.**  
*Thes.*, Cornus Florida.  
 Dean, Sch. of Pharmacy, Univ of Kansas. For  
 about 10 years after graduation acted as chief  
 clerk for Henry C. Blair's Sons, Phila. Later  
 formed partnership with Joseph P. Remington and  
 opened a store at 18th and Market Sts., Phila.  
 During this period was lecturer in pharmacy at  
 Woman's Med. College and quiz-master in Mat.  
 Med. at P. C. P. In 1885 became Dean of the  
 Sch. of Pharmacy and Prof. of Mat. Med. and  
 Pharmacy at Univ. of Kansas. In 1907 elected  
 director of drug analysis for Kansas State Board  
 of Health; also mem. of botanical staff of Kansas  
 State Board of Agriculture. Author of text-book  
 on Organic Mat. Med. and Pharmacognosy. Mem.  
 U. S. P. Rev. Com. Pres. A. Ph. A. 1919.  
*Ad.*, 1323 Ohio St., Lawrence, Kansas.
- William Segner, Ph.G.**  
*Thes.*, The Progress of Chemistry.
- \*Allen Shoemaker, Ph.G.**  
*Thes.*, Sanguinaria Canadensis.  
 Entered wholesale drug business with Robert Shoemaker  
 and Co., Phila., and retired after 50 years  
 of service. Deceased, February 13, 1917.
- \*Benjamin Shoemaker, Jr., Ph.G.**  
*Thes.*, Urtica Dioica.
- \*Charles Shoemaker, Ph.G.**  
*Thes.*, Calabar Bean.
- \*William H. Simson, Ph.G.**  
*Thes.*, Epigaea Repens.  
 Retail pharmacist, Halifax, Nova Scotia. Later  
 with his brother, established the wholesale drug  
 business of Simson Bros., Co. in Halifax. After  
 the merger with the National Drug and Chemical  
 Co. he had the management of the eastern portion  
 of Nova Scotia. Deceased, 1910.
- \*Joseph A. Souder, Ph.G.**  
*Thes.*, Iodoform.
- Louis Strehl, Ph.G.**  
*Thes.*, Iodide of Lime.
- \*Thomas A. Walker, Ph.G.**  
*Thes.*, Cimicifuga.  
 Deceased, April 17, 1904.
- 1867
- Charles E. Allaire, Ph.G.**  
*Thes.*, Liquor Magnesiae Citratæ.  
 Retired. Founder of Allaire, Woodward and Co.,  
 Peoria, Ill. Pres. Allaire, McIntyre Co., San  
 Antonio, N. M. Served 3 years in Civil War,  
 1862-65.  
*Ad.*, San Antonio, New Mexico.
- \*Henry C. Archibald, Ph.G.**  
*Thes.*, The Mode of Manufacturing Sugar Coated  
 Pills and Granules on a Large Scale.  
 Deceased, 1907.
- \*Ernest Bartram, Ph.G.**  
*Thes.*, Our National Pharmacopœia.  
 Soon after graduation purchased store at 17th  
 and Locust Sts., Phila. Later employed by Bullock  
 and Crenshaw. Having a natural taste and talent  
 for drama, gave up drug business and went upon  
 the stage and became a well-known actor. De-  
 ceased, May 9, 1894.
- \*Joseph E. Blizzard, Ph.G.**  
*Thes.*, Language of Prescriptions.
- \*James T. Borhek, Jr., Ph.G.**  
*Thes.*, Gilleinia.  
 Deceased, 1922.
- \*Edwin McC. Boring, Ph.G.**  
*Thes.*, Eupatorium.  
 Retail pharmacist, Phila., 52 years. Mem. Board  
 of Trustees, P. C. P., 42 years; Mem. Pa.  
 Chickamauga Battlefield Commission; Loyal Legion;  
 G. A. R.; One of the founders of the Phila.  
 Wholesale Drug Co. Served in Civil War, Union  
 Army, as Pvt., 1st Sgt., 1st Lieut. from 1861 to  
 1865. Deceased, June 22, 1920.
- Joseph M. Bourke, Ph.G.**  
*Thes.*, A History of Pharmacy.
- \*Samuel A. Brown, Ph.G.**  
*Thes.*, Cypripedium Pubescens.  
 Retail pharmacist in Phila. and New York City.  
 In 1874 graduated in medicine Hahnemann Med.  
 College. Practiced in New York City, still con-  
 tinuing the drug business. Masonic affiliation.  
 Deceased, January 10, 1894.
- \*Thomas J. Brown, Ph.G.**  
*Thes.*, Polyporus Officinale.
- James Buckman, Ph.G.**  
*Thes.*, Hydrangea Arborescens.  
 Associated with several corporations as president.  
 Director, Phila. Passenger Railways; also pres-  
 tress, and director in bldg. assns. Pres. 13th  
 Ward Sch. Board many years. Civil Service Ex-  
 aminer for Phila. Mem. Union League Club;  
 Historical Soc.; Genealogical Soc., etc.  
*Ad.*, 1412 N. 15th St., Phila., Pa.
- \*P. J. L. Carberry, Ph.G.**  
*Thes.*, A Drug and Prescription Store.  
 Retail pharmacist, Phila. Later engaged in real  
 estate business in Atlantic City, N. J. Deceased,  
 July 9, 1909.
- \*Samuel F. Croft, Ph.G.**  
*Thes.*, Centaurea Benedicta and Cnicus Marianus.
- \*Richard W. Cuthbert, Ph.G.**  
*Thes.*, Podophyllum Peltatum.  
 Retail pharmacist, Phila., 49 years. Deceased,  
 Sept. 25, 1920.
- Bertine S. Erwin, Ph.G.**  
*Thes.*, Ricinus Communis.  
 Physician.  
*Ad.*, Manch Chunk, Pa.
- \*Charles E. Haig, Ph.G.**  
*Thes.*, Gentiana.  
 Retail pharmacist, 19th and Master Sts., Phila.,  
 42 years. Deceased, January 19, 1913.
- \*Edwin A. Hambright, Ph.G.**  
*Thes.*, Melia Azedarach.  
 Physician. Graduated in medicine Hahnemann  
 Med. College, 1874. Enlisted in Civil War, 1863.  
 Deceased, August 10, 1921.
- Henry Harding, Ph.G.**  
*Thes.*, Hamamelis Virginica.  
 Physician.  
*Ad.*, 407 S. 10th St., Phila., Pa.
- James M. Harner, Ph.G.**  
*Thes.*, The Inner Bark and Leaves of Carya Alba.
- Jacob Harry, Ph.G.**  
*Thes.*, Adiantum Peditum.
- Nathan W. C. Hays, Ph.G.**  
*Thes.*, Phytolacca Decandra.
- \*Francis E. Himmelwright, Ph.G.**  
*Thes.*, Potassa Permanganas.  
 Deceased, March 7, 1916.
- John V. Hoffman, Ph.G.**  
*Thes.*, Krameria.

**Edward B. Jones, Ph.G.**

*Thes.*, Baptisia Tinctoria.  
Retired. Retail pharmacist 40 years. Mem. N. J. Board of Pharmacy 5 years. Mem. A. Ph. A.; N. J. Pharm. Assn.; Pres. Mt. Holly Trust Co. *Ad.*, Mt. Holly, N. J.

**\*Augustus M. Kurtz, Ph.G.**

*Thes.*, Sanguinaria.  
Deceased, April 3, 1912.

**\*Arthur H. Little, Ph.G.**

*Thes.*, Oxide of Zinc.  
Deceased, January 12, 1903.

**\*Joseph S. Locuson, Ph.G.**

*Thes.*, Physicians' Prescriptions.

**\*Joseph H. McMinn, Ph.G.**

*Thes.*, Cornus Alternifolia.  
Retail pharmacist, Williamsport, Pa. Deceased, July 6, 1919.

**\*Charles C. Moore, Ph.G.**

*Thes.*, The Dawn of Chemistry.  
Soon after graduation engaged in quacensware business with his brother. Later entered into real estate and building. Deceased, November 16, 1898.

**\*Arthur Moseley, Ph.G.**

*Thes.*, Agathotes Chiretta.

**William Ford Roche, Ph.G.**

*Thes.*, Cataria.  
Justice of the Peace. Retail pharmacist 41 years. Served in Civil War with 196th Penna. Volunteers, Co. B. *Ad.*, McVeytown, Pa.

**\*Charles Shivers, Ph.G.**

*Thes.*, Chenopodium.  
Deceased, 1901.

**Samuel Simes, Ph.G.**

*Thes.*, Coptis Trifoliata.  
Retired. Retail pharmacist, Phila., 30 years. *Ad.*, Box 17, Bala, Pa.

**George T. Slmpson, Ph.G.**

*Thes.*, Chiretta.

**\*George M. Swaim, Ph.G.**

*Thes.*, Sumbul.  
Deceased, April 26, 1901.

**\*Stewart Tait, Ph.G.**

*Thes.*, The Relative Duties of Physicians and Druggists.  
Deceased, November 6, 1878.

**James Taylor, Ph.G.**

*Thes.*, Erigeron Canadense.

**Isaac P. Vandegrift, Ph.G.**

*Thes.*, Hamamelis Virginica.

**Samuel W. Webb, Ph.G.**

*Thes.*, Caulophyllum Thalictroides.  
Retired. Formerly in charge of order dept. of wholesale drug house. *Ad.*, 1706 N. Sydenham St., Phila., Pa.

**Jacob Weichselbaum, Ph.G.**

*Thes.*, Xanthoxylum Fraxineum.  
Physician and pharmacist. *Ad.*, Savannah, Ga.

**Charles A. Weidemann, Ph.G.**

*Thes.*, Spigelia.  
Physician. Retail pharmacist until 1902. Graduated in medicine Univ. of Penna., 1880. Recording Secy., P. C. P., 1900-1921. *Ad.*, S. E. cor. 22nd and Green Sts., Phila., Pa.

**\*Albert D. Wike, Ph.G.**

*Thes.*, Baptisia Tinctoria.  
Prominent pharmacist of Marietta, Pa. Deceased, February 24, 1897.

**Charles E. Woodward, Ph.G.**

*Thes.*, Laudanum.

1868

**\*John W. Beck, Ph.G.**

*Thes.*, Podophyllum Peltatum.  
Deceased, September 20, 1900.

**Abraham Boyd, Ph.G.**

*Thes.*, Cynips Quercusfolii.

**Thomas F. Bradley, Ph.G.**

*Thes.*, Extemporaneous Pharmacy.  
*Ad.*, 5315 Reinhard St., Phila., Pa.

**\*Eugene C. Bronson, Ph.G.**

*Thes.*, Hypericum Perforatum.

**\*A. B. Clark, Jr., Ph.G.**

*Thes.*, Caulophyllum Thalictroides.  
After graduation spent two years in Munich, Germany, studying analytical chemistry. Opened a store in Galesburg and remained active in pharmacy until death. Deceased, January 10, 1894.

**\*J. E. Corbidge, Ph.G.**

*Thes.*, Pharmaceutical Manipulations.  
Deceased, January 29, 1869.

**\*Robert L. Day, Ph.G.**

*Thes.*, Caulophyllum Thalictrioidea.  
Deceased, July 6, 1903.

**\*S. Levin Dilks, Ph.G.**

*Thes.*, The Learning and General Principles of the Drug Business.  
Retail pharmacist, 6th and Pine Sts., Phila. Deceased, January 15, 1891.

**\*Mortimer H. Eayre, Ph.G.**

*Thes.*, Duties of the Apothecary.

**\*Fred G. Elliott, Ph.G.**

*Thes.*, Lycopus Virginicus.  
Gen. Mgr. for John Lucas and Co., paint manufacturers, Phila. Pres. Paint Manufacturers Assn. of the U. S. Mem. National Paint, Oil and Varnish Assn. Mem. Exec. Board of the Paint Manufacturers Club, Phila. Deceased, January 18, 1908.

**Howard England, Ph.G.**

*Thes.*, Chemistry as Applied to Agriculture, Arts and the Daily Concerns of Life.  
Retail pharmacist. Formerly associated with Dr. E. R. Squibb; Alexander Hudnut; Dr. Chas. J. Perry; Wm. J. Schieffelin and Co. *Ad.*, 37 N. 15th St., East Orange, N. J.

**\*Horace W. Estlack, Ph.G.**

*Thes.*, Podophyllum Peltatum.  
Retail pharmacist, Phila., 39 years. Deceased, March 8, 1913.

**W. L. Farr, Ph.G.**

*Thes.*, Gelsemium Sempervirena.  
*Ad.*, Liberty, Ind.

**James Foulke, Ph.G.**

*Thes.*, Extracta Fluida of Our Pharmacopœia.  
Retired. Retail pharmacist until 1912. Mem. A. Ph. A.; N. J. Pharm. Assn.; College of Pharmacy of City of N. Y.; Nat'l Assn. Retail Druggists. Pres. N. J. Pharm. Assn. 1 year and Treas. 1 year.  
*Ad.*, 215 E. 15th Street, New York City.

**\*James J. Fronheiser, Ph.G.**

*Thes.*, Kryolite.  
Graduated from Univ. of Berlin with high honors. and received degree of Ph.D. at Munich, 1873. Employed many years by Cambria Iron Co. Deceased, March 17, 1894.

**Joseph Harrop, Ph.G.**

*Thes.*, Taste and Odor of Cod Liver and Castor Oils.

**Jacob K. Hecker, Ph.G.**

*Thes.*, Polygonum Punctatum.  
Retail pharmacist.  
*Ad.*, 4914 Lancaster Ave., Phila., Pa.

- \*Pratt R. Hoagland, Ph.G.**  
*Thes.*, Veratrum Viride.
- Henry A. Jorden, Ph.G.**  
*Thes.*, Cornus Florida.  
Retail pharmacist. Secy. N. J. State Board of Pharmacy, 1896-1916.  
*Ad.*, 56 E. Commerce St., Bridgeton, N. J.
- \*Joseph Karch, Ph.G.**  
*Thes.*, Lappa Major.  
Retail pharmacist, Lebanon, Pa. Deceased, May 22, 1886.
- Samuel D. Kay, Ph.G.**  
*Thes.*, Benzoin Odoriferum.  
Chief pharmacist, Jersey City Hosp. since 1869.  
*Ad.*, City Hosp., Jersey City, N. J.
- \*Charles C. Klump, Ph.G.**  
*Thes.*, Cinchona.  
Retail pharmacist, Allentown, Pa., 52 yrs. Deceased, October 23, 1920.
- \*Benjamin Lillard, Ph.G.**  
*Thes.*, Cimex Lectularius.
- Edward MacInall, Ph.G.**  
*Thes.*, Chlorodyne.  
*Ad.*, 1912 Green St., Phila., Pa.
- \*Robert T. Marshall, Ph.G.**  
*Thes.*, Aqua.  
Retail pharmacist, Phila., Pa. Deceased, February 27, 1920.
- Charles C. Matthews, Ph.G.**  
*Thes.*, Chelone Glabra.
- Orlando L. Moore, Ph.G.**  
*Thes.*, Juglans Cineria.
- \*J. Bryan O'Brien, Ph.G.**  
*Thes.*, Professional Intercourse Between the Apothecary and the Physician.  
Served in Navy during the Civil War. Graduated in medicine Univ. of Penna. Practiced in Phila., Pa. Deceased, April 11, 1919.
- \*Franklin Ottinger, Ph.G.**  
*Thes.*, Spigelia Marilandica.
- \*Clemmons Parrish, Ph.G.**  
*Thes.*, The Physical Characteristics of the Official Powders.  
Son of Prof. Edward Parrish. Deceased, March 31, 1912.
- William H. Raser, Ph.G.**  
*Thes.*, Hydrastis Canadensis.  
Retired. Engaged for many years in wholesale drug and commission business in New York City.  
*Ad.*, 799 Madison Ave., New York City.
- William C. Rice, Ph.G.**  
*Thes.*, Stillingia Sylvatica.
- Clarence M. Schellinger, Ph.G.**  
*Thes.*, Elaterium.  
Farmer. Graduated in medicine Jeff. Med. College, 1879. Practiced medicine 15 years in Camden, New Jersey.  
*Ad.*, Westville, N. J.
- \*Robert L. Seybert, Ph.G.**  
*Thes.*, Cimicifuga Racemosa.  
Retail pharmacist, Hillsboro, O. Deceased, November 28, 1894.
- \*Joseph B. Shaw, Ph.G.**  
*Thes.*, Buchu.  
Physician, Delaware Water Gap, Pa. Pres. Monroe County Med. Assn. Deceased, July 18, 1904.
- \*John N. Shoffner, Ph.G.**  
*Thes.*, Verbascum Thapsus.  
Retail pharmacist, Norristown, Pa. Deceased, August 24, 1885.
- \*Joseph B. Shropshire, Ph.G.**  
*Thes.*, Datura Stramonium.
- \*Allen Shryock, Ph.G.**  
*Thes.*, Ennomos Subsignaria.  
Retail pharmacist, Phila., Pa. Deceased, September, 1905.
- \*B. Franklin Shugard, Ph.G.**  
*Thes.*, Prinos Verticillatus.  
Retail pharmacist, Phila., Pa. Deceased, May 28, 1882.
- \*Samuel F. Simes, Ph.G.**  
*Thes.*, Cryolite.  
Retail pharmacist, 20th and Spruce Sts., Phila. Deceased, January 10, 1881.
- Mathias Simon, Ph.G.**  
*Thes.*, Benzoin Odoriferum.  
*Ad.*, 7 S. 3d St., LaCrosse, Wis.
- Homer A. Smith, Ph.G.**  
*Thes.*, Aralia Nudicaulis.
- \*George P. Stackhouse, Ph.G.**  
*Thes.*, Hydrargyrum Cum Creta.  
Retail pharmacist, Phila. Masonic affiliation. Deceased, October 22, 1911.
- \*Louis Stiefel, Ph.G.**  
*Thes.*, Iris Versicolor.
- \*Frank W. Thomas, Ph.G.**  
*Thes.*, Fraxera Walteri.  
Practiced medicine in Dayton, O. Deceased, September, 1890.
- \*William H. Webb, Ph.G.**  
*Thes.*, Apocynum Androsæmifolium.  
Deceased, December 20, 1903.
- Charles Wilson, Ph.G.**  
*Thes.*, Arsenicum.
- William Wilson, Ph.G.**  
*Thes.*, Geum Rivale.

1869

- \*Louis A. Bates, Ph.G.**  
*Thes.*, Pharmacy and Its Requirements.  
At one time operated a chain of drug stores in New York City. Later engaged in the hotel business in Nashville, Tenn. Deceased, March 29, 1913.
- \*James S. Bell, Ph.G.**  
*Thes.*, Mistura Aloes Composita.  
Retail pharmacist in Chicago and in Peoria, Ill. Masonic affiliation. Deceased, May 25, 1892.
- \*Henry K. Bowman, Ph.G.**  
*Thes.*, Tannin in Vegetable Astringents.  
Employed by Powers and Weightman, Phila. Deceased, January 11, 1874.
- \*James C. Craven, Ph.G.**  
*Thes.*, Anilin.
- \*Joseph J. Cummings, Ph.G.**  
*Thes.*, Sabbatia.  
Deceased, 1910.
- \*Aaron R. Davis, Ph.G.**  
*Thes.*, The Drug Business.
- Henry H. Davis, Ph.G.**  
*Thes.*, Erythroxylyon Coca.  
Physician. Graduated in medicine Jeff. Med. College, 1879. Retail pharmacist until 1918. Mem. Board of Education; Pres. Camden Board of Health 15 years. Chief Med. Inspector Camden Schools. Phys. in Chief, Camden Municipal Hosp. U. S. Pension Examiner.  
*Ad.*, 417 Cooper Street, Camden, N. J.
- \*John G. De Huff, Ph.G.**  
*Thes.*, Iris Versicolor.
- \*Christopher E. Eyster, Ph.G.**  
*Thes.*, Hamamelis Virginica.  
Retail pharmacist, Duluth, Minn. Deceased, November 13, 1877.



- \*James G. Fritchey, Ph.G.**  
*Thes.*, Robinia Pseud-Acacia.  
 Deceased, November 4, 1871.
- \*Carl D. S. Früh, Ph.G.**  
*Thes.*, The Necessity of Legislation in Behalf of the Interests of Pharmacy.  
 Graduated in medicine Jeff. Med. College, 1875.  
 Mem. of Faculty Jeff. Med College, being a demonstrator in anatomy, and for 32 years retail druggist in Phila. Deceased, May 13, 1914.
- Charlea Hand, Ph.G.**  
*Thes.*, Extractum Pepo Fluidum.
- Charles E. Holstein, Ph.G.**  
*Thes.*, Extemporaneous Pharmacy.  
 Retail pharmacist.  
*Ad.*, Bridgeport, Pa.
- \*Thomas J. Husband, Jr., Ph.G.**  
*Thes.*, The Leaves of Podophyllum Peltatum.  
 Deceased, 1913.
- \*Hamilton Hutchinson, Ph.G.**  
*Thes.*, Crystallized Nitrate of Mercury.
- \*George W. Isard, Ph.G.**  
*Thes.*, The Leaves of Baptisia Tinctoria.  
 Retail pharmacist, Phila. for many years. Deceased, June 15, 1912.
- \*D. Augustus Jones, Ph.G.**  
*Thes.*, Chelidonium Major.  
 Retail pharmacist in Germantown, Phila., and Vincentown, N. J. Deceased, May 1, 1886.
- \*Clement Kelty, Ph.G.**  
*Thes.*, Comptonia Asplenifolia.  
 Retail pharmacist, Salem, N. J. Deceased, January 3, 1894.
- George W. Kennedy, Ph.G.**  
*Thes.*, Olea Fixa.  
 Served in 3rd Penna. Reserves and 187th Reg. of Penna. Vols. during Civil War. Retail pharmacist, Pottsville, Pa. for many years. Pres. P. C. P. Alumni Assn. 1876. One of the organizers of the Penna. Pharm. Assn. in 1878; Pres. in 1880-81. Mem. A. Ph. A.
- \*Christopher Henry Kolp, Ph.G.**  
*Thes.*, Stillingia Sylvatica.  
 Retail pharmacist, Phila. Corres. Sec'y P. C. P. Alumni Assn., 1874-75. Mem. A. Ph. A. Deceased, February 11, 1879.
- William E. Krewson, Sr., Ph.G.**  
*Thes.*, Epigaea Repens.  
 Pharmacist (relief). Secy. Alumni Assn. P. C. P. 24 years; Mem. Board of Trustees. Secy. various fraternal organizations. Masonic affiliation.  
*Ad.*, 3420 N. 17th Street, Phila., Pa.
- \*Eugene Lamparter, Ph.G.**  
*Thes.*, The Genuine Angustura Bark.  
 Physician, Green Lane, Pa. Deceased, July 29, 1922.
- \*Charles H. Merklein, Ph.G.**  
*Thes.*, Science and Art of Percolation.  
 Practiced medicine in Phila. Deceased, April 1, 1890.
- William W. Moorhead, Ph.G.**  
*Thes.*, Prinos.  
 Physician. Graduated in medicine Univ. of Penna. 1882. Mem. Phila. County Med. Soc.; Volunteer Med. Service Corps.  
*Ad.*, 1523 Pine Street, Phila., Pa.
- Aulay W. Peck, Ph.G.**  
*Thes.*, Erigeron Canadense.
- \*Stephen F. Penrose, Ph.G.**  
*Thes.*, Hydrangea Arborescens.  
 Retail pharmacist, Quakertown, Pa. Deceased, May 6, 1886.
- Adam Pfromm, Ph.G.**  
*Thes.*, Animal Fats.  
 Wholesale druggist. Pres. of Adam Pfromm and Co., Phila., an establishment which has been in existence 100 years.  
*Ad.*, 233 N. 2d Street, Phila., Pa.
- Frederick H. Phelps, Ph.G.**  
*Thes.*, Utility of Glycerine.
- \*Ferris Price, Ph.G.**  
*Thes.*, Patent Medicines.
- \*Milton Rambo, Ph.G.**  
*Thes.*, Lycopersicum Esculentum.
- Charles B. Read, Ph.G.**  
*Thes.*, Suppositoria.  
*Ad.*, 410 Penn Street, Huntington, Pa.
- \*John J. Reynolds, Ph.G.**  
*Thes.*, Annotta.
- William T. Ridgway, Ph.G.**  
*Thes.*, Stillingia Sylvatica.
- \*Henry E. Robertson, Ph.G.**  
*Thes.*, Fol. Hedera Helix.  
 Secy. and Treas. of Frederick Brown and Co., Phila. Continuously in employ of this firm 59 years. Deceased, August 31, 1919.
- James S. Robinson, Ph.G.**  
*Thes.*, Collinsonia Canadensis.  
 Retail pharmacist. Vice-pres. Manhattan Bank and Trust Co. Director N. C. St. L. R. R.; Cumberland Telephone Co.  
*Ad.*, 22 N. 2d Street, Memphis, Tenn.
- \*Robert C. Sharp, Ph.G.**  
*Thes.*, Fol. Centaurea Benedicta.
- \*Jacob H. Stein, Ph.G.**  
*Thes.*, The Model Druggist.  
 Proprietor of five drug stores, four in Reading, Pa., and one in Hamburg, Pa. Trustee of Franklin and Marshall Theological Sem. Deceased, May 27, 1909.
- L. Scott Storks, Ph.G.**  
*Thes.*, Spigelia Marilandica.
- \*Harry B. Taylor, Ph.G.**  
*Thes.*, Tabacum.  
 Graduated in medicine, Univ. of Penna., 1888. Practiced in Phila. In 1890 appointed Coroner's Physician. Deceased, December 17, 1891.
- Louis Alpinus Treichler, Ph.G.**  
*Thes.*, Benzoin in Ointments.  
*Ad.*, 42 W. Coulter St., Germantown, Phila., Pa.
- Charles B. Unzicker, Ph.G.**  
*Thes.*, Suppositories.
- Jarvis R. Wallen, Ph.G.**  
*Thes.*, Prinos Verticillatus.  
 Mem. of firm, Colburn and Co., Spice Manufacturers. Deceased, May 24, 1886.
- \*Frank Ware, Ph.G.**  
*Thes.*, Xanthoxylum.
- \*Samuel F. Ware, Ph.G.**  
*Thes.*, Panax Quinquefolium.  
 Physician. Deceased, July 17, 1921.
- Harry B. Weymer, Ph.G.**  
*Thes.*, An Important Question.
- Edwin K. Wilson, Ph.G.**  
*Thes.*, Protoxide of Nitrogen as an Anæsthetic Agent.
- \*Charles Wirgman, Ph.G.**  
*Thes.*, Yellow Oxide of Mercury.  
 Deceased, April 19, 1902.
- Issac G. Wolfe, Ph.G.**  
*Thes.*, Gossypii Radix.

1870

- Louis W. Adams, Ph.G.**  
*Thes.*, Pepsin.
- \***George W. Barton, Ph.G.**  
*Thes.*, Physiology of Plants.
- \***John M. Brennan, Ph.G.**  
*Thes.*, Percolation.
- Milton G. Briggs, Ph.G.**  
*Thes.*, Heuchera Americana.  
Inspector of Highways, Highway Bureau, City of Phila. Retail pharmacist until 1891.  
*Ad.*, 3621 N. 11th Street, Phila., Pa.
- Edward Chilea, Ph.G.**  
*Thes.*, Spiritus Frumenti.
- Silaa B. Clarke, Ph.G.**  
*Thes.*, The Country Drug Store.  
*Ad.*, Box 9, Townshend, Vt.
- William C. Connally, Ph.G.**  
*Thes.*, Proposed Law for the Practice of Pharmacy.
- Henry H. Dinning, Ph.G.**  
*Thes.*, Cimicifuga Racemosa.
- \***Benton G. Doach, Ph.G.**  
*Thes.*, Pepo and Vallet's Mass.  
Formerly pharmacist, with Thos. A. Lancaster, John Wyeth and Bro., Phila., Pa., and for many years in Pittsburgh, Pa.
- Will Rush Ehler, Ph.G.**  
*Thes.*, Filtration.
- \***Wardle Ellis, Ph.G.**  
*Thes.*, Cimicifuga.
- Charles L. Finch, Ph.G.**  
*Thes.*, Treatment of Poisons.
- \***Francis X. Fox, Ph.G.**  
*Thes.*, Chimaphila Umbellata.  
Deceased, 1898.
- Howard B. French, Ph.G.**  
*Thes.*, Syrup of Guaiac.  
Pres. F. C. P., 1900-21. (See page 366.)  
*Ad.*, 4th and Callowhill Streets, Phila., Pa.
- \***Augustus F. Gerhard, Ph.G.**  
*Thes.*, The History and Relative Value of Socotrine and Cape Aloes as Medicinal Agents.  
Deceased, October 6, 1921.
- C. L. Groff, Ph.G.**  
*Thes.*, Tinctures.
- G. Omar Guy, Ph.G.**  
*Thes.*, Sulphocarbohic Acid and Sulphocarbulates.
- Joseph J. Hall, Ph.G.**  
*Thes.*, Citrate of Magnesia and Percolation.  
Deceased, January 5, 1880.
- William H. Hancker, Ph.G.**  
*Thes.*, Cannabis Indica.  
Medical Supt. Delaware State Hosp. since 1891. Graduated in medicine Jeff. Med. College, 1873. Res. phys. Phila. Gen. Hosp., 1873-74. Asst. Phys. Northern Hosp. for the Insane, Wis., 1875-91  
*Ad.*, Delaware State Hosp., Farmhurst, Del.
- \***John B. Hannaman, Ph.G.**  
*Thes.*, The Root of Baptisia Tinctoria.
- \***Samuel E. R. Hassinger, Ph.G.**  
*Thes.*, Ilex Verticillata.  
For 40 years retail pharmacist, Phila. Deceased, February 21, 1917.
- \***Llewellyn Helfrich, Ph.G.**  
*Thes.*, Black Alder.
- \***Eugene Herbert, Ph.G.**  
*Thes.*, Carbolic Acid.
- \***Louis William Hildenbrand, Ph.G.**  
*Thes.*, Coptistrifolia.  
Deceased, November 13, 1896.
- John F. Huddart, Ph.G.**  
*Thes.*, Fluid Extracts.
- \***Thomas Hunter, Ph.G.**  
*Thes.*, Ceratum Plumbi Subacetatis.  
Former Select Councilman, 26th Ward, Phila.  
Deceased, June 20, 1911.
- Otway E. Hutchings, Ph.G.**  
*Thes.*, Number of Drops to a Fluid Drachm.  
Chemist, Fragrant Products Co., Phila. Many years engaged in drug business in various parts of the United States.  
*Ad.*, 1648 N. 61st Street, Phila., Pa.
- \***Harry R. Kervey, Ph.G.**  
*Thes.*, Life of a Drug Clerk.
- \***Joseph J. Kirkbride, Ph.G.**  
*Thes.*, Arsenicum.
- \***Charles S. Lee, Ph.G.**  
*Thes.*, A First Class Drug Store.  
Retail pharmacist, Phila. Deceased, April 1, 1885.
- Walter Lehman, Ph.G.**  
*Thes.*, Podophyllum.
- \***Thomas J. Lightcap, Ph.G.**  
*Thes.*, Chloral and Its Hydrate.  
Retail pharmacist, Phila. Masonic affiliation. Deceased, January 25, 1890.
- \***Samuel Lott, Ph.G.**  
*Thes.*, Lycopus Virginicus.  
Deceased, February 21, 1916.
- \***Edward H. Luckenbach, Ph.G.**  
*Thes.*, Euonymus Atropurpureus.
- George I. McKelway, Ph.G.**  
*Thes.*, Fucus Vesiculosus.  
Major, Med Corps, U. S. A.  
*Ad.*, The Brighton Apts., Washington, D. C.
- John T. McLaughlin, Ph.G.**  
*Thes.*, Angelica Atropurpurea.
- \***Henry A. Newbold, Ph.G.**  
*Thes.*, Glycyrrhiza Glabra.  
Graduated in medicine Univ. of Penna., 1893. Examiner of Insane, Phila. Gen. Hosp., 1900-20. Lecturer on Mat. Med., Univ. of Penna. Mem. Vol. Med. Reserve Corps; Council National Defense. Deceased, March 3, 1920.
- \***James J. Ottinger, Ph.G.**  
*Thes.*, Rectal Suppositories.  
Following graduation became manager of store of John Wyeth and Bro., later going to New York, as manager for the Caswell, Hazard Co. Returning to Phila., opened store at 20th and Spruce Sts., and conducted the business 34 years. Mem. Nat'l Assn. Retail Druggists; Phila. Assn. Retail Druggists; A. Ph. A.; Penna. Pharm. Assn. Deceased, May 19, 1914.
- \***Edward C. Painter, Ph.G.**  
*Thes.*, Unguentum Hydrargyri Nitratis.  
Deceased, June 5, 1910.
- \***Daniel J. Patton, Ph.G.**  
*Thes.*, Euphorbia Ipecacuanha.
- \***Elliott D. Paxson, Ph.G.**  
*Thes.*, Phenic Acid.  
Deceased, June 29, 1921.
- Robert F. Rankin, Ph.G.**  
*Thes.*, Cassia Marilandica.
- Eugene A. Rau, Ph.G.**  
*Thes.*, Catalpa Bignonoides.  
Retired. Retail pharmacist until 1913. Trustee in various school and church boards.  
*Ad.*, 72 E. Church Street, Bethlehem, Pa.

- \*Urish F. Richards, Ph.G.**  
*Thes.*, Glycerine and Its Uses.  
 Retail pharmacist, Camden, N. J. Deceased, March 4, 1915.
- \*Harry D. Schell, Ph.G.**  
*Thes.*, Convolvulus Panduratus.  
 Deceased, February 1, 1922.
- Henry Schmidt, Ph.G.**  
*Thes.*, Pimpinella Anisum.  
 Physician.  
*Ad.*, Addieville, Ill.
- \*Lewis F. Segrest, Ph.G.**  
*Thes.*, Rubus Villosus.
- Clayton F. Shoemaker, Ph.G.**  
*Thes.*, Patent Medicines.  
 Mem. of firm, Shoemaker and Busch, Wholesale Druggists.  
*Ad.*, 511 Arch St., Phila., Pa.
- \*Walter C. Stillwell, Ph.G.**  
*Thes.*, Pix Liquida.  
 Graduated in medicine, Univ. of Penna., and practiced in Phila., conducting a drug store for many years. Deceased, November 14, 1914.
- \*Charles F. Stretch, Ph.G.**  
*Thes.*, The Importance of System.
- Jesse L. Supplee, Ph.G.**  
*Thes.*, Galium Aparine.  
 Retail pharmacist.  
*Ad.*, 607 N. 12th St., Phila., Pa.
- Leopoldo Tomassevich, Ph.G.**  
*Thes.*, Pharmacy As One of the Learned Professions.
- \*John Tull, Ph.G.**  
*Thes.*, Granular Preparations.  
 Retail pharmacist, Phila., Pa., and Morgantown, N. C. Mayor of Morgantown for many years. Deceased, February 25, 1915.
- \*D. H. Turner, Ph.G.**  
*Thes.*, The Early Closing of Drug Stores.
- \*Alfred B. Wenrich, Ph.G.**  
*Thes.*, Pharmacy vs. Vox Populi.
- J. Alexander Wilhelm, Ph.G.**  
*Thes.*, A Cholagogue Tincture of Gentian.  
*Ad.*, Market and Pine Streets, York, Pa.
- J. L. Williamson, Ph.G.**  
*Thes.*, Rennet and Its Preparations.
- Samuel P. Wright, Ph.G.**  
*Thes.*, Suppositories.  
 Relief clerk. Retired from active business, 1913.  
*Ad.*, 1919 N. 19th Street, Phila., Pa.
- 1871
- \*Joseph Anthony, Ph.G.**  
*Thes.*, Emulsions.  
 Wholesale druggist 40 years. Retail pharmacist 8 years. Deceased, February 27, 1921.
- Eli S. Beary, Ph.G.**  
*Thes.*, Aesculus Hippocastanum.  
 Physician. Graduated in medicine, Univ. of Penna., 1878. Mem. Sch. Board and Common Council, 28th Ward. Masonic affiliation.  
*Ad.*, 3670 Queen Lane, Phila., Pa.
- John L. Beeler, Ph.G.**  
*Thes.*, An Examination of a Silver Ore.  
 Real Estate. Retail pharmacist until 1892.  
*Ad.*, Hamilton, Ohio.
- \*Charles F. Bolton, Ph.G.**  
*Thes.*, Benzoating Ointments Extemporaneously.  
 Mem. retail drug firm, Gramm and Bolton., Phila. Deceased, July 20, 1879.
- Wallace B. Boyer, Ph.G.**  
*Thes.*, Cypripedium Pubescens.  
*Ad.*, Norristown, Pa.
- C. Hill Brinton, Ph.G.**  
*Thes.*, Unguenta.
- \*Harry V. Camm, Ph.G.**  
*Thes.*, Solanum Dulcamara.
- Emiliano Causse, Ph.G.**  
*Thes.*, Pharmacy in Cuba.
- \*T. Ellwood Conard, Ph.G.**  
*Thes.*, Cimicifuga Racemosa.  
 Physician. Graduated in medicine Jeff. Med. College, 1878. Attending Phys. Northern Disp. 3 years; Clinical surg. 1 year. Clinical Asst. Penna. Hosp. Eye Dept. 5 years; Asst. Surg. and Acting Surg. Wills Eye Hosp. 25 years. Mem. Volunteer Med. Service Corps. Deceased, February 13, 1922.
- \*Michael J. Cummings, Ph.G.**  
*Thes.*, The Action of the Chlorides on Calomel.  
 Graduated in medicine and practiced in Phila.
- Charles D'Inwilliers, Ph.G.**  
*Thes.*, Preparations of Iron.  
 Retired.  
*Ad.*, 3317 Walnut Street, Phila., Pa.
- \*Harrison Duffield, Ph.G.**  
*Thes.*, Ursin.  
 Deceased, October 21, 1921.
- \*John Oliver Eberhard, Ph.G.**  
*Thes.*, Stramonium.  
 Graduated in medicine Jeff. Med. College. Practiced in Phila. Mem. Northern Med. Soc. Deceased, May 28, 1914.
- Jerome A. Eldridge, Ph.G.**  
*Thes.*, Adulteration of Medicinal Substances.
- William G. Ewing, Ph.G.**  
*Thes.*, Suppositories.
- \*Edgar S. Gramm, Ph.G.**  
*Thes.*, Asimina Triloba.  
 Mem. Retail drug firm Gramm and Bolton, Phila. Later became a stock broker and was a member of Phila. Stock Exchange, being affiliated with Chas. H. Bean and Co. Mem. Drug Club, Phila. Deceased, May 18, 1914.
- Wilmot Hansell, Ph.G.**  
*Thes.*, American Botanic Drugs.  
 Manufacturer. Formerly retail pharmacist.  
*Ad.*, Masonville, N. J.
- John W. Harry, Ph.G.**  
*Thes.*, Rumex Crispus.
- \*Edward T. Hehr, Ph.G.**  
*Thes.*, Fructus Cardui Mariani.  
 Deceased, December 25, 1878.
- Richard W. Hickman, Ph.G.**  
*Thes.*, Cimicifuga.  
 Chief, Quarantine Div., Bureau of Animal Industry, Washington, D. C. Graduated in Veterinary medicine, Univ. of Penna., 1887.  
*Ad.*, 22 Albion Street, Passaic, N. J.
- \*J. Thomas Hoskinson, Ph.G.**  
*Thes.*, Adiantum Pedatum.
- John F. Huneker, Ph.G.**  
*Thes.*, Sabbatia Angularis.  
*Ad.*, Art Club, 220 S. Broad Street, Phila., Pa.
- \*Parker P. Ink, Ph.G.**  
*Thes.*, Coccus Cacti.  
 Mem. firm, Adair and Ink, Washington, Iowa. Later with Parke, Davis and Co. Masonic affiliation. Deceased, October 31, 1892.
- James A. Jeffries, Ph.G.**  
*Thes.*, Brayera As a Remedy for Tapeworm.  
*Ad.*, 7128 Boyer Street, Mt. Airy, Phila., Pa.
- Barclay Johnson, Ph.G.**  
*Thes.*, Percolation.  
*Ad.*, 1210 N. American Bldg., Phila., Pa.



- Julius Jungmann, Ph.G.**  
*Thes.*, Uva Ursi.  
*Ad.*, 100 William Street, New York City.
- Charles J. Kadish, Ph.G.**  
*Thes.*, Comprehension and Classification of Poisons.
- \*Emmet Kannal, Ph.G.**  
*Thes.*, Humulus Lupulus.  
 Retail pharmacist until 1887, when he engaged in the jewelry business. Deceased, July 31, 1891.
- Joseph Kaufman, Ph.G.**  
*Thes.*, Linimentum Ammoniac.
- \*Stewart Kellam, Ph.G.**  
*Thes.*, Liqueur Plumbi Subacetatis.
- George D. Kressler, Ph.G.**  
*Thes.*, The Requisites of a Druggist.  
 Retail pharmacist. Sch. Director 3 years.  
*Ad.*, Broad and Center Streets, Bethlehem, Pa.
- \*George R. Kuhn, Ph.G.**  
*Thes.*, Cypripedium Pubescens.  
 Graduated in medicine, Long Island Med. College. Practiced in Brooklyn, N. Y. 40 years. Founder of Catholic Benevolent Legion. Mem. various medical societies and Catholic organizations. Deceased, November 6, 1915.
- \*Emmor H. Lee, Ph.G.**  
*Thes.*, Extractum Rhei Fluidum.
- \*J. Ehrman Lehman, Ph.G.**  
*Thes.*, Prinos Verticillatus.
- George C. Lippincott, Ph.G.**  
*Thes.*, The More Recent Products of Pharmacy.
- \*Constantine G. A. Loder, Ph.G.**  
*Thes.*, Senecio Vulgaris.  
 Retail pharmacist 16th and Chestnut Sts., Phila., 35 years. Mem. Manufacturers Club; Business and Professional Club; Rotary Club. Deceased, February 12, 1914.
- John S. McElwee, Ph.G.**  
*Thes.*, Hydrate of Chloral.
- \*Stanley C. Muschamp, Ph.G.**  
*Thes.*, Cerasus Serotina.  
 Retail pharmacist, Camden, N. J. a number of years. In 1890, appointed comparing and abstract clerk in Register of Deeds. Deceased, December 25, 1916.
- Asher J. Odenwelder, Ph.G.**  
*Thes.*, Falsification of Drugs.  
 Retail pharmacist. Recruiting officer, U. S. Merchant Marine.  
*Ad.*, 45 S. 4th Street, Easton, Pa.
- \*John D. Owen, Ph.G.**  
*Thes.*, Subnitrate of Bismuth.  
 Mem. of firm, Owen and Sutton, Louisville, Ky. Deceased, May 3, 1871.
- Frank Plunkett, Ph.G.**  
*Thes.*, Quillaya Saponaria.
- Thomas H. Potts, Ph.G.**  
*Thes.*, Nepeta Cataria.  
 Vice-pres. Great American Chemical Products Co. Formerly Retail Pharmacist. Mem. Nat'l Assn. Retail Druggists, Pres. 1907; Pres. Alumni Assn., P. C. P., 1882-83; Pres. Phila. Assn. Retail Druggists, 1904-06. Mem. A. Ph. A.; Penna. Pharm. Assn.; Wis. Pharm. Assn.; Hon. Mem. Ill., Minn., Mich., O., and Ark., State Pharm. Assns.  
*Ad.*, 543 Broadway, New York City.
- John B. Raser, Ph.G.**  
*Thes.*, Pharmaceutical Ethics.  
 Retired. Retail pharmacist until 1906.  
*Ad.*, 606 N. 5th Street, Reading, Pa.
- Augustus Richards, Ph.G.**  
*Thes.*, Starch.
- Charles E. Roberts, Ph.G.**  
*Thes.*, Oleoresina Filicis.
- Enrique Rubio y Diaz, Ph.G.**  
*Thes.*, Poisoning by Arsenic.
- J. H. Scheidt, Ph.G.**  
*Thes.*, The Difference in Rapidity of Filtration Between Plain and Plaited Filters.
- J. Niven Scoullier, Ph.G.**  
*Thes.*, Tela Araneæ.
- \*Hosea F. Seeley, Ph.G.**  
*Thes.*, Hydrastis Canadensis.  
 Retail pharmacist, Phila., 21 years. Deceased, December 13, 1919.
- \*Louis Shaw, Ph.G.**  
*Thes.*, Nitro-Prusside of Sodium.
- William Simms, Ph.G.**  
*Thes.*, Fluid Extract of Ipecacuanha Root.
- \*Robert Simpson, Ph.G.**  
*Thes.*, The Preservation of Pharmaceutical Apparatus from Breakage by Sudden Change of Temperature.  
 Deceased, June 19, 1918.
- \*Selden W. Smith, Ph.G.**  
*Thes.*, Pharmaceutical Advancement.
- Charles C. Sniteman, Ph.G.**  
*Thes.*, Phytolacca Decandra.  
 Retail pharmacist. With Allaire, Woodward and Co. until 1875.  
*Ad.*, Neillsville, Wis.
- E. D. Snyder, Ph.G.**  
*Thes.*, Aqua.
- Aaron Stern, Ph.G.**  
*Thes.*, Patent Medicines.
- \*George R. Vernon, Ph.G.**  
*Thes.*, Percolation.
- John T. Viley, Ph.G.**  
*Thes.*, Crab Orchard Salt.
- William Carey Watson, Ph.G.**  
*Thes.*, The Preparation and Mode of Dispensing Drugs.
- \*John A. Weaver, Ph.G.**  
*Thes.*, Baptisia Tinctoria.
- Frederick C. Weber, Ph.G.**  
*Thes.*, Acidum Arseniosum.
- William Weber, Ph.G.**  
*Thes.*, Catalpa Bignonioides.
- H. Clay Webster, Ph.G.**  
*Thes.*, Products of the Vegetable Kingdom.
- John W. Wood, Ph.G.**  
*Thes.*, Tinctura Ferri Chloridi.  
 Retired. Retail pharmacist until 1901. Postmaster 14 years. Mem. State Board of Pharmacy 6 years. Director, Board of Trade, etc.  
*Ad.*, 80 S. Grand Avenue, Pasadena, Cal.
- \*J. Willits Worthington, Ph.G.**  
*Thes.*, Emplastrum Belladonnæ.  
 Retail pharmacist, Moorestown, N. J. Deceased, June 9, 1887.

- \*William B. Addington, Ph.G.**  
*Thes.*, Indigenous Remedies.
- Charles Sumner Allen, Ph.G.**  
*Thes.*, Cucurbita Citrullus.
- J. Frank Ash, Ph.G.**  
*Thes.*, Natural Chemistry.

**George Bille, Ph.G.**

*Thes.*, Aqueous Fluid Extract of Rhubarb.  
*Ad.*, 2d and Thompson Streets, Phila., Pa.

**Henry Halliwell Bitler, Ph.G.**

*Thes.*, Oleum Gossypii.  
With Smith, Kline and French Co., Information Dept. Treas., Rutledge Mutual Land Improvement Assn.; Director Rutledge Bldg. and Loan Assn.  
*Ad.*, Rutledge, Pa.

**\*Alfred H. Bolton, Ph.G.**

*Thes.*, Some Oleoresins by Deodorized Benzine.  
Retail pharmacist until 1912. Deceased, March 31, 1921.

**\*Henry A. Borell, Ph.G.**

*Thes.*, Sevum, U. S. P.  
Served three and one-half years during Civil War. After graduation, became retail pharmacist in Phila. Mem. of firm, Rumsey-Borell Drug Co. Director West End Trust Co. Deceased, April 13, 1913.

**Milton M. Buss, Ph.G.**

*Thes.*, Common Garden Rhubarb.

**Joseph Cave, Ph.G.**

*Thes.*, Ozone—Its Production and Uses.  
Pres. Joseph Cave and Co., Perfumers.  
*Ad.*, 116 Market Street, Phila., Pa.

**\*James B. Cherry, Ph.G.**

*Thes.*, Yellow Amorphous Oxide of Mercury.  
Retail pharmacist, Pittsburgh, Pa. 32 years. Deceased, March 12, 1902.

**Charles H. Clark, Ph.G.**

*Thes.*, Saponification and Saponification of Castor Oil.  
Retail pharmacist.  
*Ad.*, 1900 Pine Street, Phila, Pa.

**\*Joseph H. Crawford, Ph.G.**

*Thes.*, Preparations of Cinchona Bark.

**\*Albert C. Curtis, Ph.G.**

*Thes.*, Benzoinum.  
Graduated Univ. Mich., 1871. Deceased, June, 1876.

**George S. Davison, Ph.G.**

*Thes.*, Bromine and Its Compounds.

**\*John H. Dawson, Ph.G.**

*Thes.*, The New York Drug Law.  
Pharmacist and chemist. Examiner of Drugs and Chemist, U. S. Customs, San Francisco, 20 years. Director California College of Pharmacy. Mem. Amer. Chem. Soc.; A. Ph. A.; International Jury of Awards, Panama Pacific International Exposition. Deceased, May, 1920.

**Edward E. Desh, Ph.G.**

*Thes.*, Pilulæ Quininæ Sulphatis.

**\*Charles B. Evans, Ph.G.**

*Thes.*, The Seeds of Cucurbita Citrullus.  
Deceased, June 30, 1891.

**Benjamin T. Fairchild, Ph.G.**

*Thes.*, Suppositoriæ Assafoetidæ.  
Mfg. Chemist. Pres. and Director of Laboratories of Fairchild Bros. and Foster. Organized firm of Fairchild Bros. with S. W. Fairchild in 1879, and subsequently the corporation, Fairchild Bros. and Foster. Mem. of the Council of N. Y. Univ.  
*Ad.*, 76 Laight Street, New York City.

**Samuel Stewart Ford, Ph.G.**

*Thes.*, The Uses of Glycerine.

**Horatio N. Fraser, Ph.G.**

*Thes.*, Cotton Seeds.  
Retired. Started business in New York City in 1881 with Benjamin T. Fairchild, as Fraser and Co. Pres. of Fraser Tablet Co., 1901-19. Degree Ph.M., P. C. P., 1908; M.D., St. Louis College of Physicians and Surgeons 1909. Treas. College of Pharmacy of City of New York. Mem. and Trustee, P. C. P. Mem. College of Pharmacy of City of New York; A. Ph. A.; Union League Club; Lotos; Aldine; Chemists Club; Chamber of Commerce; Board of Trade; New England Soc.; Metropolitan Museum; Montauk Club.  
*Ad.*, 218 Lincoln Place, Brooklyn, N. Y.

**\*John Stuart Frazer, Ph.G.**

*Thes.*, The Physician and the Pharmacist.

**Max Geiger, Ph.G.**

*Thes.*, Glycerine.

**Benjamin S. Gilbert, Ph.G.**

*Thes.*, Sarracenia Purpurea.  
*Ad.*, York, Pa.

**\*Lee S. Harrison, Ph.G.**

*Thes.*, The Variable Properties of Extracts.  
Chemist, American Glucose Co.

**John M. Harvey, Ph.G.**

*Thes.*, Syrup of the Phosphates of Iron, Quinine and Strychnine.  
Retail pharmacist.  
*Ad.*, 1002 West Street, Wilmington, Del.

**W. Barton Hawkins, Ph.G.**

*Thes.*, The Curative Powers of Drugs.

**Herbert Hazard, Ph.G.**

*Thes.*, A New Source of Potash Supply.

**Samuel T. Hense, Ph.G.**

*Thes.*, Fungi.  
Pharmacist, chemist, manufacturer. Pres. Samuel T. Hense Mfg. Co., Mfrs. of Hense Syrup Percolator. Mem. A. A. A. S.; Amer. Chem. Soc.; A. Ph. A.; Council, A. Ph. A. Author. Mem. U. S. Public Service Reserve.  
*Ad.*, 1415 Glenarm Place, Denver, Col.

**Frank P. Hill, Ph.G.**

*Thes.*, Syrupus Scillæ Compositus.

**Hibbert P. John, Ph.G.**

*Thes.*, Disinfectants.  
*Ad.*, The Bartram, 33d and Chestnut Streets, Phila., Pa.

**George D. Jones, Ph.G.**

*Thes.*, Tinctura Ferri Chloridi.  
*Ad.*, 5015 Irving Street, Phila., Pa.

**\*Newton H. Kemmerer, Ph.G.**

*Thes.*, Adulteration.  
Deceased, October 23, 1903.

**George W. Knight, Ph.G.**

*Thes.*, The Prevention of Mistakes in the Drug Store.  
Retail pharmacist.  
*Ad.*, 1207 Broadway, Camden, New Jersey.

**\*William Estell Lee, Ph.G.**

*Thes.*, Gnaphalium Polycephalum.  
Retail pharmacist, Phila. 40 years. Mem. Board of Trustees P. C. P. Ex-pres. P. C. P. Alumni Assn. Mem. A. Ph. A.; Nat'l Assn. Retail Druggists; Penna. Pharm. Assn. Deceased, July 20, 1914.

**Samuel Lemly, Jr., Ph.G.**

*Thes.*, An Improved Fluid Extract of Rhubarb.

**W. H. Light, Ph.G.**

*Thes.*, Concentration of Vinegar.

**Samuel S. Long, Ph.G.**

*Thes.*, Sabbatia Angularis.  
Traveling salesman. Formerly clerk in Dept. of Health of Penna. 4 years. Also in Dept. of Mines. *Ad.*, 571 Linden Avenue, York, Pa.

**Thomas D. McElhenie, Ph.G.**

*Thes.*, Lycopersieum Esculentum.  
Retail pharmacist. Mem. Kings Co. Pharm. Soc.; N. Y. State Pharm. Assn.; N. J. State Pharm. Assn.; A. Ph. A.; N. Y. Branch A. Ph. A. *Ad.*, 266 Ryerson Street, Brooklyn, N. Y.

**\*Louis A. Matos, Ph.G.**

*Thes.*, Pharmaceutical Experience.  
Proofreader of Spanish Translation of the U. S. Pharmacopœia. Deceased, 1910.

**\*Jules Muringer, Ph.G.**

*Thes.*, Pilulæ Hydrargyri.

**\*Henry M. Mntchler, Ph.G.**

*Thes.*, Hydrate of Chloral.

**\*Charles L. Mitchell, Ph.G.**

*Thes.*, Gun Cotton and Its Preparations.  
P. C. P. Alumni quiz master on pharmacy. Graduated in medicine Jeff. Med. College, 1880. In 1882 retired from retail drug business and devoted time to manufacturing Soluble Medicated Gelatin Preparations. One of the founders of Medico-Chirurgical College and prof. of chemistry 2 years. Received degree Ph.D. from Medico-Chi in 1883. Vice-pres. Blair Camera Co. Deceased, 1910.

**\*Louis Oliphant, Ph.G.**

*Thes.*, Hydrangea Arborescens.  
Deceased, February 25, 1911.

**\*Jefferson Oxley, Ph.G.**

*Thes.*, Ericaceous Plants.

**\*Ernest Pierpoint, Ph.G.**

*Thes.*, Sanguinaria Canadensis.  
Deceased, 1910.

**\*Wallace Procter, Ph.G.**

*Thes.*, The Fruit of Magnolia Tripetala.  
Son of William Procter, Jr. Retail pharmacist in Phila. and Wheeling, West Va. Mem. P. C. P. Board of Trustees. Deceased, May 27, 1911.

**T. S. Richardson, Ph.G.**

*Thes.*, Soluble Cream of Tartar.

**W. D. Richardson, Jr., Ph.G.**

*Thes.*, Lobelina.

**Milton W. Roth, Ph.G.**

*Thes.*, Comparative Value of Benzoin and Ether in Preparing Oleoresins.

**John H. Shrum, Ph.G.**

*Thes.*, Rhus Glabrum.  
Retired.  
*Ad.*, 664 N. Frazier Street, Phila., Pa.

**Eugene W. Spencer, Ph.G.**

*Thes.*, Artificial Congress Water.

**\*Jacob R. Stephens, Ph.G.**

*Thes.*, Prescriptions.  
Deceased, 1909.

**Charles Orville Thiesand, Ph.G.**

*Thes.*, Juglans Cinerea.  
Pharmacist for Web Ry. Hosp. Assn. Postmaster, Vevay, Ind., 4 years. Retail pharmacist until 1910. *Ad.*, 170 E. 6th Street, Peru, Ind.

**E. C. Trembly, Ph.G.**

*Thes.*, Mel Rosae.

**\*Isaac Tull, Ph.G.**

*Thes.*, Suppositories.

**\*Henry M. Wetherill, Jr., Ph.G.**

*Thes.*, Gillenia Stipulacea.  
Graduated in medicine Univ. of Penna. Served in Episcopal Hosp., Phila. Gen. Hosp., Penna. Hosp. for the Insane. Became a noted alienist. Secy. of State Board of Lunacy and Charity. Deceased, July 27, 1904.

**\*Joseph Wiley, Ph.G.**

*Thes.*, Gossypium Radicis Cortex.  
Wholesale druggist and manufacturer, Phila. Mem. of firm, Wiley and Wallace. Deceased, November 11, 1889.

**John M. Wirgman, Ph.G.**

*Thes.*, The Oils of Peach Kernels.  
Pres. Bluefield Water Co., W. Va. Retail pharmacist until 1877. With Penna. R. R. Co. until 1890. Mem. Univ. of Penna. Museum. *Ad.*, 603 Drexel Bldg., Phila., Pa.

**Atwood Yeakle, Ph.G.**

*Thes.*, The Pharmacist and Physician.  
Retail pharmacist.  
*Ad.*, 600 DeKalb Street, Norristown, Pa.

1873

**\*S. D. Addis, Ph.G.**

*Thes.*, Aloe Vulgaris.

**\*Miguel Alvarez y Ortiz, Ph.G.**

*Thes.*, Obtainment of Tartar Emetic.

**\*Joseph V. Antill, Ph.G.**

*Thes.*, Prinos Verticillatus.  
Many years a practicing physician and pharmacist, Phila. Deceased, September 8, 1919.

**\*Ammon A. Apple, Ph.G.**

*Thes.*, Rubus Villosus.  
Retail pharmacist, Phila., 40 years. Masonic affiliation. Deceased, July 27, 1916.

**E. Harlan Babb, Ph.G.**

*Thes.*, Dioscorea Villosa.

**E. C. Batchelor, Ph.G.**

*Thes.*, Aesculus Pavia.

**\*J. Howard Beck, Ph.G.**

*Thes.*, A Pharmacist and His Requirements.  
Deceased, August 15, 1912.

**\*Alanson B. Bishop, Ph.G.**

*Thes.*, Pharmaceutical Text Book for Beginners.

**\*Munroe Bond, Ph.G.**

*Thes.*, Biblical Record of Drugs and Kindred Subjects.  
Graduated in medicine Jeff. Med. Coll., 1879. Practiced in Phila. Deceased, September 15, 1890.

**\*Edward L. Boyer, Ph.G.**

*Thes.*, Pharmaceutical Manipulations.

**\*Phillip F. Brakeley, Ph.G.**

*Thes.*, Acids.

**\*Paul Bridger, Ph.G.**

*Thes.*, Protoxide of Hydrogen.  
Veteran of the Civil War. Retail pharmacist, Phila. Deceased, May 31, 1908.

**Charles Scott Brown, Ph.G.**

*Thes.*, Helonium Autumnale.

**Thomas D. Brown, Ph.G.**

*Thes.*, Condurango.

**William C. Brown, Ph.G.**

*Thes.*, Antimonij et Potassii Tartras.  
Retail pharmacist.  
*Ad.*, Lakewood, N. J.



- \*Harry M. Capp, Ph.G.**  
*Thes.*, Pharmacy of Today.
- \*Richard T. Chiles, Ph.G.**  
*Thes.*, *Comptonia Asplenifolia*.
- \*Thomas A. Conlyn, Ph.G.**  
*Thes.*, Disinfection.  
Retail pharmacist, Baltimore, Md. Deceased, 1921.
- \*Adsm Conrath, Ph.G.**  
*Thes.*, *Solidago Bicolor*.  
Mem. Wisconsin Board of Pharmacy; A. Ph. A.  
Deceased, December 19, 1901.
- \*John E. Cook, Ph.G.**  
*Thes.*, Botany.  
Assistant to Prof. Maisch, P. C. P. (See page 431.)
- Frank C. Dale, Ph.G.**  
*Thes.*, Experimental Pharmacy.
- Nathan B. Danforth, Ph.G.**  
*Thes.*, *Solidago Odora*.  
Wholesale and retail druggist. With Robert Shoemaker and Co., until 1876.  
*Ad.*, Market and 2nd Sts., Wilmington, Del.
- \*William Delker, Ph.G.**  
*Thes.*, A Country Drug Store.  
Deceased, May 31, 1911.
- L. Stanley DuBois, Ph.G.**  
*Thes.*, Pharmaceutical Uses of Glycerine.  
*Ad.*, Box 101, Paducah, Ky.
- Herman T. Eberle, Ph.G.**  
*Thes.*, *Baptisia Tinctoria*.  
Retail pharmacist. Mem. Sch. Board 2 years.  
Postmaster 8 years.  
*Ad.*, 1126 Powell Ave., Evansville, Ind.
- \*Worthington Emerson, Ph.G.**  
*Thes.*, *Conduraugo*.
- Samuel W. Fairchild, Ph.G.**  
*Thes.*, Legitimate Pharmacy.  
Pharmaceutical chemist, financier. Vice-Pres., Treas. and Gen. Mgr., Fairchild Bros. and Foster. Pres. N. Y. Coll. of Pharmacy, 1890-96. Degree Ph.M., P. C. P., 1908; Sc. M. Columbia Univ. 1911. One of the Incorporators Bronx Botanical Gardens. Mem. Metropolitan Museum of Art. Founder of Fairchild Scholarship for students in Gt. Britain and Ireland, 1904; Scholarship in U. S. 1915. Chm. of Board of Bowery Savings Bank. Vice-Pres., Chamber of Commerce, State of N. Y. Mem. Union League Club, Pres. from 1911-15; Metropolitan Club of N. Y. and Washington, D. C., etc. Chm. War Committee of Union League Club. Trustee, Polyclinic Medical School and Hosp., etc.  
*Ad.*, 74 Laight St., New York City.
- John Henry Flint, Ph.G.**  
*Thes.*, *Arctostaphylos Glauca*.  
Prof. Chemistry and Toxicology, Coll. of Physicians and Surgeons, San Francisco, Cal. Narcotic expert to Cal. State Board of Pharmacy. Formerly Toxicologist to City and County of San Francisco. Ex-mem. Cal. State Board of Pharmacy. Received degrees Ph.D. and Ph.M., Coll. of Physicians and Surgeons.  
*Ad.*, 401 Belvedere St., San Francisco, Cal.
- Arthur S. French, Ph.G.**  
*Thes.*, Court Plaster.
- \*William C. Gill, Ph.G.**  
*Thes.*, Glycerine in Fluid Extracts.  
Retail pharmacist, Phila. Deceased, June 22, 1886.
- \*Allen G. Grigge, Ph.G.**  
*Thes.*, Water.
- \*Joseph W. Griscom, Ph.G.**  
*Thes.*, Nitrite of Amyl.
- Edward Z. Gross, Ph.G.**  
*Thes.*, *Coptis Trifolia*.  
*Ad.*, 23 N. Front St., Harrisburg, Pa.
- \*Morris S. Guth, Ph.G.**  
*Thes.*, Education of the Pharmacist.  
Graduated in medicine, Univ. of Penna. Supt. of Warren State Asylum for 25 years. Later practiced medicine in Erie, Pa. Became one of the best known alienists in the U. S. Deceased, March 27, 1912.
- \*Horace J. G. Hallowell, Ph.G.**  
*Thes.*, *Iris Versicolor*.
- Frank M. Harper, Ph.G.**  
*Thes.*, *Sodii Bicarbonas Venalis*.  
Retail pharmacist. Recruiting Agt. U. S. Merchant Marine.  
*Ad.*, Madison, Ind.
- Herman Haupt, Jr., Ph.G.**  
*Thes.*, *Osha Root*.  
Physician.  
*Ad.*, Penn Sq. Bldg., Philadelphia, Pa.
- Alfred E. Helgeson, Ph.G.**  
*Thes.*, *Verbena Hastata*.
- \*August Hohl, Ph.G.**  
*Thes.*, Practical Experience.  
Employed for a time by William R. Warner and Co. Later opened a drug store in Phila. Mem. Common Council four terms. Deceased, November 29, 1908.
- \*James W. Hommann, Ph.G.**  
*Thes.*, *Hamamelis Virginica*.
- Arndt K. Housekeeper, Ph.G.**  
*Thes.*, *Unguentum Hydrargyri*.  
Retail pharmacist.  
*Ad.*, Narberth, Pa.
- \*James F. Hurt, Ph.G.**  
*Thes.*, Our College.  
One of the founders of Missouri Pharm. Ass'n. Mem. Missouri Board of Pharmacy; A. Ph. A. Deceased, August 4, 1885.
- Will N. Janvier, Ph.G.**  
*Thes.*, Pharmacy as a Profession.  
Mgr. Drug Dept., Keasbey and Mattison Co. Retail pharmacist, Springfield, O., 1881-85.  
*Ad.*, 2 Palmer Ave., Swampscott, Mass.
- \*Edward Jefferson, Ph.G.**  
*Thes.*, *Cannabis Indica*.  
Deceased, August 17, 1884.
- J. Morris Jones, Ph.G.**  
*Thes.*, *Benzoin Odoriferum*.
- Henry G. Keasbey, Ph.G.**  
*Thes.*, *Syrupus Ferri Iodidi*.  
Formerly a member of the firm, Keasbey and Mattison Co.  
*Ad.*, Ambler, Pa.
- \*George G. Keck, Ph.G.**  
*Thes.*, The Ethics of Pharmacy.
- Henry Kielhorn, Ph.G.**  
*Thes.*, *Ferrum*.
- Harry G. Kille, Ph.G.**  
*Thes.*, *Epigaea Repens*.  
Retail pharmacist.  
*Ad.*, 123 Broad St., Mt. Holly, N. J.
- Charles Richard Lange, Ph.G.**  
*Thes.*, Volatile Oils.
- William I. Lerch, Ph.G.**  
*Thes.*, *Prinos Verticillatus*.  
*Ad.*, The Covington, 37th and Chestnut Sts., Philadelphia, Pa.
- \*J. Howard McCrea, Ph.G.**  
*Thes.*, *Cortex Amygdalæ Persicæ*.

- B. Morris Magill, Ph.G.**  
*Thes.*, Chelidonium Majus.  
*Ad.*, 1332 N. 15th St., Philadelphia, Pa.
- D. W. Marshall, Ph.G.**  
*Thes.*, Iron in Chalybeate Waters.  
*Ad.*, 501 W. James St., Lancaster, Pa.
- \*Samuel W. Martin, Ph.G.**  
*Thes.*, Heracleum Lanatum.  
Retail pharmacist, Lewistown, Pa. Deceased, January 22, 1894.
- \*William N. Martindell, Ph.G.**  
*Thes.*, An Examination of Some Brands of Liquorice.  
Deceased, 1919.
- John E. Matthews, Ph.G.**  
*Thes.*, Pharmaceutical Education.
- Richard V. Mattison, Ph.G.**  
*Thes.*, Elegant Pharmacy.  
Pres. and Gen. Mgr., Keasbey and Mattison Co. Graduated in medicine, Univ. of Penna., 1879. Pres. Bell Asbestos Mines; Asbestos Shingle, Slate and Sheathing Co.; Ambler Spring Water Co.; Upper Dublin Water Co.; Ex-Vice-Pres. P. C. P. Pres. Phila. Drug Exchange; Ex-Pres. 1st Nat'l Bank of Ambler. Director in various industrial, financial and commercial institutions. Mem. A. Ph. A.; National Wholesale Druggists Assn.; Assn. of Amer. Manufacturers; Union League, Church, Country and Manufacturers Clubs. Instr. in theoretical and practical chem., P. C. P., 1873-83.  
*Ad.*, Ambler, Pa.
- \*C. Carroll Meyer, Ph.G.**  
*Thes.*, Ichthyocollo.  
Retail pharmacist, Phila. For many years, Treas. P. C. P., Alumni Assn. Mem. P. C. P. Board of Trustees. Deceased, December 15, 1919.
- \*Frank E. Miller, Ph.G.**  
*Thes.*, Anemone Ludoviciana.  
Deceased, September 6, 1891.
- \*William G. Moffit, Ph.G.**  
*Thes.*, Emulsions of Cod Liver Oil.
- Stephen A. Neppach, Ph.G.**  
*Thes.*, Manganese Pentoxide.
- \*Harry J. Nice, Ph.G.**  
*Thes.*, Mistakes in Prescriptions.  
Retail pharmacist, Phila. Deceased, June 4, 1915.
- \*William C. Nicholas, Ph.G.**  
*Thes.*, Cosmoline.
- \*James A. Parker, Ph.G.**  
*Thes.*, Scutellaria Lateriflora.  
Retail pharmacist. Mem. Penna. Pharm. Ass'n. Treas. Soc. for Organizing Charity. Deceased, March 4, 1884.
- \*Christopher Petzelt, Ph.G.**  
*Thes.*, Euphorbia Ipecacuanha.
- Harry W. Porter, Ph.G.**  
*Thes.*, Extractum Pruni Virginiana Fluidum.
- David G. Potts, Ph.G.**  
*Thes.*, Aromatic Astringent Syrups.  
Retired.  
*Ad.*, 1025 S. 46th St., Philadelphia, Pa.
- Frederick Radefeld, Ph.G.**  
*Thes.*, Aqueous Fluid Extract of Senna.  
Relief clerk.  
*Ad.*, 1537 N. 29th St., Philadelphia, Pa.
- Amand Pfister Raser, Ph.G.**  
*Thes.*, The Judicious Arrangement of Shops and the Better Preservation of Drugs and Medicines.  
Retail pharmacist. Formerly a partner in Scott Pharmacal Co.  
*Ad.*, 931 Edgewood Ave., Trenton, N. J.
- Edward B. Reichel, Ph.G.**  
*Thes.*, Nature's Medicinal Resources.
- \*Eugene D. Ritter, Ph.G.**  
*Thes.*, Atropa Belladonna Toxicologically Considered.
- A. B. Rohn, Ph.G.**  
*Thes.*, Pancreatine.  
*Ad.*, Raritan, N. J.
- Alexander H. C. Rowand, Ph.G.**  
*Thes.*, Lactucarium.  
Physician. Graduated in medicine, Univ. of Penna., 1893. Pres. 24th Sectional Sch. Board, 1893. Mem. Volunteer Med. Service Corps.  
*Ad.*, 3704 Spring Garden St., Philadelphia, Pa.
- \*G. M. Russell, Ph.G.**  
*Thes.*, Semina Cucurbita Citrullus.  
Retail pharmacist, Minneapolis, Minn. Deceased, August 31, 1918.
- Henry Schmidt, Ph.G.**  
*Thes.*, Citric Acid.  
Retail pharmacist.  
*Ad.*, 7 Broad St., Elizabeth, N. J.
- \*Charles Schnabel, Ph.G.**  
*Thes.*, Elixirs.
- \*A. E. Smith, Ph.G.**  
*Thes.*, The Advantage of the Study of Botany to Druggists.
- O. L. Smith, Ph.G.**  
*Thes.*, Mercury and its Preparations.
- \*John S. Spriggs, Ph.G.**  
*Thes.*, Panax.  
Retail pharmacist, Monmouth, Ill. Deceased, February, 1917.
- \*W. Nelson Stem, Ph.G.**  
*Thes.*, Syrup of Ipecac, Syrup of Squill, Syrup of Senega.  
Registrar, P. C. P. (See page 393.)
- A. B. Stewart, Ph.G.**  
*Thes.*, Collegiate Course in Pharmacy.
- \*Albert F. Stüfel, Ph.G.**  
*Thes.*, Pharmaceutical Education.  
Studied medicine in Germany at the Univ. of Wurzburg, and at the Univ. of Leipsig. For several years acted as Regent of the Univ. of Virginia. Practiced medicine in Wheeling, West Va. Deceased, April 10, 1893.
- G. Louis Truckenmiller, Ph.G.**  
*Thes.*, Hamamelis Virginica.
- Herman F. Voshage, Ph.G.**  
*Thes.*, Patent Medicine.  
Retail pharmacist.  
*Ad.*, 4906 Baltimore Ave., Philadelphia, Pa.
- \*William G. White, Ph.G.**  
*Thes.*, Preliminary Education.
- \*J. Adam Wiegner, Ph.G.**  
*Thes.*, Dracontium Foetidum.  
Retail pharmacist, Slatington, Pa. Deceased, April 17, 1888.
- \*Rowland Willard, Jr., Ph.G.**  
*Thes.*, Petroleum.  
Retail pharmacist until 1919.  
Deceased, August 7, 1922.
- Richard J. C. Williams, Ph.G.**  
*Thes.*, Drugs from the Animal Kingdom.  
Mfg. chemist. With G. F. H. Co., Saratoga, N. Y., since 1891.  
*Ad.*, 134 Circular St., Saratoga Springs, N. Y.
- James P. Wood, Ph.G.**  
*Thes.*, Latter Day Pharmacy.
- \*Frank P. Yergin, Ph.G.**  
*Thes.*, Cytisus Scoparius.  
Retail pharmacist, Chicago, Ill. Deceased, 1920.

- \*James L. Yost, Ph.G.**  
*Thes.*, Lycopus Virginicus or Bugle Weed.
- John K. Young, Ph.G.**  
*Thes.*, Cyripedium Pubescens.  
Retail pharmacist. Mem. Sch. Board 15 years.  
County Auditor 3 years. Mem. Board of Health  
2 years.  
*Ad.*, 559 Bath St., Bristol, Pa.
- \*G. A. Zimmerman, Ph.G.**  
*Thes.*, Iodoform.  
Deceased, March 19, 1918.
- 1874
- Louis Kossuth Acker, Ph.G.**  
*Thes.*, Suppositories.  
*Ad.*, 565 Highland Place, Bellevue, Pa.
- David Ackerman, Jr., Ph.G.**  
*Thes.*, Mistura Assafoetida.
- James Armstrong Allen, Ph.G.**  
*Thes.*, Arbutin.  
*Ad.*, Oxford, N. J.
- Edmund Bakhaus, Ph.G.**  
*Thes.*, Polygonatum Multiflorum.
- \*William Baker Banks, Ph.G.**  
*Thes.*, Practical Remarks.  
Graduated in medicine, Medico-Chi Coll. Prac-  
ticed in Phila. Deceased, December 27, 1915.
- Bartholomew Bantly, Ph.G.**  
*Thes.*, Chimaphila Maculata.
- Harry Barndollar, Ph.G.**  
*Thes.*, Chloral Hydrate.
- Alfred Barth, Ph.G.**  
*Thes.*, Hydrargyri Iodidum Viride.  
In real estate business. Formerly retail pharmacist.  
Masonic affiliation.  
*Ad.*, 567 Public St., Providence, R. I.
- Charles Johnson Biddle, Ph.G.**  
*Thes.*, Polygonum Hydropiperoides.  
*Ad.*, 3348 Market St., Philadelphia, Pa.
- \*Samuel Charles Blair, Ph.G.**  
*Thes.*, A Steam Apparatus for Fluid Extracts.  
Graduated in medicine Univ. of Penna. Practiced  
medicine in Phila., 35 years. Deceased, October  
9, 1918.
- Adrian Bowens, Ph.G.**  
*Thes.*, The Constituents of Dr. Sage's Catarrh  
Remedy.
- \*Henry Northam Bryan, Ph.G.**  
*Thes.*, Cyripedium Acaule.  
Graduated in medicine, Jeff. Med. Coll., 1884.  
Chief of Surgical Clinic, Medico-Chi Coll., 11 yrs.  
Author. Mem. Amer. Med. Assn.; Phila. County  
Med. Soc.; Coll. of Physicians. Deceased, No-  
vember 2, 1914.
- \*James Harry Buckingham, Ph.G.**  
*Thes.*, Dracontium.  
Deceased, January 13, 1895.
- \*Thomas Lownes Buckman, Ph.G.**  
*Thes.*, Phytolacca Decandra.  
Retail pharmacist in and about Phila. Deceased,  
January 27, 1912.
- Frank Murrell Budd, Ph.G.**  
*Thes.*, Suppositories.
- Augustus Crane Buzby, Ph.G.**  
*Thes.*, Remarks on Elixirs.
- \*Isaac Newton Coffee, Ph.G.**  
*Thes.*, The Advantage of a Knowledge of Botany  
to Pharmacy Students.  
Deceased, September 26, 1896.
- Jefferson Somerville Conner, Ph.G.**  
*Thes.*, The Philadelphia Drug Store.
- Edward Seymour Dawson, Jr., Ph.G.**  
*Thes.*, Juglans Cinerea.  
Retail pharmacist. Sec'y. N. Y. State Board of  
Pharmacy, 16 years. Sec'y. N. Y. State Pharm.  
Assn., since 1902.  
*Ad.*, 134 Green St., Syracuse, N. Y.
- William Dilmore, Ph.G.**  
*Thes.*, Actea Alba.
- William Francis Dugan, Ph.G.**  
*Thes.*, Glycerine.
- Francis Henry Ebur Gleim, Ph.G.**  
*Thes.*, Castanea Vesca Folium.  
Retail pharmacist. Treas. Penna. Pharm. Assn.  
since 1911. Treas. of Lebanon City, 1908-12.  
*Ad.*, Lebanon, Pa.
- \*Charles Franklin Goodno, Ph.G.**  
*Thes.*, Pilula Ferri Carbonatis.
- Paul Graef, Jr., Ph.G.**  
*Thes.*, Prinos Verticillatus.
- \*John Warrington Haines, Jr., Ph.G.**  
*Thes.*, Progress of Pharmacy.
- \*Jacob Hoeckley Hand, Ph.G.**  
*Thes.*, Extracta Fluida.  
Expert assayer of platinum and palladium. De-  
ceased, January 21, 1919.
- William Landon Harrison, Ph.G.**  
*Thes.*, The Balsam of Liquidambar Styraciflua.
- Franklin Thomas Hartzell, Ph.G.**  
*Thes.*, Commentary on Pharmacopocia Preparations.
- Edgar Melville Hattan, Ph.G.**  
*Thes.*, Cephalanthus Occidentalis.
- \*Edward Everett Hazlett, Ph.G.**  
*Thes.*, Indigofera Tinctoria.  
Deceased, June 17, 1915.
- \*William Heckenherger, Ph.G.**  
*Thes.*, Cod Liver Oil.  
Retail pharmacist, Catasaunqua, Pa., 40 yrs. Mem.  
Penna. Pharm. Ass'n. Deceased, January 16, 1914.
- \*George Snavelly Henry, Ph.G.**  
*Thes.*, Urinary Analysis.  
Retail pharmacist, Duncannon, Pa. Deceased, Sep-  
tember 29, 1896.
- Charles Swift Riche Hildeburn, Ph.G.**  
*Thes.*, Hyoscyamus Niger.
- Eugena Ziegler Hillegass, Ph.G.**  
*Thes.*, The Adulteration of Medicinal Substances.  
Physician. Graduated in medicine, Jeff. Med.  
Coll., 1880.  
*Ad.*, Mantua, Gloucester Co., N. J.
- \*Thomas C. Hilton, Ph.G.**  
*Thes.*, Potassium Acid Tartrate.
- \*George Martin Shriner Hull, Ph.G.**  
*Thes.*, Linaria Vulgaris.  
Graduated in medicine, Univ. of Penna. Prac-  
ticed in California. Deceased, August 29, 1902.
- \*David Hunter, Ph.G.**  
*Thes.*, Fluid Extract of Ipecac.  
Graduated in medicine, Jeff. Med. Coll., 1878.  
Physician and pharmacist, in Atlantic City, N. J.  
and in Phila. Ass't. Medical Inspector of Board of  
Health, Phila. Deceased, June 16, 1893.
- Harvey Briarley Hutchinson, Ph.G.**  
*Thes.*, Oleate of Mercury.
- Alexander Wilson Jacob, Ph.G.**  
*Thes.*, Helianthemum.
- \*George Harris Jacobs, Ph.G.**  
*Thes.*, Examination of Quinine Pills.



- Aaron Peter Jacoby, Ph.G.**  
*Thes.*, Eupatorin.
- \*George Hoopes Johnson, Ph.G.**  
*Thes.*, Relations Between Animal and Vegetable Matter.
- \*Robert H. Johnston, Ph.G.**  
*Thes.*, Atidum Tannicum.
- Frank Robert Jummel, Ph.G.**  
*Thes.*, Syrupus Ferri Iodidi, U. S. P., and its Scientifically Founded Substitution by Ferrum Jodatum Saccb.  
Mgr. Washington Pharmacy. Mem. 1. O. O. F.; Director I. O. O. F. Home, Trenton, N. J. Served in Spanish-Amer. War, 4th N. J. Inf., as Hosp. Steward.  
*Ad.*, 242 Spring St., Trenton, N. J.
- \*Augustus Henry Keenan, Ph.G.**  
*Thes.*, Zinc.
- \*Alexander King, Ph.G.**  
*Thes.*, Maclura Aurantiaca.  
Deceased, September 10, 1876.
- \*Howard Kingsbury, Ph.G.**  
*Thes.*, Capsicum.  
Retail pharmacist, Phila. Deceased, March 16, 1915.
- James Aloysius Kinnear, Ph.G.**  
*Thes.*, Silphium Laciniatum.  
*Ad.*, Deming, New Mexico.
- Francis Joseph Koch, Ph.G.**  
*Thes.*, Helenium Autumnale.
- Frederick John Krnell, Ph.G.**  
*Thes.*, Helianthemum.
- \*Frederick William Latz, Ph.G.**  
*Thes.*, Pharmacy at the Present Time.
- Louis Philip Leibold, Ph.G.**  
*Thes.*, Early Closing.  
Retired. Formerly retail pharmacist. Served 1 term as Alderman, Victoria, Tex.  
*Ad.*, Victoria, Tex.
- George Christian Lescher, Ph.G.**  
*Thes.*, Saturated Tinctures.
- \*Abram Lawrence Lumb, Ph.G.**  
*Thes.*, Emplastrum.  
Retail pharmacist, Phila. Deceased, February 27, 1895.
- Joseph Hall Marshall, Ph.G.**  
*Thes.*, Preparation of Single Doses.
- \*William Kline Mattern, Ph.G.**  
*Thes.*, Datura Stramonium.  
Graduated in medicine, Jeff. Med. Coll. 1882. Physician and pharmacist, Phila. Mem. 28th Section Sch. Board. Mem. Board of Education. Appointed Coroner's Physician 1892. Masonic affiliation. Deceased, April 16, 1896.
- Alfred George Mays, Ph.G.**  
*Thes.*, Gentiana Lutea.
- John Jacob Miles, Ph.G.**  
*Thes.*, Fluid Extract of Azedarach.
- Thomas Charles Morgan, Ph.G.**  
*Thes.*, Eucalyptus Globulus.  
*Ad.*, 102 John St., New York City.
- Benjamin Rowland Morrow, Ph.G.**  
*Thes.*, Advancement in Medicine.
- Jacob A. Muthersbough, Ph.G.**  
*Thes.*, Mercury  
Retail pharmacist 40 years. With Hance Bros. and White 10 years.  
*Ad.*, 28 E. Market St., Lewistown, Pa.
- \*John William Hugo Oppermann, Ph.G.**  
*Thes.*, Vaccinium Resinosum.  
Retail pharmacist, Phila. Deceased, April 19, 1888.
- \*Charles Ouram, Ph.G.**  
*Thes.*, Anagallis Arvensis.  
Deceased, April 17, 1918.
- Frederick Belding Power, Ph.G.**  
*Thes.*, Resina Podophylli.  
Prof. Analytical Chemistry P. C. P., 1881-83. (See page 410.)  
*Ad.*, Bureau of Chemistry, Washington, D. C.
- \*John Beatty Preece, Ph.G.**  
*Thes.*, Rubus Villosus.  
Deceased, 1884.
- \*Edward Albert Reed, Ph.G.**  
*Thes.*, Pharmacy.  
Dealer in tractor engines and farm tools. Retail pharmacist until 1905. Pres. Business Men's Assn. 4 years. Deceased, April 13, 1921.
- Frederic Rienhamer, Ph.G.**  
*Thes.*, Affinity or Chemical Attraction.
- Jonas Eberhart Roeder, Ph.G.**  
*Thes.*, Chlorinium.
- \*John Markley Rowe, Ph.G.**  
*Thes.*, Bromide of Morphia.  
Deceased, September 23, 1917.
- Isaac Hansell Rowley, Ph.G.**  
*Thes.*, Pepsin.  
*Ad.*, 6 N. Hillside Ave., Ventnor, N. J.
- James Lytle Royston, Ph.G.**  
*Thes.*, The History of Medicine.
- Frank Stewart Savage, Ph.G.**  
*Thes.*, Syrup of the Lactophosphate of Iron and Lime.
- \*Rush Blackfan Smith, Ph.G.**  
*Thes.*, Aconitum Napellus.  
Extensive real estate owner. Pres. Peerless Paper Co. Pres. Norristown, Pa., Sch. Board 25 years.  
Deceased, September 24, 1919.
- Charles Sparrow, Ph.G.**  
*Thes.*, Algarobia Glandulosa.
- \*Samuel Benjamin Spence, Ph.G.**  
*Thes.*, Silphium Perfoliatum.  
Deceased, October 8, 1876.
- \*Robert Reed Stewart, Ph.G.**  
*Thes.*, Podophyllum.  
Physician. Graduated in medicine Jeff. Med. Coll. 1882. Practiced in Phila. Deceased, February 2, 1922.
- \*John Frederick Stoltz, Ph.G.**  
*Thes.*, Preparations of Ferri Pomatum.  
Deceased, January 19, 1893.
- \*Thomas Daniel Terrell, Ph.G.**  
*Thes.*, Digitalis Purpurea.  
Deceased, November 26, 1917.
- \*Francis Marion Tilton, Ph.G.**  
*Thes.*, Unguentum Hydrargyri Nitratis.  
With H. O. Wilbur and Sons. Deceased, October 9, 1903.
- \*Millard Fillmore Tomlin, Ph.G.**  
*Thes.*, Cyripedium Pubescens.
- Samuel Edwin Walker, Ph.G.**  
*Thes.*, Solidago Odora.  
Physician.  
*Ad.*, 3416 N. 18th St., Philadelphia, Pa.
- Henry Solomon Wellcome, Ph.G.**  
*Thes.*, Uretbral Suppositories.  
Pres. of Burroughs, Wellcome and Co., London. (See page 207.)  
*Ad.*, 8 Snowhill Bldgs., London, England.

**\*John Mumbauer Wert, Ph.G.**

*Thes.*, The Apprentice's Assistants.  
Deceased, September 13, 1902.

**\*John Levy Williams, Ph.G.**

*Thes.*, Bitter Principle of Wild Cherry.  
Shortly after graduation, abandoned drug business to study for the ministry. Deceased, September 4, 1884.

1875

**Clarence Anderson, Ph.G.**

*Thes.*, Alcohol.

**George Washington Barrere, Ph.G.**

*Thes.*, Pharmacy.

**Samuel McGill Beldler, Ph.G.**

*Thes.*, Patent Medicines.  
Tablet m'fr. with Wm. H. Rorer, Phila. Retail pharmacist 18 years. With John Wyeth and Bro. 19 years.  
*Ad.*, 405 N. Wilton St., Philadelphia, Pa.

**\*Walter Eugene Bihby, Ph.G.**

*Thes.*, Phytolacca Decandra.  
Graduated in medicine. Practiced in Phila. Deceased, August 29, 1891.

**William Bernard Bicker, Ph.G.**

*Thes.*, Chemical Food.  
*Ad.*, 462 North American St., Philadelphia, Pa.

**John Henry Blake, Ph.G.**

*Thes.*, Physostigma Venenosum.  
Retired. Formerly retail and mfg. pharmacist.  
*Ad.*, 1311 N. 15th Street, Philadelphia, Pa.

**Henry Stryker Bolsnot, Ph.G.**

*Thes.*, The Only Insects Used in Pharmacy.  
*Ad.*, 74th St., and Broadway, New York City.

**\*William Henry Braddock, Ph.G.**

*Thes.*, Medicinal Substances—Their Strength and Quality.

**Henry Morton Brennan, Ph.G.**

*Thes.*, Linimentum Saponis, U. S. P.  
*Ad.*, 427 Tabor Road, Philadelphia, Pa.

**\*Frank Pierce Brown, Ph.G.**

*Thes.*, Apothecaries' Mistakes.

**Thomas Alexander Cheatham, Ph.G.**

*Thes.*, Examination of Glycerins.  
Drug Inspector for State of Georgia. Local Oil Inspector for State of Ga. 6 years. Also Food Inspector for City of Macon. Retail and wholesale pharmacist 28 years. Mem. I. O. O. F.; Secy. Ga. Pharm. Assn. 11 years.  
*Ad.*, 212 Washington Ave., Macon, Ga.

**Louisa Gaylord Clarke, Ph.G.**

*Thes.*, Liriodendron Tulipifera.  
*Ad.*, Clarke, Woodward Drug Co., Portland, Ore.

**Samuel Pierce Cline, Ph.G.**

*Thes.*, Glycerin and its Pharmaceutical Uses.  
Retail pharmacist.  
*Ad.*, Bloomsbury, N. J.

**\*William Conner, Ph.G.**

*Thes.*, An Adjustable Plaster Machine.  
Graduated in medicine Jeff. Med. Coll., 1892. Practiced medicine and pharmacy in Phila. Deceased, July 19, 1909.

**\*Frank Conrath, Ph.G.**

*Thes.*, Prinos Verticillatus.  
Graduated in medicine, Rush Med. Coll., Chicago 1880. Studied in Berlin, Vienna and Prague. Practiced in Milwaukee. Deceased, May 15, 1884.

**\*Wilbur Fisk Crawford, Ph.G.**

*Thes.*, Digitalis Purpurea.

**Judge Judson Green, Ph.G.**

*Thes.*, Benzine.

**\*Edward Joseph Davison, Ph.G.**

*Thes.*, Is Corrosive Sublimate Formed When Calomel is Prescribed in Combination with Carbonated Alkalies, Sugar, Sugar of Milk, etc.?

**\*Samuel Baker Davis, Ph.G.**

*Thes.*, Atropa Belladonna.  
Deceased, October 20, 1902.

**James Davison, Ph.G.**

*Thes.*, Chemical Philosophy.

**Joseph Cook Evans, Ph.G.**

*Thes.*, Unguenta.

**Thaddeus Everhart, Ph.G.**

*Thes.*, Medicated Waters.

**Albert Robert Hugo Fielder, Ph.G.**

*Thes.*, Mitchella Repens.

**Perry Martin Gleim, Ph.G.**

*Thes.*, Fructus Benzoini Odoriferi.  
With Duquesne Chem. Mfg. Co. Formerly retail pharmacist. One of the founders of Pittsburgh Coll. of Pharmacy, and its first Curator and Secy.; Secy. Board of Trustees 12 years.  
*Ad.*, Lebanon, Pa.

**Charles Ferdinand Hartwig, Ph.G.**

*Thes.*, Eucalyptus Globulus.

**\*James Frank Hayes, Ph.G.**

*Thes.*, Pharmaceutical Education.  
For many years pharmacist at Broad and Walnut Sts., Phila. Mem. City Pharmaceutical Examining Board. Deceased, May 12, 1911.

**Lewis Christopher Hopp, Ph.G.**

*Thes.*, Sanguinaria Canadensis.  
Retail pharmacist. Ex-Pres. Cleveland Coll. of Pharmacy. Ex-Pres. A.Ph.A. Mem. Ohio State Pharm. Assn., etc.  
*Ad.*, 10626 Orrville Ave., Cleveland, Ohio.

**Reuben L. Jacoby, Ph.G.**

*Thes.*, Button Snake Root.

**Charles Pierre Janvier, Ph.G.**

*Thes.*, The Ideal Pharmacist.

**Silas Walton Johnson, Ph.G.**

*Thes.*, Medicine in the Olden Times.

**\*Howard Grant Jones, Ph.G.**

*Thes.*, Analysis of a Cumberland Coal.  
Deceased, November 20, 1891.

**Richard Somers Justice, Ph.G.**

*Thes.*, Chionanthus Virginica.

**Albert Paul Keller, Ph.G.**

*Thes.*, The Abuses of Latin.  
Physician. Graduated in medicine Univ. of Penna. 1879.  
*Ad.*, 4147 N. Broad St., Philadelphia, Pa.

**James M. Kimbrough, Ph.G.**

*Thes.*, Fluid Extracts.

**John Blair Smith King, Ph.G.**

*Thes.*, The Progress of Medicine.  
Physician. Prof. of Chem. Hahnemann Med. Coll., Chicago, 1883-90, and in Hering Med. Coll. 1890-1900. Editor, "Medical Advance," 1910-18. Author, "Chemistry of Food."  
*Ad.*, 159 N. State St., Chicago, Ill.

**Marshall Girton Kinney, Jr., Ph.G.**

*Thes.*, Pharmaceutical Incongruities.

**Richard C. Knox, Ph.G.**

*Thes.*, Piper Nigrum.  
In real estate business. Admitted to bar, Ottawa, Ill. 1888.  
*Ad.*, 307 Pereles Bldg., Milwaukee, Wis.

**Ira Daniel Webster Kramer, Ph.G.**

*Thes.*, Derivation of Fixed Oils.  
Retail pharmacist.  
*Ad.*, 461 Richmond St., Philadelphia, Pa.



- Otto Kraus, Ph.G.**  
*Thes.*, Camphor and Cream of Camphor.  
Retail pharmacist 40 years. Secy. Phila. Assn.  
Retail Druggists. Mem. P. C. P. Board of  
Trustees. Sch. Director. Pres. Bldg. and Loan  
Assns.  
*Ad.*, 2045 N. College Ave., Philadelphia, Pa.
- Wilson Luther Kutz, Ph.G.**  
*Thes.*, Medicated Waters.
- Harry Percy Lechler, Ph.G.**  
*Thes.*, The Constituents of Plants.
- David Wilson Levy, Ph.G.**  
*Thes.*, Illicium Anisatum.  
Physician. Graduated in medicine Medico-Chi  
Coll. 1884. Wholesale and retail pharmacist until  
1885.  
*Ad.*, 1122 E. Palmer St., Philadelphia, Pa.
- William Burk McRoberts, Ph.G.**  
*Thes.*, Status of Pharmacy in Kentucky.  
Relief work. Formerly retail pharmacist. Vice-  
Pres. and Secy. Ky. Pharm. Assn., 4 years.  
*Ad.*, 930 S. 1st St., Louisville, Ky.
- Harry Clayton Manlove, Ph.G.**  
*Thes.*, Syrup of Garlic.  
With New York Life Ins. Co. Pharmacist Univ.  
of Penna. Hosp., 1877-79. Retail pharmacist 1879-  
1901.  
*Ad.*, 1515 Girard Ave., Philadelphia, Pa.
- \*James Augustus Maston, Ph.G.**  
*Thes.*, Fluid Extracts.  
Pharmacist, Episcopal Hosp., Phila. Deceased,  
September 16, 1882.
- William Brown Means, Ph.G.**  
*Thes.*, The Advantage of a Knowledge of Chemis-  
try to Pharmacists.  
Physician and pharmacist. Graduated in medicine  
Jeff. Med. Coll. 1878.  
*Ad.*, 841 N. Cumberland St., Lebanon, Pa.
- Jacob Messing, Jr., Ph.G.**  
*Thes.*, Effervescing Solution of Tartrate of Sodium.  
*Ad.*, Stapleton, N. Y.
- William Meyer, Ph.G.**  
*Thes.*, Hepatica Americana.
- Charles Meyer Miller, Ph.G.**  
*Thes.*, Asclepias Tuberosa.  
*Ad.*, 11451 Euclid Ave., Cleveland, Ohio.
- William Seager Mitchell, Ph.G.**  
*Thes.*, The Seed of Colchicum Autumnale.
- James Lemon Patterson, Ph.G.**  
*Thes.*, Aspidium Marginale.  
*Ad.*, 21st and Ridge Ave., Philadelphia, Pa.
- \*Edward Plummer, Ph.G.**  
*Thes.*, Aquæ Medicatæ.
- Warren Henry Poley, Ph.G.**  
*Thes.*, Phytolacca Decandra.  
Retired. Retail pharmacist until 1906. One of the  
founders, Vice-Pres. and Pres. Phila. Assn. Retail  
Druggists. Mem. Board of Trustees, P. C. P. Ex-  
Treas., P. C. P., Ex-Pres. P. C. P. Alumni Assn.  
Asst. Secy. Site and Relic Soc. of Germantown,  
Phila.  
*Ad.*, 33 East Upsal St., Mt. Airy, Philadelphia, Pa.
- William Reuben Powell, Ph.G.**  
*Thes.*, Iris Versicolor.  
*Ad.*, 808 Market St., Camden, N. J.
- William Harveit Ramsey, Ph.G.**  
*Thes.*, Hop Culture in Wisconsin.
- Howard Dunfee Reifsnnyder, Ph.G.**  
*Thes.*, Veratria.
- Louis Philip Reimann, Ph.G.**  
*Thes.*, Extractum Glycyrrhizæ.  
Physician. Retail pharmacist until 1919.  
*Ad.*, 6400 Park Ave., Oak Lane, Pa.
- Odilon B. Richardson, Ph.G.**  
*Thes.*, Moulding Suppositories Without Melting.
- \*William Gustave Schirmer, Ph.G.**  
*Thes.*, Capsicum Annum.  
Graduated in medicine Jeff. Med. Coll. One of  
the founders and trustees Pittsburgh Coll. of  
Pharm. Retail pharmacist 50 years. Deceased,  
September 17, 1918.
- Joseph William Seger, Ph.G.**  
*Thes.*, Double Cone Suppositories.
- George Munson Shamalia, Ph.G.**  
*Thes.*, The Preparation of Medicinal Waters.  
Retail pharmacist since 1877.  
*Ad.*, 43 Bridge St., Lambertville, N. J.
- \*Francis Peter Sher, Ph.G.**  
*Thes.*, Potassii Bromidum.
- Wilson Vanard Stansbury, Ph.G.**  
*Thes.*, Datura Stramonium.  
Retail pharmacist.  
*Ad.*, 3144 Frankford Ave., Philadelphia, Pa.
- Samuel Robinson Stirling, Ph.G.**  
*Thes.*, The Manufacture of Extemporaneous  
Elixirs.  
Physician. Graduated in medicine Jeff. Med. Coll.  
1880. Retail pharmacist until 1887. Formerly City  
District Physician, also Vaccine Physician.  
*Ad.*, 1931 E. Cumberland St., Philadelphia, Pa.
- Ephraim Frank Stoner, Ph.G.**  
*Thes.*, Radix Sumbul.
- \*William James Stoner, Ph.G.**  
*Thes.*, The Preparation of the Tincture of Arnica.
- \*Leonidas Hamlin Street, Ph.G.**  
*Thes.*, Gentiana Lutea.
- Manilus Henry Stuart, Ph.G.**  
*Thes.*, Glycerate of Iodides of Iron.
- Frank Leopold Sussdorff, Ph.G.**  
*Thes.*, Prinos Verticillatus.
- \*Charles Henry Tatem, Ph.G.**  
*Thes.*, Tincture of Calamus.
- \*Joseph Ysager Taylor, Ph.G.**  
*Thes.*, Asclepias Incarnata.
- Henry Prickett Thorn, Ph.G.**  
*Thes.*, Aralia Spinosa.  
Retail pharmacist. Pres. N. J. Pharm. Assn. 1889.  
Mem. P. C. P.; A. Ph. A.; Pres. Burlington Co.  
Nat'l Bank; Director Burlington Co. Trust Co.;  
Secy. Burlington Co. Assn. for Insurance. Mem.  
Burlington Co. Board of Taxation; N. J. State  
Republican Com.; Masonic affiliation.  
*Ad.*, Medford, N. J.
- \*Thomas Cullin Tomlinson, Ph.G.**  
*Thes.*, Percolation.
- Rudolph Fred George Voelcker, Ph.G.**  
*Thes.*, Rais Del Indico.
- Robert Henry Walch, Ph.G.**  
*Thes.*, Xanthoxylum Fraxineum.
- \*John Franklin Wilgus, Ph.G.**  
*Thes.*, Chiretta.  
Retail pharmacist, Phila. Masonic affiliation. De-  
ceased, May 5, 1889.
- Lewis Henry Wilson, Ph.G.**  
*Thes.*, Cerasus Serotina.  
*Ad.*, 3rd and Linden Sts., Camden, N. J.



1876

- Zachary Taylor Anstett, Ph.G.**  
*Thes.*, Aristolochiacea.
- Thomas Swalm Armstrong, Ph.G.**  
*Thes.*, Guarana.  
Retired. Retail pharmacist until 1917. Mem. N. J. Pharm. Assn.; 1st Vice-pres., 1909; Pres., 1910. Mem. Nat'l Assn. Retail Druggists. Masonic affiliation.  
*Ad.*, 37 Duer Street, North Plainfield, N. J.
- \*Walter Theron Baker, Ph.G.**  
*Thes.*, Medicated Waters.  
Retail pharmacist, Phila. Deceased, January 14, 1890.
- John Rufus Barr, Ph.G.**  
*Thes.*, Triticum Repens.  
Retail pharmacist.  
*Ad.*, West Conshohocken, Pa.
- Hugo Franklin Baur, Ph.G.**  
*Thes.*, Mucilago Acacia.
- John Behlar, Ph.G.**  
*Thes.*, Pimpinella Anisum.
- Alphonso Albert Willits Bley, Ph.G.**  
*Thes.*, Honey.
- Emil Louis Boerner, Ph.G.**  
*Thes.*, Ricinus Communis.  
Retail pharmacist. Dean and Prof. Pharmacy, State Univ. of Iowa, 1885-1904. Prof. Emeritus since 1904.  
*Ad.*, 113 E. Washington Street, Iowa City, Iowa.
- \*William Norwood Keliy Boileau, Ph.G.**  
*Thes.*, Wax—Adulterations and Pharmaceutical Uses.  
Retail pharmacist, Bristol, Pa., and Phila. Deceased, March 4, 1888.
- \*Frederick Stryker Boismot, Ph.G.**  
*Thes.*, Suppositories.
- \*Daniel Albert Bowen, Ph.G.**  
*Thes.*, Podophyllum.  
Retail pharmacist in New Jersey. Mem. N. J. Pharm. Assn. Deceased, June 19, 1912.
- Willis Brenton, Ph.G.**  
*Thes.*, Cryolite.
- Charles Augustus Brotherline, Ph.G.**  
*Thes.*, Phosphorus Pills.
- Joseph John Brown, Ph.G.**  
*Thes.*, The Alcoholic Strength of Wine.
- \*James Oscar Burge, Ph.G.**  
*Thes.*, The Chemical Laboratory.  
One of the founders of the Wharton Chem. Co. and of the Gattis Chem. Co., Nashville, Tenn. Deceased, February 6, 1919.
- Louis Phillip Carbonell, Ph.G.**  
*Thes.*, Acidum Lacticum.
- Flavius Saunders Case, Ph.G.**  
*Thes.*, Salicylic Acid.  
Retail pharmacist, 42 years.  
*Ad.*, Logan, Ohio.
- Theophilus Niblow Corbyn, Ph.G.**  
*Thes.*, Proprietary Medicine.
- Benjamin Thomas Creighton, Ph.G.**  
*Thes.*, The Culture of Tobacco in Ohio.  
Pharmacist, Deemer Drug Co. Formerly in business in Phila., Haddonfield and Palmyra, N. J.  
*Ad.*, 1408 Atlantic Ave., Atlantic City, N. J.
- Charles Albert Daniel, Ph.G.**  
*Thes.*, Preparations of Calamus.
- Philipp Henry Dilg, Ph.G.**  
*Thes.*, Euphorbia Ipecacuanha.
- Isaac Roland Diller, Ph.G.**  
*Thes.*, Tinctura Ferri Chloridi.  
Real estate, mortgage loans and insurance. Retail pharmacist until 1901.  
*Ad.*, 511 W. Carpenter Street, Springfield, Ill.
- Charles Massey Cresson Durborow, Ph.G.**  
*Thes.*, The Deterioration of Druggists' Stock and the Means of Preventing it.  
*Ad.*, 1010 18th Avenue, Altoona, Pa.
- Louis Emanuel, Ph.G.**  
*Thes.*, Glycerin As an Excipient for Pill Masses.  
Retail pharmacist. Mem. Penna. Pharm. Assn.; A. Ph. A.; Penna. Board of Pharmacy 27 years. Ex-treas. Nat'l Assn. Retail Druggists. One of the organizers of the Pittsburgh College of Pharmacy.  
*Ad.*, 237 Darragh Street, Pittsburgh, Pa.
- \*John Henry Evans, Ph.G.**  
*Thes.*, Carbon.  
Deceased, January 13, 1921.
- William Fullerton Fleming, Ph.G.**  
*Thes.*, Cortex Liriodendron Tulipifera.
- Wilbur Winthrop Fry, Ph.G.**  
*Thes.*, The Centennial Class.
- Edmund R. Gatchel, Ph.G.**  
*Thes.*, Amylum.  
Retired. Retail pharmacist 45 years. Mem. Penna. Pharm. Assn.; Phila. Assn. Retail Druggists. One of the founders of Phila. Wholesale Drug Co.; director for 25 years.  
*Ad.*, Box 161, Langhorne, Pa.
- \*Daniel Conrad Gentsch, Ph.G.**  
*Thes.*, Glycerine.  
Graduated in medicine Georgetown Univ. From 1886-1897 held important government positions in Washington. Later practiced medicine in New Philadelphia, O. Veteran of the Civil War. Deceased, May 30, 1914.
- Ezra H. Gingrich, Ph.G.**  
*Thes.*, Chemical Changes.
- Leon Joseph K. Graber, Ph.G.**  
*Thes.*, Opium—Its Uses and Abuses.  
Physician.  
*Ad.*, Harrisburg, Pa.
- Charles Griffith, Ph.G.**  
*Thes.*, A Substitute for Volatile Liniment.  
*Ad.*, Main Street, Johnstown, Pa.
- \*John Dowling Groves, Ph.G.**  
*Thes.*, Iodine.  
Mem. of firm, Dr. M. F. Groves and Co., Phila. Deceased, July 12, 1915.
- \*Carl Svanté Nicanor Hallberg, Ph.G.**  
*Thes.*, Pharmaceutical Notes.  
Soon after graduation became associated with C. G. Wheeler as a manufacturing pharmacist. Here he originated the saccharated extracts, which later became the "abstracts" of the U. S. P., 1880. Retiring in 1885, became director of G. P. Engelhard's correspondence pharmacy school. 1888-89 manufactured N. F. preparations and received A. Ph. A. gold medal in 1888. Mem. A. Ph. A.; Ill. Pharm. Assn.; Amer. Med. Assn.; Rev. Com. of U. S. P. and N. F. Editor, "The Western Druggist," 1882-1890. Prof. of Pharmacy in Chicago College of Pharmacy. Editor of "Bulletin of A. Ph. A." Deceased, 1910.
- Charles Green Harris, Ph.G.**  
*Thes.*, Tinctura Ferri Chloridi.
- Park Harris, Ph.G.**  
*Thes.*, Opium.
- \*Henry Tower Hayhurst, Ph.G.**  
*Thes.*, Effervescent Preparations of Sodium Tartrate.  
Deceased, May, 1918.

## 492 First Century of the Philadelphia College of Pharmacy

**Ernest William Herrmann, Ph.G.**

*Thes.*, Tin Scrap.  
Retired. Formerly retail pharmacist.  
*Ad.*, 233 W. Tabor Road, Olney, Phila., Pa.

**George Blake Holden, Ph.G.**

*Thes.*, Olenm Morrhuæ.  
*Ad.*, Haverhill, Mass.

**Oliver Pascal Hooper, Ph.G.**

*Thes.*, Phytolacca.  
Retail pharmacist.  
*Ad.*, Upland, Pa.

**\*Charles Eugene Hornberger, Ph.G.**

*Thes.*, The Discovery of Glass.  
Retail pharmacist, Providence, R. I. Mem. R. I. Pharm. Assn.; R. I. College of Pharmacy. Deceased, December 11, 1911.

**Thomas Albert Huston, Ph.G.**

*Thes.*, Polygonum Punctatum.

**\*Alvin Henry Keller, Ph.G.**

*Thes.*, The Science of Pharmacy in the Country.  
Deceased, November 12, 1917.

**\*Isaiah Henry Schuyler Kindig, Ph.G.**

*Thes.*, Percolation.  
Mem. wholesale drug firm Pfromm and Kindig.  
Deceased, November 7, 1906.

**\*Otto F. Koehler, Ph.G.**

*Thes.*, Iodine.  
Deceased, June 2, 1921.

**\*Robert August Koempel, Ph.G.**

*Thes.*, Red Wine.

**Jacob Loudenslager Kolp, Ph.G.**

*Thes.*, Gelsemium Sempervirens.  
Retail pharmacist. Masonic affiliation.  
*Ad.*, 1000 Buttonwood Street, Phila., Pa.

**George Washington Kram, Ph.G.**

*Thes.*, Disguising Disagreeable Remedies.

**Charles Lashell, Ph.G.**

*Thes.*, Botany.

**\*Philip Jacob Laver, Ph.G.**

*Thes.*, Solubility of Drugs.  
Deceased, September, 1908.

**\*Frank Pierce Lins, Ph.G.**

*Thes.*, Jaborandi.  
Retail pharmacist, Phila. Masonic affiliation. Deceased, May 17, 1890.

**Theodric C. Linthicum, Ph.G.**

*Thes.*, Monobromated Camphor.  
*Ad.*, Texico, New Mexico

**\*Charles Drum Lippincott, Ph.G.**

*Thes.*, Fixed and Volatile Oils.  
Retail pharmacist, Denver, Col. Deceased, 1921.

**Franklin Pierce Louderbough, Ph.G.**

*Thes.*, Solubility and Uses of Salicylic Acid.

**\*Jeremiah Dull McFerren, Ph.G.**

*Thes.*, Responsibilities and Requirements of a Pharmacist.  
Salesman, Mallinckrodt Chemical Works. Retail Pharmacist until 1904. Deceased, September 4, 1920.

**Robert McNeil, Jr., Ph.G.**

*Thes.*, Prescriptions.  
Retail pharmacist and manufacturer of pharmaceuticals and surgical dressings.  
*Ad.*, Front and York Streets, Phila., Pa.

**Carl Heinrich Marquardt, Ph.G.**

*Thes.*, Iris Versicolor.

**John Chrysostom Martin, Ph.G.**

*Thes.*, Pharmaceutical Science.

**\*Joseph Wayne Merritt, Ph.G.**

*Thes.*, Salicylic Acid.  
Retail pharmacist, Woodbury, N. J. Mem. N. J. Pharm. Assn. Deceased, September 23, 1913.

**\*George Joseph Mitsch, Ph.G.**

*Thes.*, Patent Medicines and an Analysis of Face Lotions.  
For many years connected with the Water Board, St. Paul, Minn. Deceased, 1920.

**Charles Moenkemoeller, Ph.G.**

*Thes.*, Cinchona and Its Alkaloids.  
Retail pharmacist. Secy. West Va. State Pharm. Assn., 1881-84. Hon. Mem. Ohio State Pharm. Assn.; Mem. A. Ph. A. Secy., Wheeling Drug-gists Assn. Mem. 1st Branch Council; Board of Education. Pres. Board of Public Works. Mem. Ohio Co. Commissioners; B. P. O. E. Masonic affiliation.  
*Ad.*, 22d and Market Streets, Wheeling, West Va.

**Francis Marion Murray, Ph.G.**

*Thes.*, Agave Americana.  
Physician.  
*Ad.*, 64 N. Main Street, Delaware, O.

**\*Francis Henry Poley, Ph.G.**

*Thes.*, Aesculus Hippocastanum.  
Deceased, September 10, 1892.

**\*William Poole, Ph.G.**

*Thes.*, The Strength of Saccharated Pepsin.  
Retail pharmacist, Wilmington, Del. Deceased, January 17, 1918.

**Andrew Richard Porter, Ph.G.**

*Thes.*, Sium Latifolium.  
*Ad.*, 12 N. Broadway, Peru, Ind.

**John William Quinn, Ph.G.**

*Thes.*, Opium.

**\*Irvin Railey, Ph.G.**

*Thes.*, The Apothecary.  
Deceased, November 18, 1919.

**William Henry Righter, Jr., Ph.G.**

*Thes.*, Preservation of Syrup of Ipecac.

**\*Clarence Henderson Risk, Ph.G.**

*Thes.*, Dispensing Poisons.  
Graduated in medicine, Univ. of Penna., 1878. Practiced medicine and pharmacy in Baltimore, Md. Later practiced in Bridgeport, Conn. Deceased, July 3, 1894.

**John Ritter, Ph.G.**

*Thes.*, Syrup of Wild Cherry Bark.

**William Henry Robbins, Ph.G.**

*Thes.*, Turiones Asparagi.

**William Duffield Robinson, Ph.G.**

*Thes.*, Tinctura Cinchonæ Composita.  
Physician. Mem. Board of Trustees, P. C. P. Pres. of Alumni Assn., 1920-21.  
(See page 262.)  
*Ad.*, 2012 Mt. Vernon Street, Phila., Pa.

**Francis Abraham Roepper, Ph.G.**

*Thes.*, Iron and Its Properties.

**Joseph Collard Rogers, Ph.G.**

*Thes.*, Domestic Remedies.

**David Abraham Rosenthal, Ph.G.**

*Thes.*, The Wholesale and Retail Druggist.  
Retail pharmacist. Secy. Holston Mfg. Co., mfrs. hosiery. Vice-pres. Holston Nat'l Bank. Pres. Tenn. Pharm. Assn., 1907-08. Secy. Board of Governors Knoxville Gen. Hosp. 12 years.  
*Ad.*, 617 W. Church Street, Knoxville, Tenn.

**William Ruff, Ph.G.**

*Thes.*, Iodine.

**George Lewis Sandt, Ph.D.**

*Thes.*, Styrax Benzoin.  
Retired. Formerly retail pharmacist.  
*Ad.*, Brookville, Pa.



**Henry Schroeder, Ph.G.**

*Thes.*, Triosteum.

**James Henry Sheridan, Ph.G.**

*Thes.*, Manufacture and Uses of Zinc Oxide in Medicine.

In Real Estate and Mortgage Dept., E. P. Wilbur Trust Co. Also Mem. Board of Directors. Retail pharmacist until 1916.

*Ad.*, Bethlehem, South Side, Pa.

**\*Howard Granville Shinn, Ph.G.**

*Thes.*, Convovulus Ponduratus.

**Howard Buckman Sides, Ph.G.**

*Thes.*, Chemical Action.

Retail pharmacist and optometrist. Mem. Town Council; Board of Health. Chief Burgess.

*Ad.*, 207 W. Lancaster Avenue, Downingtown, Pa.

**Clayton Kerper Smith, Ph.G.**

*Thes.*, The Relative and Commercial Value of Fluid Extracts.

**\*Richard Miller Sommers, Ph.G.**

*Thes.*, Menispermum Canadense.

**\*John William Sonnicks, Ph.G.**

*Thes.*, Syrupus Rhei Aromaticus.

**\*Allen Spengler, Ph.G.**

*Thes.*, Preservation of Syrups.

**Francis Edward Stewart, Ph.G.**

*Thes.*, Lac Vaccinium—Its Adulterations and Preparations.

Lecturer in pharmaceutical jurisprudence, P. C. P., 1917—. (See page 428.)

**\*William Wood Stockton, Ph.G.**

*Thes.*, Trifolium Pratense.

Retail pharmacist, Huron, S. Dak. Deceased, April 23, 1884.

**\*Walter Adolphus Taylor, Ph.G.**

*Thes.*, Extractum Gossypii Radicis Fluidum.

Deceased, 1909.

**Winfield Scott Taylor, Ph.G.**

*Thes.*, Dispensing Pharmacy.

*Ad.*, N. Broad and Perry Sts., Trenton, N. J.

**Albert Livingston Thorn, Ph.G.**

*Thes.*, Adulterations.

**\*Charles William Tobey, Ph.G.**

*Thes.*, Pharmacy.

Retail pharmacist. Mem. A. Ph. A.; Nat'l Assn. Retail Druggists. Pres. Ohio State Pharm. Assn.

Mem. Health Board and Civil Service Board. Hon. Mem. Nat'l Boards of Pharmacy. K. of P. Masonic affiliation. Deceased, 1922.

**Milhounr Ashury Toulson, Ph.G.**

*Thes.*, Arnica Montana.

Retail pharmacist. Pres. Kent Co. Saving Bank, 10 years.

*Ad.*, Chestertown, Md.

**\*Henry Trimble, Ph.G.**

*Thes.*, Benzoic Acid as an Antiseptic.

Prof. of Analytical Chem. P. C. P. (See page 412.)

**William Wesley Trout, Ph.G.**

*Thes.*, Aqua Medicata.

Physician. Graduated in medicine Jeff. Med. College, 1886. Treas. Spring Lake Beach since 1903.

Mem. Sch. Board. Masonic affiliation.

*Ad.*, Spring Lake Beach, N. J.

**Albert Hapgood VanGorder, Ph.G.**

*Thes.*, Asarum Canadense as an Indigenous Aromatic.

Wholesale druggist and manufacturer. Vice-pres. Hall-Van Gorder Co. Pres. Cleveland Fruit Juice Co.

*Ad.*, 1382 W. 9th St., Cleveland, O.

**Louis Von Cotzhausen, Ph.G.**

*Thes.*, Coumaria—Its Uses and Source.

Physician. Specialist in physiotherapy. Graduated in medicine Univ. of Penna., 1885. Courses at Penna. Orthopedic Inst. and Sch. of Mechanotherapy. Chief of Med. Clinic and Disp. Medico-Chi College, 1885-86. Ex-editor Phila. Journal of Physiological Therapeutics.

*Ad.*, 1707 Chestnut Street, Phila., Pa.

**Henry Louis Von Wittkamp, Jr., Ph.G.**

*Thes.*, Pharmacy.

*Ad.*, 1744 N. 27th Street, Phila., Pa.

**\*Charles Williams Warrington, Ph.G.**

*Thes.*, The Privacy of the Prescription Department.

**\*Harry Calvin Watt, Ph.G.**

*Thes.*, Fluid Extract of Ipecac.

Graduated in medicine Jeff. Med. College, 1889, but never practiced medicine. Retail pharmacist, Phila. Masonic affiliation. Deceased, November 26, 1895.

**Morrison Wright Webb, Ph.G.**

*Thes.*, Patience and Care and Knowledge.

**\*Joseph LeRoy Webber, Ph.G.**

*Thes.*, Assay of Atropia.

Retail pharmacist until 1882, when became associated with Parke, Davis and Co. Prof. of pharmaceutical chem. in Detroit College of Pharmacy. Later with Sharpe and Dohme and Bristol-Myers Co. Deceased, Nov. 25, 1910.

**\*William Feiffer Weiser, Ph.G.**

*Thes.*, Eucalyptus Globulus.

Retail pharmacist, Camden, N. J. Deceased, June 6, 1922.

**\*Ebenezar Miller Wells, Ph.G.**

*Thes.*, Cincho-Quinine.

Retail pharmacist, Texas. One of the founders of Tex. Pharm. Assn. Mem. of committee to draft the pharmacy law of Texas. Deceased, March, 1920.

**Theodore Corson Wheaton, Ph.G.**

*Thes.*, Carya Porcina.

Glass manufacturer. Graduated in medicine Univ. of Penna., 1879. Entered glass mfg. business, 1888. Now pres. T. C. Wheaton Co. Mem. Millville City Council 15 yrs.

*Ad.*, Millville, N. J.

**Hugh White, Ph.G.**

*Thes.*, Pyrethrum Roseum.

**\*John Alfred Witmer, Ph.G.**

*Thes.*, Tobacco.

Retail pharmacist, Phila. Deceased, Jan., 1885.

**Special Student.**

**Chipman Botsford.**

*Thes.*, Podophyllum Peltatum.

First student to receive Certificate of Proficiency in Chemistry and Materia Medica.

1877

**\*Gustav Adolph Appenzeller, Ph.G.**

*Thes.*, Extractum Glycyrrhizae Depuratum.

Deceased, Dec. 21, 1903.

**William Amos Ball, Ph.G.**

*Thes.*, Chloral.

**Samuel Earnest Barr, Ph.G.**

*Thes.*, Estimation of Morphia in Powdered Opium.

City auditor, Canton, O. Retail pharmacist 31 yrs.

*Ad.*, 515 12th Street, N. W., Canton, O.

**Theodore Frederick Beckert, Ph.G.**

*Thes.*, Colchicum Root.



## 494 First Century of the Philadelphia College of Pharmacy

- \*Emery Gilbert Bissell, Ph.G.**  
*Thes.*, Hops.  
 Retail pharmacist, Waterville, N. Y. Mem. A. Ph. A.; N. Y. Pharm. Assn. Deceased, Sept. 2, 1891.
- Charles Alexander Bowman, Ph.G.**  
*Thes.*, Examination of Commercial Copaiba.  
*Ad.*, 21 Arcade Bldg., Nashville, Tenn.
- Edward Dayton Boyer, Ph.G.**  
*Thes.*, Excipients for Pills.  
*Ad.*, Atlas Portland Cement Co., 25 Broadway, New York City.
- Robert Brennecke, Ph.G.**  
*Thes.*, Opium.  
 Retired.  
*Ad.*, 813 Western Ave., Watertown, Wis.
- \*Silas Mainevielle Burroughs, Ph.G.**  
*Thes.*, The Compression of Medicinal Powders.  
 After graduation represented firm of John Wyeth and Bro. In 1877 went to London and manufactured pharmaceuticals in part interest with the Wyeth firm. Later the business became entirely his and in 1880, Henry S. Wellcome, P.C.P., '74, became his partner. With the aid of Mr. Wellcome a very large business was established, not only in Great Britain, Europe and America, but also in all the British colonies of Asia, Australia and Africa. Deceased, February 6, 1895.
- William Charles Asmus Busch, Ph.G.**  
*Thes.*, Resina Podophylli.  
*Ad.*, 1045 Hershey Ave., Muscatine, Iowa.
- Charles Henry Byerly, Ph.G.**  
*Thes.*, The Action of Mild Chloride of Mercury on Compound Tincture of Iodine.
- \*Walter Foss Childs, Ph.G.**  
*Thes.*, Polygonum Persicaria.  
 Deceased, August 1, 1920.
- Harry Warren Christman, Ph.G.**  
*Thes.*, Prinos Verticillatus.
- Harlan Cloud, Ph.G.**  
*Thes.*, Duty and Responsibility of a Pharmacist.  
 Retail pharmacist.  
*Ad.*, Darby, Pa.
- Joseph Clarence Coxey, Ph.G.**  
*Thes.*, Jahorandi.  
 Retired. Retail pharmacist until 1910.  
*Ad.*, 428 Linden Street, Camden, N. J.
- Frank Mercer Crowl, Ph.G.**  
*Thes.*, The Pharmacist.
- Abraham Davidson, Ph.G.**  
*Thes.*, Radix Valeriana.  
 Retail pharmacist.  
 1424 Lexington Avenue., New York City.
- \*Theodore Garrison Davis, Ph.G.**  
*Thes.*, Chloral Hydrate with Camphor and Resins.  
 Deceased, February 8, 1921.
- \*Louis Dembinski, Ph.G.**  
*Thes.*, Cantharidin from Doryphora Decemlineata.  
 Deceased, March 9, 1886.
- Caspar Edward DePuy, Ph.G.**  
*Thes.*, The Seed of Delphinium Staphisagria.  
 Wholesale grain and seed dealer. Retail pharmacist until 1910. Mem. local sch. board 15 years.  
*Ad.*, Pontiac, Mich.
- William Eunice Dickeson, Ph.G.**  
*Thes.*, Lignin and Cellulose.  
*Ad.*, 121 W. Washington Street., Media, Pa.
- Samuel Drancourt, Ph.G.**  
*Thes.*, Sugar.
- Charles Caspar Drueding, Ph.G.**  
*Thes.*, Gossypium Radicis Cortex.  
 Treas. Drueding Bros. Co., Leather mfrs.  
*Ad.*, 69th and Lawnton Ave., Oak Lane, Phila., Pa.
- Henry Gerhard Drueding, Ph.G.**  
*Thes.*, Assay of Quinia in Ferri et Quinina Citras.  
 Pres. Drueding Bros. Co., chamois and sheep leather. Formerly retail pharmacist.  
*Ad.*, 5th and Master Streets, Phila., Pa.
- \*Jacob R. Elfreth, Ph.G.**  
*Thes.*, Emulsion of Cod Liver Oil.  
 Retail pharmacist. Phila. 38 years. Deceased, December 15, 1919.
- \*J. Estell Evans, Ph.G.**  
*Thes.*, Copaiba.  
 For a number of years employed by Wm. R. Warner and Co. Deceased, January 4, 1891.
- George Washington Ewing, Ph.G.**  
*Thes.*, Acorus Calamus.
- Henry Fisher, Ph.G.**  
*Thes.*, A Test for the Adulterations of Oleum Theobromæ.  
 Physician. Graduated in medicine Medico-Chi. College, 1883. Asst. prof. Mat. Med. and Pharmacy, Medico-Chi. College, 1884-99. Prof. Mat. Med. and Botany, Medico-Chi. College, 1899-1905. Now Prof. Mat. Med. and Pharmacology Temple Univ., Phila. Degree Phar.D., Medico-Chi. College. Mem. City Council 1888; Sch. Board fifteen years. Mem. Senior Med. Corps.  
*Ad.*, 2345 E. Dauphin Street, Phila., Pa.
- \*Joseph Miller Fulton, Ph.G.**  
*Thes.*, Copaiba.  
 Deceased, February 21, 1892.
- Lawson C. Funk, Ph.G.**  
*Thes.*, Home Made Chemicals.  
 Retired. Retail and wholesale drug mfr. 25 years.  
*Ad.*, 831 N. 41st Street, Phila., Pa.
- Burt Pike Gates, Ph.G.**  
*Thes.*, Assay of Morphia in Laudanum.
- John Miller Gerling, Ph.G.**  
*Thes.*, Our Centennial Exhibits.
- \*John A. Gingrich, Ph.G.**  
*Thes.*, Unguentum Hydrargyri Nitratis.
- \*George Conrad Goess, Jr. Ph.G.**  
*Thes.*, Elegant Pharmacy.  
 Representative of American Druggists' Syndicate in Phila. Masonic affiliation. Deceased, January 12, 1913.
- George Harris Grahame, Ph.G.**  
*Thes.*, Cerates and Ointments.
- Louis Franklin Griffin, Ph.G.**  
*Thes.*, The Preparations of Piper Cubeba.
- William Harris, Ph.G.**  
*Thes.*, Pepsin.  
 Physician.  
*Ad.*, 3708 Spring Garden Street, Phila., Pa.
- John Henry Kinports, Ph.G.**  
*Thes.*, Humulus Lupulus.
- \*Eli Leinbach Klopp, Ph.G.**  
*Thes.*, Potassii Iodidum.  
 Deceased, September 29, 1917.
- \*Walter William Koehler, Ph.G.**  
*Thes.*, Pulvis et Unguentum Zinci Oxidi.  
 Retail pharmacist, Brooklyn, N. Y. Deceased, February 21, 1880.
- \*Howard Samuel Kramer, Ph.G.**  
*Thes.*, Unguenta.
- Norman Archibald Kuhn, Ph.G.**  
*Thes.*, Scilla Maritima.
- \*Edward Lamhofer, Ph.G.**  
*Thes.*, Oleum Theobromæ.  
 Deceased, February 3, 1922.
- Peter Lsndschutz, Ph.G.**  
*Thes.*, Resina Jalapæ Purificata.

- Daniel Henry Latham, Jr., Ph.G.**  
*Thes.*, Aqua Cinnamomi.
- George Washington Levering, Ph.G.**  
*Thes.*, Chloral Hydrate.
- William Thompson Lewis, Ph.G.**  
*Thes.*, Protochloride of Iron.
- Wilhelm Edward Lindewald, Ph.G.**  
*Thes.*, The Ammonium Theory.
- William H. Llewellyn, Ph.G.**  
*Thes.*, Laudanums of Commerce.  
Retail pharmacist.  
*Ad.*, 1518 Chestnut Street, Phila., Pa.
- Emil Lustig, Ph.G.**  
*Thes.*, Caloric in Changes of Aggregation.  
Physician. Mem. Amer. Med. Assn.; Medical  
Mem. Local Draft Board, Buffalo, N. Y.  
*Ad.*, 1037 S. 50th Street, Phila., Pa.
- \*Felix Anthony Lyneman, Ph.G.**  
*Thes.*, Tinctura Capsici.  
Retail pharmacist, Denver, Col. Mem. A. Ph. A.;  
Colorado Pharm. Assn.; Secy. a number of years.  
Deceased, June 19, 1894.
- \*George Henry McKeehan, Ph.G.**  
*Thes.*, Alcohols and Their Derivatives.  
Deceased, June 29, 1917.
- Albert McMullin, Ph.G.**  
*Thes.*, Compressed Camphor.
- \*Andrew McMullin, Ph.G.**  
*Thes.*, Zinci Oxidum.  
Deceased, 1917.
- George Martin, Jr., Ph.G.**  
*Thes.*, Potassium Hypophosphite.
- John Albert Martin, Ph.G.**  
*Thes.*, The Rhizome of *Dracontium Foetidum*.  
*Ad.*, 930-15th Street, Denver, Colo.
- William Frederick Maulick, Ph.G.**  
*Thes.*, The Vicissitudes of the Graduate.
- \*Frank Moore, Ph.G.**  
*Thes.*, *Althea Officinalis*.
- Richard Jesse Moore, Ph.G.**  
*Thes.*, Salicylic Acid.
- \*Edwin Myers, Ph.G.**  
*Thes.*, Arnica.
- Olaf Martin Oleson, Ph.G.**  
*Thes.*, *Extractum Colocynthis Compositum*.  
Retail pharmacist. State senator 2 terms.  
*Ad.*, Fort Dodge, Iowa.
- \*Frederick Henry Parker, Ph.G.**  
*Thes.*, *Extractum Conii*.  
Deceased, June, 1918.
- Jacob Franklin Phillips, Ph.G.**  
*Thes.*, Nitrous Oxide.
- Thomaa Coombe Roe, Ph.G.**  
*Thes.*, Dispensing Prescriptions.
- Nathan Rosenwasser, Ph.G. (Now Rosewater).**  
*Thes.*, Colchicum Seed and Colchicine.  
Physician.  
*Ad.*, Hotel Statler, Cleveland, Ohio.
- \*David William Rosa, Ph.G.**  
*Thes.*, *Garrya Fremontii*.  
Deceased, May 17, 1910.
- Henry Ogden Ryerson, Ph.G.**  
*Thes.*, Ergota.  
Retail pharmacist. Director and treas. Public Li-  
brary 32 years. Pres. N. J. State Pharm. Assn.  
Mem. Board of Pharmacy 10 years. Recruiting  
Officer, U. S. Merchant Marine.  
*Ad.*, Newton, N. J.
- \*George Philip Scheele, Jr., Ph.G.**  
*Thes.*, Extract of *Hyoscyamus* as Found in the  
Shops.  
Retail pharmacist 32 years in Phila. Deceased,  
April 15, 1915.
- George William Schools, Ph.G.**  
*Thes.*, Capsicum.  
Retired. Retail pharmacist until 1915.  
*Ad.*, 373 N. 9th Street, Lebanon, Pa.
- \*Arthur Schwartz, Ph.G.**  
*Thes.*, Water.  
Retail pharmacist, Princeton, N. J. Deceased,  
1916.
- Albert Henry Smith, Ph.G.**  
*Thes.*, The Indigenous Plants.  
Physician and pharmacist. Graduated in medicine  
Medico-Chi College, 1888. Mem. Alumni Assn.  
P. C. P. and Medico-Chi College; Med. Reserve  
Corps.  
*Ad.*, 3516 N. 16th Street, Phila., Pa.
- Joseph Granville Smith, Ph.G.**  
*Thes.*, *Hydrargyri Chloridum Corrosivum*.
- Joseph Stable Smith, Ph.G.**  
*Thes.*, Tinctura Opii.
- Richard Graham Stevenaon, Ph.G.**  
*Thes.*, Production of Coloring Matter from Coal  
and its Products.
- \*John Strobel, Jr., Ph.G.**  
*Thes.*, Chemical Affinity.  
Physician. Graduated in medicine Jeff. Med. Col-  
lege, 1880. Mem. Phila. Co. Med. Soc.; Amer.  
Med. Assn.; Phila. Clinical Assn.; Northern Med.  
Assn.; Med. Club of Phila. Mem. Sch. Board.  
Ex-pres. Medico-Legal Soc. Mem. Volunteer Med.  
Service Corps. Masonic affiliation. Deceased,  
May 26, 1920.
- George Morton Terrill, Ph.G.**  
*Thes.*, Forms in Which Medicines Are Used.
- Louisa Trupp, Ph.G.**  
*Thes.*, Fluid Extract Pruni Virginianæ.  
Retail pharmacist. Mem. Penna. Pharm. Assn.;  
Phila. Assn. Retail Druggists.  
*Ad.*, 901 E. Chelton Avenue, Phila., Pa.
- \*Eugene Peter Unangst, Ph.G.**  
*Thes.*, The Relative Strength of Pepsin.
- Henry Crawford Walker, Ph.G.**  
*Thes.*, Pepsin.
- Louisa Weiss, Ph.G.**  
*Thes.*, A Drug Store in the Far West.  
Physician and pharmacist. Organizer of the Good  
Hope Mining and Reduction Co., miners of gold,  
silver and copper. Masonic affiliation. Mem.  
I. O. O. F.  
*Ad.*, Iola P. O., Gunnison Co., Colo.
- Thomaa David Williams, Ph.G.**  
*Thes.*, The Tincture and Ammoniated Tincture of  
Guaiaac.
- \*Alexander Wilson, Ph.G.**  
*Thes.*, Chemical Change.  
Retail pharmacist, Phila. Masonic affiliation. De-  
ceased, October 19, 1913.
- William Norton Shinn Woolston, Ph.G.**  
*Thes.*, Erythroxylon Coca.
- George Shoemaker Roberts Wright, Ph.G.**  
*Thes.*, Gossypium.  
Retired. Retail pharmacist until 1913. Mem.  
Common Council 1 term; Sch. Board. Now Pres.  
Frankford Hosp.  
*Ad.*, 1324 Wakeling Street, Phila., Pa.
- \*Isidore Zacharias, Ph.G.**  
*Thes.*, The Manufacture of Spirits of Turpentine,  
Rosin and Tar.
- \*Oacar Zinn, Ph.G.**  
*Thes.*, The Amount of Quinia in Citrate of Iron  
and Quinia.

1878

- Franklin P. Albright, Ph.G.**  
*Thes.*, Phytolacca Decandra.  
Retail pharmacist.  
*Ad.*, 21st and Oxford Streets, Phila., Pa.
- \***John Hays Allen, Jr., Ph.G.**  
*Thes.*, Systematic Pharmacy.
- Benjamin Franklin Bache, Ph.G.**  
*Thes.*, Duty of Pharmacentists.  
Pharmacist, Florida State Hosp. Formerly retail pharmacist and traveling salesman. Instr. in mat. med. Sch. for Nurses, Florida State Hosp.  
*Ad.*, Florida State Hosp., Chattahoochee, Fla.
- \***John Stevenson Barnitz, Ph.G.**  
*Thes.*, Pharmaceutical Uses of Paraffin.
- Charlea Edwin Barton, Ph.G.**  
*Thes.*, Dialysed Iron.  
Retail pharmacist.  
*Ad.*, Norwalk, Ohio.
- Jacob Samuel Beetem, Ph.G.**  
*Thes.*, Doryphora Decemlineata.  
Registrar, P. C. P. since 1903. (See page 394.)  
*Ad.*, 145 N. 10th Street, Phila., Pa.
- \***John Kulght Bennett, Ph.G.**  
*Thes.*, Disinfectants.  
City physician and inspector for Gloucester, N. J. Board of Health. Deceased, October 2, 1918.
- Herman Betz, Ph.G.**  
*Thes.*, Coagulating Power of Pepsin.
- \***Wallace Geary Bobb, Ph.G.**  
*Thes.*, Prescriptions.
- George B. Walbridge Brown, Ph.G.**  
*Thes.*, Saccharated Pepsin.
- \***Thomas Trew Brown, Ph.G.**  
*Thes.*, Faults of the Pharmacopœia.
- Norman Isaac Brunner, Ph.G.**  
*Thes.*, Pharmaceutical Legislation.  
Retired. Retail pharmacist 40 years. Mem. Macon City Council 3 terms.  
*Ad.*, 140 Tenth Street, Macon, Ga.
- \***Lawrence Minor Bullock, Ph.G.**  
*Thes.*, Bark of Castanea Vesca.  
Graduated in medicine Jeff. Med. College, 1882. Practiced in Upland, Pa. Elected Burgess of Upland and later served as coroner of Delaware County. Removed to New Mexico and continued the practice of medicine. Masonic affiliation. Deceased, December, 1894.
- \***Seymour Snowden Burns, Ph.G.**  
*Thes.*, Fungous Growth.  
Deceased, September 25, 1884.
- \***Charles Edwin Button, Ph.G.**  
*Thes.*, Syrups by Cold Percolation.
- Charles Thomas Cahoon, Ph.G.**  
*Thes.*, Cane Sugar and Its Derivatives.
- \***Harry Cox, Ph.G.**  
*Thes.*, Tinctura Opii.  
Retail pharmacist, Phila., 40 years. Deceased, November 7, 1921.
- Thomas Canby Craig, Ph.G.**  
*Thes.*, Analysis of Chambersburg Hydrant Water.
- \***Thomasa Craighead, Ph.G.**  
*Thes.*, Salicylic Acid.  
Deceased, March 25, 1907.
- \***Henry Bedell Crane, Ph.G.**  
*Thes.*, Ferrum Dialysatum.
- \***Daniel Parke Cnstis, Ph.G.**  
*Thes.*, The Official Products of Apis Mellifica.
- \***Isaac Davis, Ph.G.**  
*Thes.*, Medicated Syrups.
- Marshall Moses Andre Davis, Ph.G.**  
*Thes.*, Opium.
- \***Nehemiah Davis, Ph.G.**  
*Thes.*, Salicylic Acid.  
Graduated in medicine Jeff. Med. College, 1886. Practiced in Camden, N. J. Deceased, November 11, 1915.
- George William Davy, Ph.G.**  
*Thes.*, Murexide.  
Retail pharmacist. Masonic affiliation.  
*Ad.*, 131 E. Lincoln Highway, Coatesville, Pa.
- Norman R. Dean, Ph.G.**  
*Thes.*, Suppositories.  
Retail pharmacist.  
*Ad.*, 128 E. Pomona Terrace, Germantown, Philadelphia, Pa.
- William Henry Deprez, Ph.G.**  
*Thes.*, Extractum Cannabis Indica.  
Retail pharmacist and owner of general store.  
*Ad.*, Shelbyville, Ind.
- \***Augusto F. Dresscher, Ph.G.**  
*Thes.*, Toxicological Analysis in a Supposed Poison Case.  
Deceased, 1907.
- John Aiken Falck, Ph.G.**  
*Thes.*, Aqua Acidi Carbonici.  
With surgical instrument factory, Phila., Pa. Retail pharmacist for many years in Western U. S., Australia, Tasmania, India. Also traveling salesman and manufacturing pharmacist.  
*Ad.*, 874 Wynnewood Road, Overbrook, Phila., Pa.
- Charles Darius Farwell, Ph.G.**  
*Thes.*, Assay of Commercial Extracts and Resins of Jalap.
- David Willmot Fawkes, Ph.G.**  
*Thes.*, Grindelia Robusta.
- Ernest Charles Federer, Ph.G.**  
*Thes.*, Powdered Calisaya of Commerce.
- William Scott Fleming, Ph.G.**  
*Thes.*, Ointment of oxide of Zinc.
- \***Charles Fosselman, Ph.G.**  
*Thes.*, Benzine.  
Deceased, September 23, 1909.
- \***Charles Herman Gardner, Ph.G.**  
*Thes.*, Borate of Bismuth.  
Deceased, 1918.
- \***George Washington Gray, Ph.G.**  
*Thes.*, Tuber of Exogonium Purga, Ipomea Jalapa.
- Peter Grayhill, Ph.G.**  
*Thes.*, Chemical Research.  
Retired. Retail pharmacist 27 years.  
*Ad.*, 702 Wayne Avenue, Dayton, Ohio.
- \***Harry Augustus Hall, Ph.G.**  
*Thes.*, Chemistry.  
Retail pharmacist, Danville, Ill. Masonic affiliation. Deceased, October 10, 1912.
- \***John Windham Harrison, Ph.G.**  
*Thes.*, The Necessity for Thorough Pharmaceutical Knowledge.
- \***Elwood Gouldy Hendricks, Ph.G.**  
*Thes.*, Hirts on Pharmaceutical Manipulation.  
Deceased, August 23, 1880.
- Wilford Oldham Higgate, Ph.G.**  
*Thes.*, Extractum Pruni Virginianæ Fluidum.  
Physician. Graduated in medicine Univ. of Penna., 1882.  
*Ad.*, 822 N. 41st Street, Phila., Pa.



- George Perry Hilton, Ph.G.**  
*Thes.*, The Papaver Somniferum—Its Products and Their Uses.
- James W. Horner, Ph.G.**  
*Thes.*, The Science of Chemistry.  
*Ad.*, 6306 Race Street, Phila., Pa.
- Edward Lee Hudgin, Ph.G.**  
*Thes.*, Melia Azedarach.
- David George Hurley, Ph.G.**  
*Thes.*, Japan Wax.  
 Mgr. William F. Gable Co. Retail pharmacist until 1906.  
*Ad.*, 1504 13th Avenue, Altoona, Pa.
- John George Johnson, Ph.G.**  
*Thes.*, Preservation of Drugs.
- Isaac Penrose Jones, Ph.G.**  
*Thes.*, Triosteum Perfoliatum.  
*Ad.*, The Tracy, 36th and Chestnut Streets, Philadelphia, Pa.
- William Reynolds Keeney, Ph.G.**  
*Thes.*, Extemporaneous Pill-Coating.  
 Director Supply Dept. P. C. P. since 1919. (See page 395.)  
*Ad.*, 318 E. Lancaster Pike, Wayne, Pa.
- \*Joseph Halbert Kernan, Ph.G.**  
*Thes.*, The Prescription Department.
- Thomas Edward Barron Kernan, Ph.G.**  
*Thes.*, Solution of Oxychloride of Iron.
- \*Mahlon Kratz, Ph.G.**  
*Thes.*, The Pharmic Lantern.  
 Retail pharmacist, Phila., until 1904. Deceased, February 18, 1920.
- \*Andrew Alexander Kroeg, Ph.G.**  
*Thes.*, Doubtful Opium.
- Albert Krout, Ph.G.**  
*Thes.*, Pharmaceutical Uses of Glycerin.  
 Manufacturer.  
 100 Arch Street, Phila., Pa.
- John Wesley Lehman, Ph.G.**  
*Thes.*, The Use of Glycerin in Fluid Extracts.  
 Received Certificate of Proficiency in Chemistry and Materia Medica, P. C. P., 1877.
- \*Hermann Lerchen, Ph.G.**  
*Thes.*, Hydrastis Canadensis.
- Howard Malcolm Levering, Ph.G.**  
*Thes.*, Acorus Calamus.  
 Retail pharmacist. Mem. Sch. Board 1 year. Mem. Common Council, Phila., 4 years.  
*Ad.*, 443 Harmon Road, Roxborough, Phila., Pa.
- Charles Foster Lilly, Ph.G.**  
*Thes.*, Linimentum Saponis.  
 Retail pharmacist. In charge of laboratory Allaire, Woodward and Co., 19 years.  
*Ad.*, 108 E. Washington Street, East Peoria, Ill.
- Walter Kulp Lita, Ph.G.**  
*Thes.*, The Arca Nut.
- \*Evan Davis Lloyd, Ph.G.**  
*Thes.*, Opium.
- \*Lorenzo Dow Loper, Ph.G.**  
*Thes.*, The Progress of Chemistry.  
 Deceased, 1916.
- \*Alonzo George Mackenson, Ph.G.**  
*Thes.*, Plasma vs. Adeps in Unguenta.  
 Deceased, January 8, 1884.
- George Wagner Mann, Ph.G.**  
*Thes.*, Preservation of Syrupus Scillæ Compositus.
- Richard Cordeleon Marley, Ph.G.**  
*Thes.*, Accuracy, Neatness and Attention.
- \*David Patrick Miller, Ph.G.**  
*Thes.*, Tobacco Cultivation in Virginia.
- \*Charles Morrison, Ph.G.**  
*Thes.*, A False Pareira Brava.  
 Deceased, January, 1918.
- John Frederick Mossberg, Ph.G.**  
*Thes.*, Emulsions.
- Omar Henry Musser, Ph.G.**  
*Thes.*, The Law of Equal Molecular Volumes and the Atomic Theory.  
 Retired. Retail pharmacist 10 years. Mfr. shirts, etc., 6 years.  
*Ad.*, Conestoga Terrace, Lancaster, Pa., Route No. 7.
- \*Clayton Ricker Myers, Ph.G.**  
*Thes.*, Pharmacy.  
 Retail pharmacist, Walbrook, Md. Deceased, March 28, 1914.
- \*Peter Frederick Neppach, Ph.G.**  
*Thes.*, Berberis (Mahonia) Narvosa.  
 Deceased, 1911.
- Edward Jacobs Newcomer, Ph.G.**  
*Thes.*, The Responsibility of Pharmacy.
- Henry Noas, Ph.G.**  
*Thes.*, Phytolacca Decandra.
- \*Jacob Francis Orsall, Jr., Ph.G.**  
*Thes.*, Salicylic Acid and Its Congeners.
- \*Edward Peat, Ph.G.**  
*Thes.*, The Double Formulæ of the United States Pharmacopœia.  
 Graduated in medicine Jeff. Med. College, 1881. Practiced medicine in Delphos, Ohio. Deceased, April 19, 1883.
- Thomas Jefferson Woodworth Phillips, Ph.G.**  
*Thes.*, Pharmacy.
- Louis Adolph Podolski, Ph.G.**  
*Thes.*, Chloral Hydrate.  
 Physician. Graduated in medicine Univ. of Penna., 1894. Retail pharmacist until 1903.  
*Ad.*, 1117 W. Lehigh Avenue, Phila., Pa.
- George Cooper Porter, Ph.G.**  
*Thes.*, Heat.
- William Perry Porterfield, Ph.G.**  
*Thes.*, Ozone As a Disinfectant.  
 3rd Vice-pres. A. Ph. A. 1920. Prominent in political and pharmaceutical circles in the northwest.  
*Ad.*, 61 Broadway, Fargo, N. Dak.
- \*Delbert Elwyn Prall, Ph.G.**  
*Thes.*, Infusum Digitalis.  
 For many years a retail pharmacist, Saginaw, Mich. Removed to Santa Ana, Cal. Ex-pres. Mich. Pharm. Assn. Deceased, April 2, 1916.
- \*Ernest William Reinacke, Ph.G.**  
*Thes.*, The Fruit of Citrus Limonum.  
 Retail pharmacist, Pittsburgh, Pa. Deceased, June 1, 1887.
- Samuel E. Robinson, Ph.G.**  
*Thes.*, First Year's Apprenticeship.
- \*Edward Rosenthal, Ph.G.**  
*Thes.*, Liquor Potassæ.  
 Deceased, April, 1912.
- \*David Hamilton Roas, Ph.G.**  
*Thes.*, Oleum Cajeputi.  
 Retail pharmacist, Phila. Mem. Phila. Assn. Retail Druggists. Secy. Treas. Phila. Wholesale Drug Co. Treas. Druggists Bldg. and Loan Assn. Mem. Common Council from 31st Ward; Sch. Board. Deceased, January 27, 1914.
- George William Sample, Ph.G.**  
*Thes.*, Arsenicum and Acidum Arseniosum.  
 Laboratory mgr., firm of William Smith and Co. Mem. Artisans Order; I. O. O. F.; K. of G. E.  
*Ad.*, 135 S. Beaver Street, York, Pa.

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- John Anthony Selinger, Ph.G.**  
*Thes.*, Belladonna and Opium.
- David Franklin Shull, Ph.G.**  
*Thes.*, Erythroxylen Coca.  
Retail pharmacist.  
*Ad.*, 206 S. 41st Street, Phila., Pa.
- \*Frank Roop Smith, Ph.G.**  
*Thes.*, *Carya Tomentosa*.
- \*Cornelius Ederson Spenceley, Ph.G.**  
*Thes.*, *Hepatica Triloba*.
- William Spencer, Ph.G.**  
*Thes.*, Preparations of Subacetate of Lead.  
Physician.  
*Ad.*, 1623 Walnut Street, Phila., Pa.
- Jacob Strickler, Ph.G.**  
*Thes.*, *Chimaphila Umbellata*.  
Clerk, J. W. Wood Drug Co. Formerly proprietor  
of drug store.  
*Ad.*, 17 Carroll Street, Poughkeepsie, N. Y.
- John Paul Suess, Ph.G.**  
*Thes.*, *Rubus Villosus*.  
Retail pharmacist.  
*Ad.*, 31 W. 4th Street, Williamsport, Pa.
- Morris Kemerer Sweitzer, Ph.G.**  
*Thes.*, *Fucus Vesiculosus*.
- Frank Fremont Trimble, Ph.G.**  
*Thes.*, *Cimicifuga Racemosa*.  
*Ad.*, Salem, Ohio.
- Benjamin Carpenter Waterman, Ph.G.**  
*Thes.*, Disinfectants.  
*Ad.*, 4020 Spring Garden Street, Phila., Pa.
- \*William Wels, Ph.G.**  
*Thes.*, Dialysed Iron.  
Deceased, 1912.
- Otto Werckshagen, Ph.G.**  
*Thes.*, *Syrupus Rhei Aquosus*.  
Retail pharmacist. Mem. A. Ph. A.; Md. Pharm.  
Assn.; Baltimore Retail Druggists Assn.  
*Ad.*, 258 W. Biddle Street, Baltimore, Md.
- \*Andrew Allison White, Ph.G.**  
*Thes.*, Tincture of Kino.
- George William Whitehill, Ph.G.**  
*Thes.*, Sulphur.
- Thomas Winfield Wilson, Ph.G.**  
*Thes.*, Dispensing Prescriptions.
- \*Joseph Vincent Wingert, Ph.G.**  
*Thes.*, *Iris Versicolor*.  
Retail pharmacist, Pottsville, Pa. Deceased, Jan-  
uary 29, 1889.
- Francis Xavier Wolf, Ph.G.**  
*Thes.*, The Pharmacist.  
*Ad.*, 343 S. 6th Street, Reading, Pa.
- Edwin Robert Ziebach, Ph.G.**  
*Thes.*, *Hydrargyrum Cum Saccharo Lactis*.  
*Ad.*, Lake George, N. Y.
- 1879
- James Polk Aason, Ph.G.**  
*Thes.*, A Soda-Water Apparatus.
- Emanuel Allison Alleman, Ph.G.**  
*Thes.*, *Eriodictyon Glutenosum*.  
Physician. Graduated in medicine Medico-Chi  
College, 1890.  
*Ad.*, 535 W. Front Street, Berwick, Pa.
- \*Alexander Bonnell Allen, Ph.G.**  
*Thes.*, Glycerin and Its Uses.  
Deceased, April 15, 1917.
- \*John Reese Allen, Ph.G.**  
*Thes.*, The Use of Natural Mineral Waters.  
Deceased, June, 1907.
- Louis Ancker, Ph.G.**  
*Thes.*, The Citron.  
Representative, Wm. H. Llewellyn, Phila. Hosp.  
Steward 3rd Reg., N. G. P. 25 years.  
*Ad.*, 1518 Chestnut Street, Phila., Pa.
- \*Alfred Croskey Ashmead, Ph.G.**  
*Thes.*, *Rubus Villosus*.  
Deceased, September 25, 1917.
- George Hickman Bancroft, Ph.G.**  
*Thes.*, Pharmaceutical uses of Unguentum Petrolii.
- Thomas Barnes, Jr., Ph.G.**  
*Thes.*, The Apis Mellifica and Its Productions.
- W. Wallace Beitenman, Ph.G.**  
*Thes.*, *Althæa* as a Pill Excipient.  
*Ad.*, Cripple Creek, Colo.
- \*John Jacob Beyer, Ph.G.**  
*Thes.*, Glycerole of Subacetate of Lead.  
Deceased, August 9, 1909.
- \*John Blankenhorn, Ph.G.**  
*Thes.*, *Smilax Glauca*.
- Joseph Brakeley, Ph.G.**  
*Thes.*, Oil of Gaultheria.  
Canner of vegetables. Retail pharmacist until  
1882.  
*Ad.*, Freehold, N. J.
- John Griscom Bullock, Ph.G.**  
*Thes.*, The Pharmacopœia.  
Retired. Graduated Haverford College, 1874, A.B.  
degree. Mem. of firm, Bullock and Crenshaw,  
wholesale druggists, importers, chemists and mfrs.  
until the close of their business.  
*Ad.*, 6439 Greene Street, Germantown, Pa.
- Frederick White Carpenter, Ph.G.**  
*Thes.*, *Sanguinaria Canadensis*.
- \*Edward Ligon Enders Castleton, Ph.G.**  
*Thes.*, Percolation with Improved Attachment.
- Hesser Charles Clapham, Ph.G.**  
*Thes.*, Manufacture of Licorice.  
Retail pharmacist. Mem. Penna. Pharm. Assn.;  
Phila. Assn. Retail Druggists. Director Phila.  
Wholesale Drug Co. Ex-pres. Cooper Literary  
Inst. Mem. Penna. State Fish and Game Assn.  
Vestryman in Church of Good Shepherd, Phila.  
*Ad.*, 227 Gowen Avenue, Mt. Airy, Phila., Pa.
- \*Alfred W. Cochran, Ph.G.**  
*Thes.*, Alcoholic Fermentation.
- David Costelo, Ph.G.**  
*Thes.*, *Gambogia*.  
Retail pharmacist.  
*Ad.*, 918 6th Avenue, New York City.
- \*Harry Oscar Cox, Ph.G.**  
*Thes.*, *Strychnos Nux Vomica*.
- \*Harry Otis Cravens, Ph.G.**  
*Thes.*, Licorice Lozenges.
- Walter Crawford, Ph.G.**  
*Thes.*, Pharmaceutical and Medical Relationship.  
*Ad.*, Nazareth, Pa.
- \*John P. Curran, Jr., Ph.G.**  
*Thes.*, *Grindelia Robusta*.  
Retail pharmacist, Phila. Deceased, August 6,  
1887.
- \*William George Day, Ph.G.**  
*Thes.*, Thymol as an Antiseptic.  
Deceased, January 19, 1904.
- George Frank Deacon, Ph.G.**  
*Thes.*, Arsenic and Its Preparations.  
Retail pharmacist.  
*Ad.*, Bordentown, N. J.

- Robert P. Dinges, Ph.G.**  
*Thes.*, Camphora Officinarum.  
 Pharmacist, Miller Drug Store.  
*Ad.*, 20 Lee Avenue, Trenton, N. J.
- Theodore Drake, Ph.G.**  
*Thes.*, Glycerin and Its Uses.  
 Salesman, Smith, Kline and French Co.  
*Ad.*, 109 S. Bacon Rouge Avenue, Atlantic City,  
 N. J.
- Joseph B. Driver, Ph.G.**  
*Thes.*, Emulsions.
- \***George Morris Eckels, Ph.G.**  
*Thes.*, Comparative Strength of the Official Wines  
 and Tinctures.  
 Graduated Univ. of Penna. Served two terms in  
 Penna. Legislature. Retail pharmacist, Harris-  
 burg, Pa. Deceased, May 23, 1916.
- Maurice Edgar Eyster, Ph.G.**  
*Thes.*, Ceratum Cantharidis.  
 Retired. Formerly retail pharmacist.  
*Ad.*, 3415 Piedmont Avenue, Baltimore, Md.
- Clarence Preston Eyre, Ph.G.**  
*Thes.*, Yerba Buena.
- \***Levi Fahnestock, Ph.G.**  
*Thes.*, Valuation of Blistering Beetles.  
 Deceased, November 8, 1903.
- \***Hiland Flowers, Ph.G.**  
*Thes.*, Lactuca Canadensis.  
 Retail pharmacist, New York City, 25 years. De-  
 ceased, August 12, 1912.
- William Kerr Freas, Ph.G.**  
*Thes.*, Cimicifuga Racemosa.  
 Salesman, Powers-Weightman-Rosengarten Co.,  
 since 1885.  
*Ad.*, 3631 N. 18th Street, Phila., Pa.
- \***John Henry Frederick, Ph.G.**  
*Thes.*, Evaporation.  
 For many years employed by A. H. and F. H.  
 Lippincott, Phila. Deceased, December 5, 1918.
- Andrew G. Frey, Ph.G.**  
*Thes.*, Cornus Florida.  
 Retail pharmacist.  
*Ad.*, 135 E. Lemon Street, Lancaster, Pa.
- \***Ernest Fröh, Ph.G.**  
*Thes.*, Storage of Botanical Drugs.  
 Graduated in medicine Jeff. Med. College. Prac-  
 ticed medicine and pharmacy in Phila. Deceased,  
 Sept. 11, 1905.
- William Henry Gerhard, Ph.G.**  
*Thes.*, Plasters.  
 Retail pharmacist.  
*Ad.*, Tacony, Phila., Pa.
- James Lord Graham, Ph.G.**  
*Thes.*, Glyceritum Picis Liquidæ.
- Edwin Clarence Griffin, Ph.G.**  
*Thes.*, Emulsions.
- \***Edwin Howard Hammer, Ph.G.**  
*Thes.*, Syrupus Ipecacanthæ.  
 2nd. Vice-pres. Keasbey and Mattison Co. One of  
 the original members of the New York Drug Club.  
 Masonic affiliation. Deceased, December 29, 1914.
- Henry Gettman Haring, Ph.G.**  
*Thes.*, Podophyllum Peltatum Folia.  
*Ad.*, 3604 Market Street, Phila., Pa.
- Charles Albert Harrold, Ph.G.**  
*Thes.*, Dialysed Iron.
- \***George William Henry, Ph.G.**  
*Thes.*, Camphora Officinarum.  
 Graduated in medicine Jeff. Med. College. Served  
 one term as coroner and as a member of the New  
 Jersey State Legislature. Deceased, July 2, 1912.
- Charles Anstlin Higgins, Ph.G.**  
*Thes.*, Potassii Bromidum.
- Leonard Adkins Hudson, Ph.G.**  
*Thes.*, The Bark of Cerasus Serotina.
- \***Morris Albert Hull, Ph.G.**  
*Thes.*, Asclepias Tuberosa.  
 Deceased, October, 1918.
- \***William Beetem Humrich, Ph.G.**  
*Thes.*, Unguentum Hydrargyri Nitratis.  
 Deceased, April 26, 1903.
- Joseph Jacobs, Ph.G.**  
*Thes.*, Melia Azedarach.  
 Retail pharmacist. Received Ph. D. and D. Sc.  
 degrees. Founder of Jacobs' Pharmacy Co.  
*Ad.*, 6 Marietta Street, Atlanta, Ga.
- \***Roland Davis Jones, Ph.G.**  
*Thes.*, Citric Acid.  
 Graduated in medicine Univ. of Penna. Deceased,  
 September 25, 1913.
- Emil Jungmann, Ph.G.**  
*Thes.*, The Present Miseries of Pharmacy and  
 Their Remedy.  
 Physician and pharmacist. Graduated in medicine  
 Medico-Chi College, 1899.  
*Ad.*, 524 N. 4th Street, Phila., Pa.
- William Wilkins Kain, Ph.G.**  
*Thes.*, Potassii Bitartras.  
 Physician and pharmacist. Graduated in medicine  
 Jeff. Med. College, 1893. Pres. Board of U. S.  
 Pension Examiners.  
*Ad.*, 5th and Pine Street, Camden, N. J.
- Loren Dewey Kays, Ph.G.**  
*Thes.*, Cosmoline in Ointments.
- \***Patrick Mulcahy Kelly, M.D., Ph.G.**  
*Thes.*, Red Lead.  
 Deceased, January 19, 1908.
- George Henry King, Ph.G.**  
*Thes.*, Hydrobromic Acid.
- \***Harry Clarence Lawall, Ph.G.**  
*Thes.*, Carbonic Acid.  
 Deceased, March 4, 1894.
- \***Alexander Benjamin Levi, Ph.G.**  
*Thes.*, Perfumery and Its Relation to Pharmacy.  
 Retail pharmacist, Denver, Colo. Owner and edi-  
 tor of Colorado Pythian. Deceased, February 28,  
 1912.
- John Herrman Locke, Ph.G.**  
*Thes.*, Emplastrum.  
 Physician.  
*Ad.*, Cedar and Huntingdon Streets., Phila., Pa.
- Daniel Longaker, Ph.G.**  
*Thes.*, Vanilla.  
 Physician. Graduated in medicine Univ. of  
 Penna., 1881. Obstetrician to Kensington Hosp.  
 for Women.  
*Ad.*, 1402 N. 16th Street, Phila., Pa.
- \***Charles Edgar McComas, Ph.G.**  
*Thes.*, Hamamelis Virginica.
- Clement Brook McCullough, Ph.G.**  
*Thes.*, Before Attending College of Pharmacy.  
 Retail pharmacist.  
*Ad.*, 216 Pine Street, Oxford, Pa.
- \***Eugene A. McFadden, Ph.G.**  
*Thes.*, Vanilla and Its Extract.  
 Retail pharmacist, Hackensack, N. J. Deceased,  
 February 27, 1917.
- Watson Megill, Ph.G.**  
*Thes.*, The Cultivation of Tobacco in Kentucky.
- \***Edward Frederick Menger, Ph.G.**  
*Thes.*, Ceratum Plumbi Subacetatis.  
 Retail pharmacist, Phila. Deceased, August 3,  
 1909.



**Jacob Myers Mitchell, Jr., Ph.G.**

*Thes.*, Organic Chemistry.  
Wholesale and retail pharmacist. American Consular Agt. Honduras, C. A., since 1891.  
*Ad.*, San Pedro Sula, Honduras, C. A.

**William Mittelbach, Ph.G.**

*Thes.*, American Wines.  
Life Insurance Agt. Retail pharmacist until 1920. Secy. and mem. Board of Education 27 years. Ex-pres. Mo. Pharm. Assn.; Treas. 24 years. Ex-pres. Mo. State Board of Pharmacy.  
*Ad.*, Boonville, Mo.

**David Moffet, Ph.G.**

*Thes.*, Euonymus Atropurpureus.  
Physician. Mem. Sch. Board.  
*Ad.*, 520 W. Venango Street, Phila., Pa.

**Bayard Murray, Ph.G.**

*Thes.*, Grindelia Robusta.  
Physician.  
*Ad.*, Newark, Del.

**\*Emile Ott, Ph.G.**

*Thes.*, Hydrargyri Oxidum Flavum.  
Many years employed by Corn Products Co. Deceased, November 3, 1918.

**William R. Patterson, Ph.G.**

*Thes.*, Syrupus Lactucarii.

**George Alexander Woodson Payne, Ph.G.**

*Thes.*, The History and Chemistry of Glass.

**Horatio Gates Peters, Ph.G.**

*Thes.*, Sodii Boras.  
*Ad.*, Mt. Gilead, O.

**\*Charles Frederick W. Pleibel, Jr., Ph.G.**

*Thes.*, Nux Vomica.  
Retail pharmacist, Phila. Deceased, August 12, 1890.

**William S. Plumer, Jr., Ph.G.**

*Thes.*, Cocculus Indicus.

**Ernest P. Raab, Ph.G.**

*Thes.*, Ricinus Communis and Its Products.  
Physician. Graduated in medicine Univ. of Penna., 1881. Ph.D. Aux. Univ. of Penna., 1883. Res. phys. German Hosp., 1881-83. Post grad. course in Europe, 1885-86. Visiting Phys. St. Elizabeth and St. Vincent Hosp., Belleville, Ill. Ex-pres. St. Clair Co. and Belleville, Med. Soc.; Pres. Board of Education, 1904-10. Pres. Library Board. Mem. B. P. O. E.; K. of P. Mem. Examining Board. Volunteer Med. Service Corps. *Ad.*, 301 S. High Street, Belleville, Ill.

**Aaron William Radley, Ph.G.**

*Thes.*, Pharmaceutical Notes.  
*Ad.*, Broad and High Streets, Bethlehem, Pa.

**Fred Rapp, Ph.G.**

*Thes.*, Saccharated Pepsin.  
Retired. Retail pharmacist for many years. Vestryman of the Church of the Mediator, Phila.  
*Ad.*, 4929 Cedar Ave., Phila., Pa.

**\*Eugene Lewis Reed, Ph.G.**

*Thes.*, Statica Caroliniana.  
Retail pharmacist, Atlantic City, N. J. Deceased, December 12, 1918.

**Willoughby Henry Reed, Ph.G.**

*Thes.*, Hydrargyrum.  
Physician. Graduated in medicine Jeff. Med. College, 1882. Retail pharmacist 30 years. Ex-pres. Penna. Pharm. Assn. Ex-pres. Montgomery Co. Branch of Nat'l Retail Druggists Assn., etc.  
*Ad.*, Jeffersonville, Pa.

**Charles Edward Resag, Ph.G.**

*Thes.*, Capsicum Annum.

**Alfred Nathan Richards, Ph.G.**

*Thes.*, Catechu-Tannic Acid.  
*Ad.*, Fleming Bldg., Easton, Pa.

**Charles H. B. Roberts, Ph.G.**

*Thes.*, Eucalyptus.  
In real estate business.  
*Ad.*, Glenside, Pa.

**Victor Christopher Roberts, Ph.G.**

*Thes.*, Toxicology.  
Physician and pharmacist. Graduated in medicine Medico-Chi. College, 1892. Mem. Sch. Board 8 years. Served as surgeon, U. S. A., during Spanish-Amer. War.  
*Ad.*, 5416 Chester Avenue, Phila., Pa.

**\*Augustus Harvey Ross, Ph.G.**

*Thes.*, Unguentum Zinci Oxidi.  
Deceased, June 1, 1916.

**John M. Rudolph, Ph.G.**

*Thes.*, Corallorhiza Odontorhiza.

**\*Warren Blachly Rush, Ph.G.**

*Thes.*, Copaiba Acid.  
Graduated in medicine, Jeff. Med. College. Practiced medicine and pharmacy Lake City, Fla. Deceased, September 18, 1918.

**\*Charles J. Siglinger, Ph.G.**

*Thes.*, Spigelia Marilandica.

**M. S. Simpson, Ph.G.**

*Thes.*, Oils and Fats.  
Physician. Graduated in Medicine Jeff. Med. College. Post grad. course Univ. of Leipsic. A. A. Surgeon, U. S. A. P. A. Surgeon, U.S.N. Major and surgeon, U. S. A. Service in the blockade of Cuba; chief surgeon of native troops in Philippines; and in the Boxer uprising in China (the relief of Peking) Cong. Medal of Honor.  
*Ad.*, Titusville, N. J.

**Jacob Daniel Smeltzer, Ph.G.**

*Thes.*, Honey.  
Retired. Formerly wholesale druggist. Graduated in law, Univ. of Minn., with degree of LL.B.  
*Ad.*, 426 H. N. Hellman Bldg., Los Angeles, Cal.

**Augustus Swartz Smith, Ph.G.**

*Thes.*, Glucose.

**Henry George Smith, Ph.G.**

*Thes.*, Croton Chloral Hydrate.

**Alfred Denny Sparks, Ph.G.**

*Thes.*, Liquor Magnesii Citratis.

**\*George Sylvester Speaker, Ph.G.**

*Thes.*, Ceratum Plumbi Suhacetas.  
Deceased, August 25, 1887.

**Theodore Sprissler, Ph.G.**

*Thes.*, Wood Products.  
Physician. Mem. Med. Reserve Corps.  
*Ad.*, 601 S. 9th Street, Phila., Pa.

**\*Albert August Gustav Starck, Ph.G.**

*Thes.*, Unguentum Hydrargyri Nitratis.  
Graduated in medicine Jeff. Med. College. Practiced in Phila. Deceased, Jan. 30, 1919.

**\*Oliver Henry Sterner, Ph.G.**

*Thes.*, Dracontium Foetidum.

**Albert H. Stites, Ph.G.**

*Thes.*, The Bark of Diospyros Virginiana.  
Retail pharmacist.  
*Ad.*, Sioux Falls, S. Dak.

**Jacob Frederick Stock, Ph.G.**

*Thes.*, Prinos Verticillatus.

**\*Emil Conrad Thomas, Ph.G.**

*Thes.*, Organic Chemistry.

**Conrad W. Troll, Ph.G.**

*Thes.*, Pharmaceutical Education.  
In coal business.  
*Ad.*, 11435 Enclid Avenue, Cleveland, O.

**\*Alexander Turner, Ph.G.**

*Thes.*, An Index of Strength in All Galenical Preparations.  
Deceased, May 12, 1903.

- Curtia Waugh Turner, Ph.G.**  
*Thes.*, Toxicology in Its Relation to Pharmacists.  
*Ad.*, 162 N. Franklin Street, Chicago, Ill.
- John Basketter Turner, Ph.G.**  
*Thes.*, Castanea.  
 Physician. Graduated in medicine Jeff. Med. College, 1882. Retail pharmacist until 1884. During World War, ophthalmologist Methodist Hosp., Phila. Mem. Med. Advisory Board.  
*Ad.*, 1833 Chestnut Street, Phila., Pa.
- John Augustus Uhland, Ph.G.**  
*Thes.*, Medicated Waters.
- \*Robert Hays Vansant, Ph.G.**  
*Thes.*, Glucose in Its Pharmaceutical Applications.  
 Retail pharmacist, Trenton, N. J. Deceased, 1911.
- McClanahan Wade, Ph.G.**  
*Thes.*, Simple Syrup.
- \*Charles Hugh Wagener, Ph.G.**  
*Thes.*, Carbon and Its Compounds.  
 Deceased, November 1, 1920.
- \*Edward Morrell Wallington, Ph.G.**  
*Thes.*, Emulsions of Cod Liver Oil.
- \*Charles Wesley Watson, Ph.G.**  
*Thes.*, Pilulæ Zinci Phosphide Composite.
- \*William Wendel, Ph.G.**  
*Thes.*, Podophyllum Peltatum.
- \*John Louis Wessels, Ph.G.**  
*Thes.*, Erythroxyton Coca.
- \*Henry Clay Whitney, Ph.G.**  
*Thes.*, Apium Petroselinum.  
 Mem. Texas. Pharm. Assn. Deceased, December 28, 1901.
- \*Fred Tyacke Williams, Ph.G.**  
*Thes.*, Coffee.  
 Retail pharmacist, Phila. Deceased, Dec. 31, 1891.
- \*William Rufus Wilson, Ph.G.**  
*Thes.*, Cydonium.  
 Pres. National Iron, Steel and Heavy Hardware Assn. Followed drug business a few years after graduation, but later became a member of the firm of Wilson and Bates, jobbers in iron, steel and blacksmith supplies. Deceased, 1920.
- \*George Edward Witsil, Ph.G.**  
*Thes.*, Honey and Glucose.  
 Received Certificate of Proficiency in Chemistry and Materia Medica, P. C. P., 1877.
- William Warran Woodnutt, Ph.G.**  
*Thes.*, Cosmoline as a Base for Some Official Ointments.  
*Ad.*, 150 N. 15th Street, Phila., Pa.
- Max Robert Zaegel, Ph.G.**  
*Thes.*, Radix Podophylli.  
*Ad.*, Sheboygan, Wis.
- 1880
- \*John Frederick Oscar Agthe, Ph.G.**  
*Thes.*, The Preparation of Phosphorus Pills.
- \*Charles Hamilton Ballantine, Ph.G.**  
*Thes.*, Unguentum Hydrargyri Nitratis.  
 Graduated in medicine. Practiced in Phila. Deceased, September 8, 1913.
- Richard Calcott Barrington, Ph.G.**  
*Thes.*, Phosphorus.  
*Ad.*, Mt. Holly, N. J.
- Fenwick Hazelton Bassett, Ph.G.**  
*Thes.*, Lactic Acid and Its Compounds.  
*Ad.*, Norwood, Del. Co., Pa.
- \*Charles Beala, Ph.G.**  
*Thes.*, Chloroform.  
 Deceased, October 29, 1903.
- \*Allen Lealie Belleville, Ph.G.**  
*Thes.*, Salicylic Acid.
- \*Alexander Elwell Bennett, Ph.G.**  
*Thes.*, Glycerin.
- George Mahlon Beringer, Ph.G.**  
*Thes.*, Caffeina.  
 (See page 388.)  
*Ad.*, 501 Federal Street, Camden, N. J.
- Edwin Hugh Bidwell, Ph.G.**  
*Thes.*, The Halogens.
- Edward George Boysen, Ph.G.**  
*Thes.*, Emulsions.  
 Cashier of U. S. Customs, Buffalo.  
*Ad.*, 202 Hoyt Street, Buffalo, N. Y.
- \*Lewls Colloredo Boyaen, Ph.G.**  
*Thes.*, The Miseries in Pharmacy.
- Mitchell Baxter Brooka, Ph.G.**  
*Thes.*, Plasma—Its Pharmaceutical Value.  
 Retail pharmacist.  
*Ad.*, 866 Wynnewood Road, Overbrook, Phila., Pa.
- \*Edwin Raughley Burdick, Ph.G.**  
*Thes.*, The Absence of Tannic Acid in Living Plants.  
 Retail pharmacist, Phila. Deceased, June 18, 1891.
- Charles Blair Carl, Ph.G.**  
*Thes.*, Tinctura Kino.  
 Retail pharmacist. Notary Public. Mem. A. Ph. A.; Penna. Pharm. Assn.  
*Ad.*, Greencastle, Pa.
- \*William Henry Caralake, Ph.G.**  
*Thes.*, Cerasus Serotina.  
 Deceased, May, 1910.
- Harry Scott Clark, Ph.G.**  
*Thes.*, The Pharmacist's Study of Vegetation.  
*Ad.*, 185 E. Fayette St., Uniontown, Pa.
- \*Louis Clay Collier, Ph.G.**  
*Thes.*, Prinos Verticillatus.
- \*Thomaa S. Collina, Ph.G.**  
*Thes.*, Chenopodium Anthelminticum.
- George Havena Colton, Ph.G.**  
*Thes.*, Xanthoxylum Carolinianum  
 Retired. Retail pharmacist until 1901.  
*Ad.*, Springfield, Mass.
- George Emil Dahia, Ph.G.**  
*Thes.*, Pills and Pill Coating.  
 Physician and pharmacist. Graduated in medicine Medico-Chi College, 1895. Sch. Director 40th Ward 12 years.  
*Ad.*, 4900 Woodland Avenue, Phila., Pa.
- \*Adam Clarion Daniela, Ph.G.**  
*Thes.*, Glycerin.  
 Deceased, July 16, 1917.
- August Jacob Detzer, Ph.G.**  
*Thes.*, Chemical Affinity in Compounding Medicine.
- \*William Crosaett Dockstader, Ph.G.**  
*Thes.*, Anamirra Cocculus.  
 Deceased, November 10, 1903.
- Frank Frederick Drueding, Ph.G.**  
*Thes.*, Syrupus Ferri Iodidi.  
 Physician.  
*Ad.*, 1233 N. 6th Street, Phila., Pa.
- \*Charles William Elkins, Ph.G.**  
*Thes.*, Aralia Spinosa.  
 Deceased, November 1, 1882.

- George Bryan Evans, Ph.G.**  
*Thes.*, Physostigma.  
 Druggist. Trustee P. C. P. Mem. Union League Club; A. Ph. A., etc.  
*Ad.*, 1106 Chestnut Street, Phila., Pa.
- \*Parker H. Famous, Ph.G.**  
*Thes.*, *Euonymus Atropurpureus*.
- \*George A. Ferdinand, Ph.G.**  
*Thes.*, Estimation of Free Citric Acid in the Cranberry.  
 Deceased, 1895.
- George Washington Fisher, Ph.G.**  
*Thes.*, Syrupus Ferri Iodidi.
- Oliver John Freeman, Ph.G.**  
*Thes.*, Zinc.
- \*Frank Frisby, Ph.G.**  
*Thes.*, *Fucus Vesiculosus*.  
 Retail pharmacist, Bismarck, N. Dak. Secy. of Board of Pharmacy, N. Dak. Deceased, January 18, 1892.
- Gustav Adolph Früh, Ph.G.**  
*Thes.*, Oil of Wintergreen.  
 Retired.  
*Ad.*, 2445 Ridge Avenue, Phila., Pa.
- Daniel Joshua Fry, Ph.G.**  
*Thes.*, Olibanum.  
 Retail pharmacist. Mem. A. Ph. A.  
*Ad.*, Salem, Ore.
- Samuel Wesley Gadd, Ph.G.**  
*Thes.*, Syrups and Their Preparation.  
 Physician. Graduated in medicine, Univ. of Penna. 1885. Retail pharmacist until 1899. Practitioner until 1919. Med. Director Phila. Life Ins. Co. since 1915. Mem. Med. Reserve Corps.  
*Ad.*, 2114 S. 16th Street, Phila., Pa.
- \*Thomas Mullin Galbreath, Ph.G.**  
*Thes.*, Emulsions.  
 Retail pharmacist, Atlantic City, N. J. Deceased, January 25, 1889.
- \*Samuel Franklin Garman, Ph.G.**  
*Thes.*, Powdered Chinoidine and the General Adulteration of Drugs.  
 Deceased, July 1, 1884.
- \*Robert Gibson, Jr., Ph.G.**  
*Thes.*, *Cornus Circinata*.
- James Alexander Davis Hallowell, Ph.G.**  
*Thes.*, Fermentation.  
 With Powers-Weightman-Rosengarten Co.  
*Ad.*, 4609 Springfield Avenue, Phila., Pa.
- Frank Scott Harker, Ph.G.**  
*Thes.*, *Aquæ Purification*.
- Francis E. Harrison, Ph.G.**  
*Thes.*, Improved Troche Board and Roller.  
 Retail pharmacist. Treas. of Delaware Co., 1906. Chm. Delaware Co. Republican Exec. Com. 1 year.  
*Ad.*, 5649 Market Street, Phila., Pa.
- \*Alfred Kerr Hartzell, Ph.G.**  
*Thes.*, *Helianthemum Canadense*.
- Conrad Gabriel Hoell, Ph.G.**  
*Thes.*, Cerates and Ointments.  
 Physician. Graduated in medicine Univ. of Penna., 1882. Retail pharmacist until 1898. Mem. Volunteer Med. Service Corps.  
*Ad.*, 565 Benson St., Camden, N. J.
- \*John Wilson Hoffa, Ph.G.**  
*Thes.*, Commercial Extract of Krameria.  
 Retail pharmacist, Harrisburg, Pa. Masonic affiliation. Deceased, January 11, 1903.
- Louis Henry Holden, Ph.G.**  
*Thes.*, *Aralia Spinosa*.
- William C. Holzhauser, Ph.G.**  
*Thes.*, *Eriodictyon Californicum*.  
*Ad.*, 601 Oneida Street, Joliet, Ill.
- George Henry Jackson, Ph.G.**  
*Thes.*, Fermentation.
- William Oscar Jacoby, Ph.G.**  
*Thes.*, *Eupatorium Perfoliatum*.
- \*Washington William Jost, Ph.G.**  
*Thes.*, *Polygala Senega* and Its Acid.
- James Pecor Kern, Ph.G.**  
*Thes.*, *Eupatorium Perfoliatum*.  
*Ad.*, Masonic Temple, Phila., Pa.
- Stirling Kerr, Jr., Ph.G.**  
*Thes.*, Pharmaceutical Manipulation.  
 In drug business in Phila. until 1889. With Penna. Railroad until 1908. Supreme Council A. A. S. R. Southern Jurisdiction. Also Grand Secy., Provincial Grand Lodge of U. S. of Royal Order of Scotland. Major, 1st Btn., 1st Reg. Dist. of Columbia Home Defense Rifles.  
*Ad.*, 433 3rd Street, N.W., Washington, D. C.
- \*Thomas Franklin Keys, Ph.G.**  
*Thes.*, The Introduction, Permanent Adoption or Failure of Certain Medicines.  
 Graduated in medicine Univ. of Penna. Practiced in Chicago, Ill. Deceased, Sept. 7, 1910.
- \*William John Killingbeck, Ph.G.**  
*Thes.*, Gum Arabic.  
 Deceased, January 13, 1887.
- \*John Klemet, Ph.G.**  
*Thes.*, The Preservation of Drugs.  
 Graduated in medicine, Jeff. Med College, 1883. Practiced in Phila. Deceased, July 30, 1886.
- John William Kohlerman, Ph.G.**  
*Thes.*, Fluid Extracts.  
 Retail pharmacist. One of the founders of the Phila. Wholesale Drug Co. Mem. Sch. Board. Masonic affiliation.  
*Ad.*, 21 W. Centre Street, Merchantville, N. J.
- William Henry Lantz, Ph.G.**  
*Thes.*, *Aralia Nudicaulis*.  
 Retail pharmacist.  
*Ad.*, 16th and Lehigh Avenue, Phila., Pa.
- \*George Latin, Ph.G.**  
*Thes.*, *Eupatorium Perfoliatum*.  
 Retail pharmacist, Dayton, Ohio. Deceased, 1904.
- Isaac Lavenson, Ph.G.**  
*Thes.*, Roots and Rhizomes.  
*Ad.*, 15th and Mt. Vernon Streets, Phila., Pa.
- \*Arthur Everett Lewis, Ph.G.**  
*Thes.*, Meconic Acid.
- \*Frederick Loos, Jr., Ph.G.**  
*Thes.*, Glycerole of Cinchona.
- Amandus Julius Luethé, Ph.G.**  
*Thes.*, Empiricism.  
*Ad.*, 610 Murray Avenue, Milwaukee, Wis.
- John E. McCambridge, Ph.G.**  
*Thes.*, *Hydrargyri Iodidum Viride*.  
 With G. D. Searle and Co. Employed by Wm. R. Warner and Co. until 1908.  
*Ad.*, 4845 N. Paulina Street, Chicago, Ill.
- \*Andrew James McFeeters, Ph.G.**  
*Thes.*, Resina Podophylli.  
 Deceased, November 3, 1920.
- Joseph Summerfield Madison, Ph.G.**  
*Thes.*, *Aristolochia Serpentaria*.  
 Fruit Farming. Retail pharmacist until 1910.  
*Ad.*, 4826 1st Avenue, Los Angeles, Cal.



- John Maier, Ph.G.**  
*Thes.*, Eupatorium Perfoliatum.  
 Retail pharmacist.  
*Ad.*, Care of E. J. Tryon, Bristol, Pa.
- Alfred Stanger Marshall, Ph.G.**  
*Thes.*, American Druggists.  
 Retail pharmacist.  
*Ad.*, 154 S. Broad Street, Woodbury, N. J.
- Arthur Robinson Milby, Ph.G.**  
*Thes.*, Chemistry and History of Glass.
- William Leland Miller, Ph.G.**  
*Thes.*, The Value of the Laboratory.
- William Moses Miller, Ph.G.**  
*Thes.*, Eriodictyon Glutinosum.  
*Ad.*, Flagstaff, Ariz.
- Bernard James Murray, Ph.G.**  
*Thes.*, Rubus.  
 Physician and Pharmacist. Graduated in medicine, Medico-Chi College., 1892.  
*Ad.*, 48 W. Johnson Street, Germantown, Philadelphia, Pa.
- George Henry Ochse, Ph.G.**  
*Thes.*, Liquor Ferri Acetici, Phar. Ger. With Valentine H. Smith and Co. Formerly retail pharmacist.  
*Ad.*, Fort Washington, Pa.
- Andrew Allison O'Daniel, Ph.G.**  
*Thes.*, Elegant Pharmacy.  
 Physician. Graduated in medicine, Jeff. Med. College, 1884. Mem. U. S. A. Med. Corps.  
*Ad.*, 1700 Walnut Street, Phila., Pa.
- Thomas Edwin Ogram, Ph.G.**  
*Thes.*, Chrysophanic Acid.  
 Retired. Retail pharmacist 25 years.  
*Ad.*, Washington, D. C.
- William Maxwell Opdycke, Ph.G.**  
*Thes.*, The Apothecary.
- \*Horace Hildebrand Owen, Ph.G.**  
*Thes.*, Terebinthina.
- \*Oric Henry Paxson, Jr., Ph.G.**  
*Thes.*, Aralia Spinosa.  
 Graduated in medicine. Practiced in Christiana, Pa. Deceased, July 24, 1916.
- William Joseph Pechin, Ph.G.**  
*Thes.*, Products of Pinus Palustris.  
 Retired. Retail pharmacist until 1919.  
*Ad.*, 4615 N. Broad Street, Phila., Pa.
- Nathan Pennypacker, Ph.G.**  
*Thes.*, Salix Alba.  
 Retail pharmacist.  
*Ad.*, 501 Callowhill Street, Phila., Pa.
- Henry Eugene Peters, Ph.G.**  
*Thes.*, Eriodictyon Californicum.  
 Wholesale and retail druggist. Pres. Lehigh Valley Retail Druggists Assn. 10 years. Director, 2d Nat'l Bank. Mem. Livingston Club.  
*Ad.*, 639 Hamilton Street, Allentown, Pa.
- \*Louis Clark Pettit, Ph.G.**  
*Thes.*, Eugenic Acid.  
 Physician, Manhattan Asylum, State of New York. Deceased, 1912.
- \*Linnaeus S. Poley, Ph.G.**  
*Thes.*, Xanthoxylum Fraxineum.
- John Brewster Reynolds, Ph.G.**  
*Thes.*, Tinctura Opii Deodorata.  
*Ad.*, Front and Norris Streets, Phila., Pa.
- Charles Haines Roberts, Ph.G.**  
*Thes.*, Botany.
- Edward Manning Roche, Jr., Ph.G.**  
*Thes.*, Jaborandi.
- George Redaecker Ross, Ph.G.**  
*Thes.*, Sanguinaria Canadensis.  
*Ad.*, 810 Cumberland Street, Lebanon, Pa.
- Charles William Saalfrank, Ph.G.**  
*Thes.*, Syrupus Radicis Glycyrrhizae Echinatae.  
 Physician. Physician to Phila. Protestant Home for Aged since 1900 and to Phila. Baptist Home for Aged since 1905. Mem. Phila. Co. Med. Assn.; Amer. Med. Assn.; Volunteer Med. Service Corps.  
*Ad.*, 6410 Rising Sun Avenue, Phila., Pa.
- Harry Schandain, Ph.G.**  
*Thes.*, Unguentum Benzoini.  
 Mem. of firm, Schandain and Lind, mfg. confectioners.  
*Ad.*, 3115 Diamond Street, Phila., Pa.
- George William Schimminger, Ph.G.**  
*Thes.*, Comptonia Asplenifolia.
- Jacob Shelly, Ph.G.**  
*Thes.*, The Manufacturing of Fluid Extracts Without Evaporation By Heat.
- \*Harry Huber Sherk, Ph.G.**  
*Thes.*, Polygonium Hydropiper and Punctatum.  
 Graduated in medicine Jeff. Med. College. Practiced in Camden, N. J. Deceased, June 1, 1915.
- William Huntley Short, Ph.G.**  
*Thes.*, Liquor Magnesii Citratis.
- \*Silas Henry Shull, Ph.G.**  
*Thes.*, Pharmaceutist and Physician.
- Charlea Edward Slough, Ph.G.**  
*Thes.*, Pharmacal Botany.  
*Ad.*, 219 E. Walnut Avenue, Merchantville, N. J.
- Harry Leedom Smedley, Ph.G.**  
*Thes.*, Asclepias Syriaca.  
 Graduated in dentistry, Univ. of Penna., 1882; and in medicine, 1883.  
*Ad.*, Media, Pa.
- George Farrar Smith, Jr., Ph.G.**  
*Thes.*, Ointments.  
 Retail pharmacist. Vice-pres. and Director, Board of Trade. Capt. Co. 1, 1st Tenn. N. G., 1883. Chm. County High Sch. Board. Mayor, Newport, Tenn., 2 years. Field examiner and recruiting officer U. S. Merchant Marine.  
*Ad.*, Newport, Tenn.
- William H. Smith, Jr., Ph.G.**  
*Thes.*, Glycerin.  
*Ad.*, 105 W. Jackson Street, Richmond Va.
- \*John Edward Sombart, Ph.G.**  
*Thes.*, Suppositories by Cold Compression.  
 Graduated in medicine Jeff. Med. College. Deceased, July 8, 1908.
- Lewis Joseph Steltzer, Ph.G.**  
*Thes.*, Castanea.  
*Ad.*, 11th and Lehigh Avenue, Phila., Pa.
- \*Charles Pettit Stout, Ph.G.**  
*Thes.*, Spigelia Marilandica.  
 Graduated in medicine, Univ. of Penna., 1884. Practiced in Phila. Deceased, August 22, 1894.
- Samuel William Strunk, Ph.G.**  
*Thes.*, The Metric System.  
 With Quakertown Silk Co. Retail pharmacist, 1880-84. Traveling salesman for McPike and Fox, Atchison, Kan., 1886-1890. Retail pharmacist until 1911. Mem. Phila. Assn. Retail Druggists and Nat'l Assn. Retail Druggists.  
*Ad.*, 621 W. Broad Street, Quakertown, Pa.
- \*Stephen Liveraidge Talbot, Ph.G.**  
*Thes.*, The Equivalence of Drops.  
 Deceased, January 15, 1883.
- \*William James Thornley, Ph.G.**  
*Thes.*, Oenothera Biennis.
- Joseph Alexander Titcomb, Ph.G.**  
*Thes.*, Pills.

- William George Toplis, Ph.G.**  
*Thes.*, Medicated Gelatine Lozenges.  
 Retail pharmacist. Bacteriological work for City of Phila., 1901. Bact. and Practical Hygiene, Univ. of Penna, 1900. U. S. Brewers Acad., Yeast Culture, Industrial Alcohol, 1913. Received Certificate of Proficiency in Chemistry, P. C. P., 1899. *Ad.*, 4939 Germantown Avenue, Phila., Pa.
- Herman Van Allen, Ph.G.**  
*Thes.*, *Virburnum Prunifolium*.
- William Sampson Wallace, Ph.G.**  
*Thes.*, Falsifications and Adulterations.
- Frank Stephen Warner, Ph.G.**  
*Thes.*, *Digitalis*.
- \***Edward Warrington, Ph.G.**  
*Thes.*, *Cosmolin* and *Vaselin*.  
 Retail pharmacist, Phila. Deceased, June 6, 1891.
- George C. Webater, Ph.G.**  
*Thes.*, *Aristolochia Serpentaria*.  
 Physician.  
*Ad.*, 311 W. 7th Street, Chester, Pa.
- \***James Addiaon White, Ph.G.**  
*Thes.*, *Hydrastis* and Its Preparations.  
 Retail pharmacist, Youngstown, Ohio. Deceased, April 4, 1911.
- George Eli Williams, Ph.G.**  
*Thes.*, Absorption of Moisture by Glycerin.
- \***George Byron Winebrenner, Ph.G.**  
*Thes.*, *Coccus Cacti*.
- Preston Reuben Young, Ph.G.**  
*Thes.*, Adulteration of Beer.  
 Retail pharmacist.  
*Ad.*, 410 N. 6th Street, Camden, N. J.
- \***Charles Frederick Zeller, Ph.G.**  
*Thes.*, The Thalleoquin Test.  
 Served as Asst. Prof. of Pharmacy and Curator of P. C. P. Museum. Deceased, April 7, 1885. (See page 432.)
- Mason Woodward Zimmerman, Ph.G.**  
*Thes.*, *Glycyrrhiza Glabra*.
- 1881
- Charles Franklin Adams, Ph.G.**  
*Thes.*, Pharmaceutical Ethics.  
 Physician. Graduated in medicine Jeff. Med. College, 1887. Studied in Berlin and Vienna. Consultant eye and ear diseases State Hosp. for Insane and Skillman Epileptic Village. Chief, Eye and Ear Dept., Mercer Hosp. Served in U. S. A. as major, Med. Corps. stationed at Camp Green, N. C. *Ad.*, 52 W. State Street, Trenton, N. J.
- Ernest Herbert Baker, Ph.G.**  
*Thes.*, Glucose.
- \***Jacob Baur, Ph.G.**  
*Thes.*, *Hydrangea Arborescens*.  
 Pres. and Treas. Liquid Carbonic Co. Deceased, July 19, 1912.
- Charles Edward Bellows, Ph.G.**  
*Thes.*, Poisons—With Remarks on Apothecaries' Mistakes.  
 Health officer, Bridgeton, N. J. Coroner 6 years.  
 Retail pharmacist 20 years.  
*Ad.*, Lake Street, Bridgeton, N. J.
- Wilber Merritt Benton, Ph.G.**  
*Thes.*, The Manufacture of Alcohol from Corn.  
 Retired. Retail pharmacist until 1907.  
*Ad.*, Peoria, Ill.
- \***Charles Henry Bernhard, Ph.G.**  
*Thes.*, *Celastrus Scandens*.  
 Deceased, 1913.
- Louis Napoleon Berube, Ph.G.**  
*Thes.*, *Turnera Aphrodisiaca*.  
 Retail pharmacist. Masonic affiliation.  
*Ad.*, Freeport, Pa.
- Samuel Everett Betts, Ph.G.**  
*Thes.*, *Pepsin*.  
*Ad.*, 37 W. Gay Street, West Chester, Pa.
- John Beuter, Ph.G.**  
*Thes.*, *Adiantum Pedatum*.
- William Jasper Bowman, Ph.G.**  
*Thes.*, *Aspidium Rigidum*.
- Phillip Fine Howell Brakeley, Ph.G.**  
*Thes.*, Animal Absorption.  
*Ad.*, Bordentown, N. J.
- Frank Wigton Brown, Ph.G.**  
*Thes.*, Salicylic Acid.  
 Retail pharmacist. Mfg. chemist 5 years. Studied medicine 3 years at Univ. of Penna.  
*Ad.*, 6100 Kingsessing Avenue, Phila., Pa.
- Charles Alfred Bye, Ph.G.**  
*Thes.*, *Unguentum Hydrargyri Nitratis*.  
 Retail pharmacist. Recruiting officer U. S. Merchant Marine.  
*Ad.*, Lakewood, N. J.
- James Edward Cahill, Ph.G.**  
*Thes.*, *Aletris*.
- Samuel Campbell, Jr., Ph.G.**  
*Thes.*, The Exhaustion of Drugs.  
*Ad.*, Cynwyd, Pa.
- \***Nathaniel Alexander Caahman, Ph.G.**  
*Thes.*, Filtering Paper.
- Charles Frederick Chapman, Ph.G.**  
*Thes.*, Syrup of Tolu.
- Alton Clabaugh, Ph.G.**  
*Thes.*, *Asclepias Tuberosa*.  
*Ad.*, Third and Lexington Avenue, Altoona, Pa.
- \***Charles Wesley Clymer, Ph.G.**  
*Thes.*, Cocoa.  
 Retail pharmacist, Phila. Deceased, May 1, 1895.
- William Edmund Cook, Ph.G.**  
*Thes.*, Syrups by Cold Process.  
 Retail pharmacist.  
*Ad.*, Fort Jones, Cal.
- \***Samuel Walter Courtney, Ph.G.**  
*Thes.*, Fermentation.
- Walter Cramer, Ph.G.**  
*Thes.*, *Phytolacca Baccæ*.
- David Winfield Creasler, Ph.G.**  
*Thes.*, *Iris Versicolor*.
- Frederick Wallace Culler, Ph.G.**  
*Thes.*, Requirements of Pharmacy.  
 Physician. Graduated in medicine N. Y. College Physicians and Surgeons, 1896. Instr. Anesthesia, Hosp. Corps, U. S. A. Masonic affiliation.  
*Ad.*, 127 W. 82d Street, New York City.
- William Edward Danner, Ph.G.**  
*Thes.*, Standard Solution of Dialyzed Iron.  
 Manufacturing pharmacist. Vice-pres. Henry K. Wampole and Co., Ltd., Perth, Ontario, Can. Formerly with John Wyeth and Bro.  
*Ad.*, Perth, Ontario, Can.
- \***Frank Clifford Davis, Ph.G.**  
*Thes.*, Duties of a Pharmacist.  
 Retail pharmacist, Phila. Deceased, January 11, 1911.
- John Walheater Davis, Ph.G.**  
*Thes.*, The Arrangement and Dispensing of Poisons.
- William Lowther Demaree, Ph.G.**  
*Thes.*, *Castorium*.

- \*Benjamin Harper Diehl, Ph.G.**  
*Thes.*, Glycyrrhiza Glabra and Its Pharmaceutical Uses.  
 Physician and pharmacist, Phila. Deceased, October 15, 1890.
- Emil August Dorner, Ph.G.**  
*Thes.*, Resins and Oleoresins.
- Serrill Douglaas, Ph.G.**  
*Thes.*, Heat and Its Application in Pharmacy.  
*Ad.*, Bristol, Pa.
- Frank Hertzler Eberly, Ph.G.**  
*Thes.*, Lycopodium.  
 Retail pharmacist.  
*Ad.*, 2500 Oxford Street, Phila., Pa.
- \*George Hilliard English, Ph.G.**  
*Thes.*, Liquor Pepsin Glyceritum.  
 Deceased, August 2, 1918.
- \*John C. Fahey, Ph.G.**  
*Thes.*, Solution of Citrate of Magnesia.  
 Deceased, 1916.
- \*William Henry Faunce, Ph.G.**  
*Thes.*, Phosphoric Acid.  
 Deceased, March 14, 1897.
- \*Louis Genois, Ph.G.**  
*Thes.*, Dialysed Mannite.
- Michael Gerstacker, Ph.G.**  
*Thes.*, By-Products of Coal Gas.  
 Retired. Retail pharmacist until 1919.  
*Ad.*, 6718 Franklin Avenue, Cleveland, Ohio.
- George Goebel, Jr., Ph.G.**  
*Thes.*, False Senega.  
*Ad.*, 16th and Columbia Avenue, Phila., Pa.
- George Albert Gorgas, Ph.G.**  
*Thes.*, Cod Liver Oil Emulsion.  
 Retail pharmacist. Mem. Penna. Pharm. Assn.; A. Ph. A. Recruiting officer, U. S. Merchant Marine.  
*Ad.*, Harrisburg, Pa.
- Thomas Richard Gosling, Ph.G.**  
*Thes.*, Caryophyllus Aromaticus.  
 Chemist. Formerly retail pharmacist.  
*Ad.*, 5442 Media Street, Phila., Pa.
- Emil George Herman Graff, Ph.G.**  
*Thes.*, Emulsions.
- John Franklin Gray, Ph.G.**  
*Thes.*, Does Pharmacy Pay?  
*Ad.*, Jersey Shore, Pa.
- Robert Thomas Grime, Ph.G.**  
*Thes.*, Aspidium Acrosticoides.  
*Ad.*, 3830 Locust Street, Phila., Pa.
- William Griacom, Jr., Ph.G.**  
*Thes.*, Ethyl Bromide.  
 Retired. Formerly wholesale mfr. of chemicals, afterwards associated with Standard Paint Co., N. Y., as supt. and chemist. Inventor of insulating compounds, synthetic rubber, etc. Branch factories in Europe.  
*Ad.*, Plainfield, N. J.
- Charles Henry Gubbins, Ph.G.**  
*Thes.*, Ointments of the New Pharmacopœia.  
 Retail pharmacist.  
*Ad.*, 1331 Jefferson Street, Phila., Pa.
- Herman Thomas Haessig, Ph.G.**  
*Thes.*, Emulsions.
- \*John Henry Hahn, Ph.G.**  
*Thes.*, Ustilago Maidis.  
 Retail pharmacist. Mem. A. Ph. A.; P. C. P.; Ex-pres. P. C. P. Alumni Assn.; Mem. Phila. Common Council, 1903-1920; East End Republican Club; 36th Ward Republican Exec. Com.; B. P. O. E. Deceased, February 16, 1922.
- Francis Marion Halloran, Ph.G.**  
*Thes.*, Coal Tar Products.
- Benjamin Baird Hamlin, Jr., Ph.G.**  
*Thes.*, Color Reactions with Nascent Chromic Acid.
- Henry Winaton Harper, Ph.G.**  
*Thes.*, Rhus Aromatica.  
 Prof. of Chem. and Dean of Grad. Sch. Univ. of Texas. Mfg. chemist and perfumer, 1881-84; Chemist and metallurgist, 1884-86; chemist and pathologist, 1887-90. Graduated in medicine, Univ. of Va., 1892. LL.D., Baylor Univ., 1914. Mem. Beta Theta Pi; Phi Beta Kappa; Alpha Mu Pi Omega; and numerous scientific societies. Fellow A. A. A. S.; Amer. Med. Assn. Pres. Tex. Acad. of Sciences, 1900-01, etc.  
*Ad.*, 2216 Rio-Grande Street, Austin, Tex.
- Joseph Hart, Ph.G.**  
*Thes.*, Improved Formulæ of the Pharmacopœia.
- \*Bernhard August Hertsch, Ph.G.**  
*Thes.*, Herba Viola Tricolor.
- Walter Lippincott Hinchman, Ph.G.**  
*Thes.*, Asclepias Syriaca.
- Francis Hodgson, Ph.G.**  
*Thes.*, Chemical Progress.
- \*Willia Andrew Balch Hoke, Ph.G.**  
*Thes.*, The Convenience of Powdered Extracts.  
 Wholesale druggist. Deceased, November 21, 1912.
- \*Jedediah Griffith Howard, Ph.G.**  
*Thes.*, Theses.  
 Deceased, August 22, 1914.
- Frank Ames Hoyt, Ph.G.**  
*Thes.*, Cornus Sericea.
- \*Charles Bradford Hunterson, Ph.G.**  
*Thes.*, Preparation of Official Tinctures.  
 Retail pharmacist, Phila. Deceased, December 9, 1894.
- \*Theodore Edward Ihrig, Ph.G.**  
*Thes.*, Percolation.
- \*John Wealey Jacoby, Ph.G.**  
*Thes.*, Specific Gravity.  
 Deceased, January 8, 1907.
- William Earl Jenks, Ph.G.**  
*Thes.*, Iris Versicolor.  
 Mfg. pharmacist, with John Wyeth and Bro. Associated with William J. Jenks, 1887-89.  
*Ad.*, 428 S. 40th Street, Phila., Pa.
- Chester Johnson, Ph.G.**  
*Thes.*, Rubus Villosus.
- Charles Linnaeus Joy, Ph.G.**  
*Thes.*, Benzine Process for Volatile Oils and Oleoresins.
- Irving Washington Kelly, Ph.G.**  
*Thes.*, Experiments with Amorphous Phosphorus.
- John Henry Kerr, Ph.G.**  
*Thes.*, Rheum.
- Charles Pitman Kirby, Ph.G.**  
*Thes.*, Commercial Strength of Tinctura Ferri Chloridi.  
*Ad.*, 3264 Chestnut Street, Phila., Pa.
- George Harry Knowlton, Ph.G.**  
*Thes.*, Acidum Phosphoricum Dilutum.  
 Retail pharmacist. Mem. New Hampshire Pharm. Assn.; A. Ph. A.; Nat'l Pharm. Service Assn.; Nat'l Assn. Retail Druggists; Assoc. Mem. P. C. P. Studied medicine one year at Tufts Med. Sch. Mem. Manchester Common Council 1 term.  
*Ad.*, 782 Union Street, Manchester, N. H.
- \*John Leedom Kooker, Ph.G.**  
*Thes.*, Gum Benzoin.  
 Retail pharmacist. Deceased, March 14, 1915.



# 506 First Century of the Philadelphia College of Pharmacy

**Charles Henry Krauter, Ph.G.**

*Thes.*, Mistura Glycyrrhizæ Composita.  
Retail pharmacist and stationer.  
*Ad.*, Youngstown, Ohio.

**Alfred Henry Lafean, Ph.G.**

*Thes.*, Solubilities of Alkaloids in Alcohol.  
Retired. Retail pharmacist until 1913.  
*Ad.*, West Hotel, Minneapolis, Minn.

**Peter William Lascheid, Ph.G.**

*Thes.*, Glucose as an Excipient for Pill Masses.  
Mfr. syrups, extracts, and carbonated beverages.  
Graduated Nat'l Sch. of Elocution and Oratory, 1881. Mem. B. P. O. E. and various religious and fraternal organizations.  
*Ad.*, 208 Alice Street, Mt. Oliver P. O., Pittsburgh, Penna.

**Edward Jacob Lawall, Ph.G.**

*Thes.*, Syrupus Ipecacuanhæ.  
Retail pharmacist.  
*Ad.*, Catasauqua, Pa.

**Charles Leedom, Ph.G.**

*Thes.*, Adulterations.  
Retail pharmacist. Ex-mem. Board of Trustees, P. C. P. Mem. Penna. Pharm. Assn., etc.  
*Ad.*, 20th and Cherry Streets, Phila., Pa.

**Washington Emil Linden, Ph.G.**

*Thes.*, Value of Commercial Cinchona.  
Physician.  
*Ad.*, 3444 Memphis Avenue, Cleveland, Ohio.

**\*John Allen Lins, Ph.G.**

*Thes.*, Products of Distillation of Wood.

**John Francis Loehle, Ph.G.**

*Thes.*, Solubility of Salts.  
Retail pharmacist.  
*Ad.*, Lebanon, Pa.

**\*John Henry Love, Ph.G.**

*Thes.*, The Manufacturing and Retail Drug Business—An Assistant's Position in Each Branch Contrasted.

**\*Frank Luerssen, Ph.G.**

*Thes.*, Muriate of Ammonia.

**William Charlea McClintock, Ph.G.**

*Thes.*, Thymus Vulgaris.  
Retired. Formerly retail pharmacist. Graduated in chemistry, Franklin Institute. Masonic affiliation.  
*Ad.*, 403 N. Esplanade, Leavenworth, Kansas.

**Edward Adolphus Manheimer, Ph.G.**

*Thes.*, Differences Between Apocynum Androsæmifolium and A. Cannabinum.  
*Ad.*, 31 N. State Street, Chicago, Ill.

**\*Constanz Manz, Ph.G.**

*Thes.*, Ipomoea Pandurata.  
Retail pharmacist, Lyons, Iowa. Deceased, April 19, 1892.

**\*Ruah Porter Marshall, Ph.G.**

*Thes.*, Glycerina.

**\*Joseph Ingles Matthias, Ph.G.**

*Thes.*, Caffea.  
Retail pharmacist, Collingswood, N. J. Deceased, April 14, 1891.

**Charles Henry May, Ph.G.**

*Thes.*, Fluid Extract and Syrup of Ipecacuanha.  
In real estate business. Retail pharmacist until 1895.  
*Ad.*, Piqua, Ohio.

**\*William Christian Mayer, Ph.G.**

*Thes.*, Unguentum Zinci Carbonatis.

**Charles William Mengle, Ph.G.**

*Thes.*, Preparations of Decoctions and Infusions from Fluid Extracts.

**\*John Benjamin Metzger, Ph.G.**

*Thes.*, The Fruit of Sambucus Canadensis.  
Deceased, March 16, 1890.

**Frank Benjamin Meyer, Ph.G.**

*Thes.*, Parthenium Integrifolium.  
*Ad.*, Gary, Ind.

**Samuel Warren Miller, Ph.G.**

*Thes.*, Syrup of Lactucarium.  
Physician. Pharmacist, Jeff. Hosp. Phila. 2 years, and at Phila. Gen. Hosp. 2 years. Prof. Pharmacy, Gross Med. Sch., Denver, 1893-97. Police surgeon, Denver, 5 years. Mem. staff, St. Anthony's Hosp. Coroner Dolores and Ouray Co.  
*Ad.*, 1273 Vine Street, Denver, Colo.

**\*Benjamin Franklin Moise, Jr., Ph.G.**

*Thes.*, Extract of Butternut.

**Frank E. Morgan, Ph.G.**

*Thes.*, Observation on Perfumery.  
Retail pharmacist. Mem. A. Ph. A.  
*Ad.*, 1629 Walnut Street, Phila., Pa.

**James Hamilton Morgan, Ph.G.**

*Thes.*, Beet Sugar.

**Lemuel Iorwerth Morris, Ph.G.**

*Thes.*, Oleoresin of Silphium Laciniatum.  
Retired. Ph.D. degree Strassburg-Alsace Univ. 1883. Organized Tindel-Morris Co., Eddystone.  
*Ad.*, Majestic Hotel, Phila., Pa.

**Henry S. Mount, Ph.G.**

*Thes.*, Helleborus Niger.

**Henry Melchior Muhlenberg, Ph.G.**

*Thes.*, Sulphur.

**Edwin Stanton Muir, Ph.G.**

*Thes.*, Colchicia.  
Veterinarian. Retail pharmacist until 1889. Graduated in veterinary medicine, Univ. of Penna., 1890. Municipal Meat and Cattle Inspector since 1906. Instr. in pharmacy and mat. med. Vet. Dept., Univ. of Penna., 1890-1910.  
*Ad.*, 6023 Walker Street, Phila., Pa.

**Charles William Myers, Ph.G.**

*Thes.*, Linaria Vulgaris.

**\*Asher Christian Nagle, Ph.G.**

*Thes.*, Piscidia Erythrina.  
Retail pharmacist, Youngstown, Ohio. Deceased, June 18, 1886.

**Thomaa Shields Nairn, Ph.G.**

*Thes.*, Phytolaccæ Baccæ.

**Gustave Adolph Otgen, Ph.G.**

*Thes.*, Pyrethrum Rosenm.

**\*William Frederick Pape, Ph.G.**

*Thes.*, Phytolacca Radix.

**\*Jesse Walton Pechin, Ph.G.**

*Thes.*, Coto Bark.

**Mason George Perry, Ph.G.**

*Thes.*, In Behalf of More Palatable Medicines.

**David Reynolds Reed, Ph.G.**

*Thes.*, Pharmaceutical Reform.

**\*Emil G. Rehfuss, Ph.G.**

*Thes.*, Suppositories.  
Practiced medicine in Phila. Deceased, October 31, 1908.

**George Reimann, Ph.G.**

*Thes.*, Acacia Savakin.  
Retail pharmacist 40 years. Mem. N. Y. State Board of Pharmacy 21 years. Organizer and 1st pres. Nat'l Assn. Boards of Pharmacy.  
*Ad.*, 41 Brunswick Blvd., Buffalo, N. Y.

**Charles A. Rinck, Ph.G.**

*Thes.*, Cephaelis Ipecacuanha.  
*Ad.*, 145 Bushkill Street, Easton, Pa.

**\*Franklin Pierce Rogers, Ph.G.**

*Thes.*, Duties of the Pharmacist.

- George Weidler Roland, Ph.G.**  
*Thes.*, Chemistry in Pharmacy.  
 Retail pharmacist.  
*Ad.*, 423 Wyandotte Street, Bethlehem, Pa.
- Charlea Edward Rowe, Ph.G.**  
*Thes.*, The Abuse of Opium.  
 Mercantile agency. Retail pharmacist until 1917.  
*Ad.*, Petersburg, Va.
- George Adolphus Schroeder, Ph.G.**  
*Thes.*, The Rhizome of Zingiber Officinale.
- \***Joseph Harry Scott, Ph.G.**  
*Thes.*, Membrana Callosi.  
 Retail pharmacist, Phila. Deceased, September 12, 1916.
- Charlea Tripler Shewell, Ph.G.**  
*Thes.*, Experiments in Medicated Waters.
- Samuel Howard Shingle, Ph.G.**  
*Thes.*, Fluid Extract of Pruni Virginiana.  
 Retail pharmacist.  
*Ad.*, 1444 N. 19th Street, Phila., Pa.
- Frank Leroy Slocum, Ph.G.**  
*Thes.*, Sanguinaria Canadensis.  
 Chemical engineering and research. Graduated in chem., mat. med. and physics Univ. of Strassburg, 1883.  
*Ad.*, 401 S. Linden Avenue, Pittsburgh, Pa.
- \***Edward Newton Smith, Ph.G.**  
*Thes.*, Examination of Ericaceous Plants.
- Edward W. Smith, Ph.G.**  
*Thes.*, Morphia Strength of Tinctura Opil.  
*Ad.*, 1309 Scott Street, Williamsport, Pa.
- William Clay Smith, Ph.G.**  
*Thes.*, Specific Gravity and Increase of Volume.
- \***William Ellwood Speakman, Ph.G.**  
*Thes.*, Cinnamomum Zeylanicum.  
 Chemist. Mem. Union League Club, Phila. Connected with several manufacturing houses, Phila. Deceased, May 13, 1915.
- John George Spengler, Ph.G.**  
*Thes.*, Destructive Distillation Products of Wood.  
*Ad.*, 1332 Harvard Street, N.W. Washington, D. C.
- \***Beach Jones Stathem, Ph.G.**  
*Thes.*, Pharmacy.  
 Retail pharmacist, Phila. Deceased, May 23, 1913.
- \***Everard Potter Stephens, Ph.G.**  
*Thes.*, Sanguinaria Canadensis.
- Henry Herman Strater, Ph.G.**  
*Thes.*, The Prescription.
- Jamea Willa Swope, Ph.G.**  
*Thes.*, Emplastrum Plumbi.  
*Ad.*, 2522 E. 73d Street, Chicago, Ill.
- \***William Tag, Ph.G.**  
*Thes.*, Blue in Granulated Sugar.
- John Dalzell Taylor, Ph.G.**  
*Thes.*, Glycyrrhiza.  
 Retail pharmacist.  
*Ad.*, 1541 S. 22d Street, Phila., Pa.
- Henry Thornton, Ph.G.**  
*Thes.*, Suppositories.  
 Pres. and Gen. Mgr. Uricol Chemical Co. 25 years with Parke, Davis and Co. Pres. Commonwealth Country Club.  
*Ad.*, Brookline, Mass.
- Charlea Godfrey Traub, Ph.G.**  
*Thes.*, The Bark of Sambucus Canadensis.  
 Retail pharmacist.  
*Ad.*, Fort Pierce, Fla.
- Josiah S. Tyree, Ph.G.**  
*Thes.*, Proventriculus Gallinaceus.  
 Pres. J. S. Tyree, Chemist, Inc. 2d Vice-pres. District Nat'l Bank; Director, Continental Trust Co.  
*Ad.*, 15th and H Streets, N.E., Washington, D. C.
- Edwin Virden, Ph.G.**  
*Thes.*, Capsicum Annuum.
- John Edward Wallis, Ph.G.**  
*Thes.*, Anacyclus Pyrethrum.  
 Physician.  
*Ad.*, 2642 Richmond Street, Phila., Pa.
- Henry Lee Warne, Ph.G.**  
*Thes.*, Ethereal Strength of Spiritus Aetheris Nitrosi.
- William Richard Warner, Jr., Ph.G.**  
*Thes.*, Pilula Ferri Iodidi.  
 Retired. Formerly member of firm of Wm. R. Warner and Co.  
*Ad.*, Duffryn Mawr, Chester Co., Pa.
- Frank Craven Weaver, Ph.G.**  
*Thes.*, Cascara Sagrada.
- Henry Bacon Weaver, Ph.G.**  
*Thes.*, Pharmaceutical Art.  
 Mfg. chemist. Retail pharmacist until 1912.  
*Ad.*, Burlington, N. J.
- \***Christian Weiss, Ph.G.**  
*Thes.*, Ginger and Its Preparations.  
 Retail pharmacist, Phila. Deceased, October 19, 1918.
- \***Stephen Arnold Douglass Willever, Ph.G.**  
*Thes.*, Yerba Tussilago.  
 With Bruen, Ritchey and Co. Deceased, 1918.
- Will Clark Williams, Ph.G.**  
*Thes.*, Organic Alkalies.
- Matthew James Wilson, Ph.G.**  
*Thes.*, Eucalyptus Globulus.  
 Retired. Graduated in medicine Univ. of Vermont, 1883. Mem. Sch. Board. Mem. Board of Public Education, 1896-1905 and 1908-1911. Retail pharmacist until 1909.  
*Ad.*, 4143 N. Broad Street, Phila., Pa.
- \***Henry Zaun, Ph.G.**  
*Thes.*, Alcohol.

- Collier Levis Bower, Ph.G.**  
*Thes.*, Brandied Tinctures.  
Physician.  
*Ad.*, 255 S. 16th Street, Phila., Pa.
- \*John M. Bradford, Ph.G.**  
*Thes.*, Fraxinus Americana.  
Deceased, February 2, 1911.
- Charles Edward Buck, Ph.G.**  
*Thes.*, Bismuthi Subnitras.
- John Albert Bush, Ph.G.**  
*Thes.*, Ointments.
- \*Huizinga Clarence Byers, Ph.G.**  
*Thes.*, Manufacture of Wine.  
Salesman for Hance Bros. and White, Phila. Deceased, February 22, 1920.
- Chambers Brown Clapp, Ph.G.**  
*Thes.*, Prunus Virginiana.
- \*Jacob Miller Clark, Ph.G.**  
*Thes.*, Glucose.  
Deceased, July 5, 1896.
- Jonas Gerhard Clemmer, Ph.G.**  
*Thes.*, Liquor Potassæ.  
*Ad.*, 3438 Walnut Street, Phila., Pa.
- Virgil Coblentz, Ph.G.**  
*Thes.*, Ipomoea Jalapa.  
Chemist. *Phar. M.* 1895. Studied in Univ. Göttingen, Strassburg, Würzburg, Munich; Ph.D. Berlin, 1891. Prof. Mat. Med. and Toxicology, Cincinnati College of Pharmacy, 1884-87. Prof. Chem. and Physics, N. Y. College Pharmacy, 1891-1911. Chief chemist, E. R. Squibb and Sons. Mem. U. S. P. Rev. Com. Fellow Chem. Soc., London; Soc. Chem. Industry, Great Britain. Mem. Deutsche Chemische Gesellschaft; Amer. Chem. Soc.; A. Ph. A., etc. Author.  
*Ad.*, 5 Beckman Street, New York City.
- Isaac Cohen, Ph.G.**  
*Thes.*, Incompatibility of Medicines.  
*Ad.*, 1302 Filbert Street, Phila., Pa.
- Richard Frazier Collins, Ph.G.**  
*Thes.*, Jamaica Dogwood.  
*Ad.*, Newark, Ohio.
- \*William Moore Guilford Corrie, Ph.G.**  
*Thes.*, Glycerine.
- Edmund Auatin Crenshaw, Jr., Ph.G.**  
*Thes.*, Mediocrity in Pharmacy.  
Life insurance agt. With Bullock and Crenshaw, wholesale druggists, until 1892. Graduated Univ. of Penna., 1877.  
*Ad.*, 6616 Emlen Street, Germantown, Phila., Pa.
- Benjamin Amos Cunningham, Ph.G.**  
*Thes.*, Extractum Pruni Virginianæ Fluidum.
- Charles William Dare, Ph.G.**  
*Thes.*, Aether.  
Retail pharmacist. Pres. Board of Sch. Trustees; Treas. Board of Trade.  
*Ad.*, Port Jefferson, N. Y.
- \*Charles William DeFrehn, Ph.G.**  
*Thes.*, Rhus Glabrum.  
Retail pharmacist, Baltimore, Md. Deceased, July 11, 1911.
- Charles August Theodore Doench, Ph.G.**  
*Thes.*, Resina Scammonii.
- James Edgar Drorhaugh, Ph.G.**  
*Thes.*, Syrups by Percolation.  
Physician.  
*Ad.*, 30 N. 4th Street, Sunbury, Pa.
- \*Walter Crull Dugan, Ph.G.**  
*Thes.*, Glucose.  
Retail pharmacist, Frederick, Md. Deceased, 1912.
- Howard Mell Edwards, Ph.G.**  
*Thes.*, American Ash Bark.
- \*William Edgar Finney, Ph.G.**  
*Thes.*, The Ethics of Dispensing.  
Deceased, 1915.
- John Davie Forbes, Ph.G.**  
*Thes.*, Doryphora Decemlineata.
- Charles McClellan Forney, Ph.G.**  
*Thes.*, Iodine Penta-Bromide as a Test for Volatile Oils.  
*Ad.*, 31 N. 2d Street, Harrisburg, Pa.
- William Otterhein Frailey, Ph.G.**  
*Thes.*, Drugs Used as Diet for the Sick.  
Retail pharmacist. Ex-pres. Penna. Pharm. Assn.; Mem. A. Ph. A., etc.  
*Ad.*, Lancaster, Pa.
- Walter Seip Freeman, Ph.G.**  
*Thes.*, Petrolene in Ointments.  
Physician. Graduated in medicine, 1901. Retail pharmacist 17 years. Mem. Med. Reserve Corps.  
*Ad.*, 909 W. Susquehanna Avenue, Phila., Pa.
- \*Samuel Harrison French, Ph.G.**  
*Thes.*, Pepsin and Its Digestive Test.
- Joseph Millan Fronefield, Jr., Ph.G.**  
*Thes.*, Pharmaceutical Preparations.  
Real estate agt. Retail pharmacist until 1910.  
*Ad.*, Wayne, Pa.
- \*Frank Geddea, Ph.G.**  
*Thes.*, Quillaia.
- \*Jacob Franklin D. Geiger, Ph.G.**  
*Thes.*, A New Base for Suppositories.  
Deceased, October 19, 1915.
- Orton Harris Gentry, Ph.G.**  
*Thes.*, The Preparation of Syrups.  
*Ad.*, Independence, Mo.
- George Waahington Goldamith, Ph.G.**  
*Thes.*, Scilla Maritima.  
*Ad.*, 1800 N. 16th Street, Phila., Pa.
- Howard Lee Green, Ph.G.**  
*Thes.*, Osmorrhiza longistylis.  
Physician and pharmacist. Graduated in medicine Jeff. Med. College, 1897. Masonic affiliation.  
*Ad.*, Bridgeport, Pa.
- \*John Elleworth Gregory, Ph.G.**  
*Thes.*, Resina Podophylli.  
Retail pharmacist, Pottsville, Pa. Deceased, May 28, 1916.
- John Henry Harmanson, Ph.G.**  
*Thes.*, Stillingia Sylvatica.
- Oscar Eugene Harris, Ph.G.**  
*Thes.*, The Pharmacist and Physician.
- \*George Washington Hayea, Ph.G.**  
*Thes.*, Value of Commercial Powdered Rhubarb.  
Deceased, June 20, 1910.
- \*Robert G. H. Hayea, Ph.G.**  
*Thes.*, Syrupus Ipecacuanhæ.  
Deceased, June, 1917.
- Emil M. Herwig, Ph.G.**  
*Thes.*, The Preparations of Iodide of Iron.
- Joseph Herbert Hulme, Ph.G.**  
*Thes.*, Commercial Powdered Opium.
- Frederick Jacob Knaua, Ph.G.**  
*Thes.*, Alcohol and Its Derivatives.  
Attorney at Law. Graduated Univ. of Penna. Law Sch. 1889. Retail pharmacist until 1889. Chm. Legal Advisory Board, No. 11.  
*Ad.*, 1709 N. 55th Street, Phila., Pa.
- \*Harry Howard Kneidler, Ph.G.**  
*Thes.*, Oleic Acid and the Oleates.



- Jacob Hamilton Knouse, Ph.G.**  
*Thes.*, Commercial Aqua Ammonia.  
*Ad.*, 125 Pine Street, Harrisburg, Pa.
- Emil John Kohl, Ph.G.**  
*Thes.*, Mixtures or Emulsions.  
 General agt. Northwestern Mutual Life Ins. Co.  
 and retail pharmacist.  
*Ad.*, 213 S. Illinois Street, Belleville, Ill.
- Newton Alexander Koser, Ph.G.**  
*Thes.*, Botany.  
 Retail pharmacist. Masonic affiliation.  
*Ad.*, 1301 Broadway, Oakland, Cal.
- Charles Frederick Kramer, Ph.G.**  
*Thes.*, Gelatin Tests of Astringent Drugs.  
 Retail pharmacist. Mem. Penna. Board of Phar-  
 macy; A. Ph. A.; Penna. Pharm. Assn.  
*Ad.*, 3d and Broad Streets, Harrisburg, Pa.
- Frederick Balthaer Krell, Ph.G.**  
*Thes.*, Erythroxyton Coca.
- \*Walter Harry Kremer, Ph.G.**  
*Thes.*, Cimicifuga Racemosa.  
 Graduated in medicine Univ. of Penna. 1884.  
 Practiced in Germantown, Phila. Deceased, March  
 15, 1919.
- John Albert Lambert, Ph.G.**  
*Thes.*, Ammonii Iodidum.
- Oscar F. Letoriere, Ph.G.**  
*Thes.*, Carbolic Acid as a Disinfectant.  
*Ad.*, 210 S. 11th Street, Phila., Pa.
- Josiah Kirby Lilly, Ph.G.**  
*Thes.*, Aralia Spinosa.  
 Mfr. pharmaceutical and biological products. Pres.  
 Eli Lilly and Co. since 1898. Mem. numerous  
 pharmaceutical, chemical and scientific societies.  
*Ad.*, Indianapolis, Ind.
- David Christopher Lyman, Ph.G.**  
*Thes.*, Advance of Science.  
 Representative, Keasbey and Mattison Co., Ambler,  
 Pa. Formerly retail pharmacist.  
*Ad.*, 3309 N. 17th Street, Phila., Pa.
- Alexander McAlister, Ph.G.**  
*Thes.*, Extractum Carnis.  
 Physician. Graduated in medicine Univ. of Penna.  
 1885. Phys. Camden Home for Friendless Child-  
 ren and West Jersey Orphanage. Chm. and Pres.  
 Camden Co. Tuberculosis Assn.; Trustee Carnegie  
 Library Assn.; Secy. State Board of Med. Ex-  
 aminers of N. J. Chm. Camden Co. Med. De-  
 fense.  
*Ad.*, 580 Federal Street, Camden, N. J.
- Robert Davis McDougal, Ph.G.**  
*Thes.*, Acidum Phosphoricum Dilutum.  
 Retail pharmacist. Director Central Nat'l Bank.  
 Pres. Springdale Cemetery Assn.  
*Ad.*, Peoria, Ill.
- Samuel Harbeaon McGowan, Ph.G.**  
*Thes.*, Radix Taraxaci.  
*Ad.*, 4th and Cumberland Streets, Lebanon, Pa.
- Henry Conrad Mannel, Ph.G.**  
*Thes.*, Some Practical Hints of Prescribing.  
 Retail pharmacist.  
*Ad.*, 31 Linden Park, Buffalo, N. Y.
- Franklin Augustus Mathis, Ph.G.**  
*Thes.*, Primitive Compared to Modern Pharmacy.
- \*W. Leaming Matthews, Ph.G.**  
*Thes.*, Pharmaceutical Preparations.  
 Deceased, July 10, 1910.
- William Harry Msy, Ph.G.**  
*Thes.*, Prescriptions.  
*Ad.*, Egg Harbor City, N. J.
- Henry William Mehl, Ph.G.**  
*Thes.*, The Adulteration of Cream of Tartar.  
*Ad.*, 5th and Delaware Streets, Leavenworth, Kan.
- \*James Honey Mercer, Ph.G.**  
*Thes.*, Acidum Tartaricum.  
 Deceased, January 21, 1921.
- \*Evan B. Merriam, Ph.G.**  
*Thes.*, Emulsion of Cod Liver Oil with Phosphate  
 of Calcium.  
 Deceased, November 18, 1914.
- Aaron Gable Miller, Ph.G.**  
*Thes.*, Syrups by Cold Percolation.  
 Physician.  
*Ad.*, 6161 Haverford Avenue, Phila., Pa.
- John Knox Miller, Ph.G.**  
*Thes.*, Oils and Fats.
- Lucius Wright Moody, Ph.G.**  
*Thes.*, Boracic Acid.
- William John Morton, Ph.G.**  
*Thes.*, Emulsions.
- Edward J. Muldoon, Ph.G.**  
*Thes.*, Opium.
- \*Alfred Müllhaupt, Ph.G.**  
*Thes.*, Eriodicyton Californicum.  
 Graduated in medicine, Jeff. Med. College, 1884.  
 Practicing physician until time of death. Deceased,  
 May 25, 1920.
- \*John Henry Murray, Ph.G.**  
*Thes.*, Palatable Medicines.  
 Deceased, August, 1890.
- \*William Gilmore Nixon, Ph.G.**  
*Thes.*, The Microscope in Pharmacy.
- George Leonard Ott, Ph.G.**  
*Thes.*, Eupatorium Perfoliatum.
- William Franklin Pottelger, Ph.G.**  
*Thes.*, Acidum Sulphuricum Aromaticum.  
 Retail pharmacist.  
*Ad.*, Reading, Pa.
- Edward S. Power, Ph.G.**  
*Thes.*, The Cinchona Tree.  
 Physician and pharmacist.  
*Ad.*, 4166 Girard Avenue, Phila., Pa.
- John Abram Price, Ph.G.**  
*Thes.*, Commercial Purified Chinoidine.
- \*Ross Rambo, Ph.G.**  
*Thes.*, Eucalyptus Globulus.  
 Deceased, July 31, 1886.
- George Prentice Raer, Ph.G.**  
*Thes.*, Chemical Research.  
 Representative, Smith, Kline and French Co.  
*Ad.*, 429 Arch Street, Phila., Pa.
- \*Gustav Adolph Renz, Ph.G.**  
*Thes.*, Examination of Commercial Potassium  
 Iodide.  
 Deceased, May, 1919.
- \*Theodore William Renting, Ph.G.**  
*Thes.*, Petroleum.  
 Retail pharmacist, Titusville, Pa. Deceased, Jan-  
 uary 12, 1910.
- William Davis Reynolds, Ph.G.**  
*Thes.*, The Habitual Use of Narcotics.  
 Retail pharmacist.  
*Ad.*, 204 Atlantic Avenue, Atlantic City, N. J.
- Charles Naphtel Riggs, Ph.G.**  
*Thes.*, How to Detect Alcohol in Essential Oils.  
 Representative, Richard Hudnut, N. Y. Mem.  
 Rotary Club; Army and Navy Club. Masonic  
 affiliation.  
*Ad.*, 409 W. Strafford Street, Germantown, Phila-  
 delphia, Pa.

- \*William Ernest Roeschel, Ph.G.**  
*Thes.*, Chemical Urinalysis.  
 Retail pharmacist, Boonville, Mo. Deceased,  
 November 12, 1916.
- William Robinson Ross, Ph.G.**  
*Thes.*, *Aspidosperma Quebracho*.
- George Mathias Schamps, Ph.G.**  
*Thes.*, Benzoate of Calcium.  
*Ad.*, Manhattan Annex, Cleveland, Ohio.
- \*Frederick Charles Scheible, Ph.G.**  
*Thes.*, Morphometric Strength of Opiums.  
 Retail pharmacist 35 years. Alderman, Mobile,  
 Ala., 9 years.  
*Ad.*, 1262 Government Street, Mobile, Ala.
- Charles August Schoenenberger, Ph.G.**  
*Thes.*, Oil of Bitter Almonds.  
 Retail pharmacist.  
*Ad.*, 1123 Centre Street, Ashland, Pa.
- Benjamin Franklin Scholl, Ph.G.**  
*Thes.*, The Comparative Value of Benzoin and  
 Styrax in the Preservation of Ointments.  
 Physician.  
*Ad.*, 1420 N. 17th Street, Phila., Pa.
- Samuel Edward Schwetzler, Ph.G.**  
*Thes.*, Toxicology.
- \*Frederick Seitz, Ph.G.**  
*Thes.*, Mercury and Its Preparations.  
 Graduated in medicine, Jeff. Med. College. Physi-  
 cian and pharmacist, Phila. Deceased, Novem-  
 ber 10, 1914.
- \*John George Seitz, Ph.G.**  
*Thes.*, Acidum Phosphoricum Dilutum.  
 Retail pharmacist, Cleveland, Ohio. Deceased,  
 April 1, 1885.
- George Whitefield Sellers, Ph.G.**  
*Thes.*, Syrups by Cold Process.
- Judson Stewart Smith, Ph.G.**  
*Thes.*, Soluble Hypodermic Pellets.
- \*Eugene Abraham Stahler, Ph.G.**  
*Thes.*, Podophyllum.  
 Deceased, November 17, 1903.
- Harry Reader Stallman, Ph.G.**  
*Thes.*, Celery Seed.  
 Retail and wholesale druggist.  
*Ad.*, 927 W. Main Street, Norristown, Pa.
- Frederick William Edward Stedem, Ph.G.**  
*Thes.*, The Value of Cinchona Bark.  
 Manufacturing Chemist. Retail pharmacist until  
 1913.  
*Ad.*, Box 331, Narberth, Pa.
- Harry Ehrhart Steinhilber, Ph.G.**  
*Thes.*, A Model Pharmacy.  
 Mfr. "Chola-Sol Capsules" and representing Nulyne  
 Laboratories, Jackson, Mich., in N. Y. Retail  
 pharmacist until 1915.  
*Ad.*, 601 W. 140th Street, New York City.
- William Denny Stevenson, Ph.G.**  
*Thes.*, Preparations of Citrate of Iron.  
 Physician.  
*Ad.*, 105 Perry Street, Trenton, N. J.
- \*Cornelius Whitenack Stryker, Ph.G.**  
*Thes.*, Glucose from Cassava.  
 Retail pharmacist, Phila. Deceased, February 10,  
 1890.
- Walter Scott Swayne, Ph.G.**  
*Thes.*, Pharmaceutical Science.
- William Montelius Swentzell, Ph.G.**  
*Thes.*, Fermentation.  
 Retail pharmacist.  
*Ad.*, Wichita, Kansas.
- Daniel Judson Thomas, Ph.G.**  
*Thes.*, Administration of Liquid Medicines.  
 Retail pharmacist. Degree Phar.D. Medico-Chi.  
 College, 1913. Pres. Penna. Pharm. Assn.; Mem.  
 Scranton City Council and Board of Education.  
*Ad.*, 434 Clay Avenue, Scranton, Pa.
- Oscar Ernest Thomas, Ph.G.**  
*Thes.*, Water.
- Herman Emanuel Thoms, Ph.G.**  
*Thes.*, Phosphorus and Its Therapeutic Value.
- Paul Charles Henry Wallschlaeger, Ph.G.**  
*Thes.*, Simaruba Excelsa.
- Edwin Connor Warg, Ph.G.**  
*Thes.*, Hydrobromic Acid.  
 Physician. Graduated in medicine Jeff. Med. Col-  
 lege, 1889. Mem. Jeff. Hosp. service for a number  
 of years. Retail pharmacist until 1911. Mem.  
 Volunteer Med. Corps.  
*Ad.*, 1519 Montgomery Avenue, Phila., Pa.
- Jullus Way, Ph.G.**  
*Thes.*, Examination of Commercial Potassium  
 Bromide.  
 Physician. Mem. Volunteer Med. Service Corps.  
*Ad.*, Cape May Court House, N. J.
- Henry Webster, Ph.G.**  
*Thes.*, Salicylate of Cinchonidia.
- George Edward Wevill, Ph.G.**  
*Thes.*, Nitrogen.
- \*Simon E. Wolf, Ph.G.**  
*Thes.*, Bismuth Subnitrate.  
 Deceased, May 28, 1882.
- Stephen Disbrow Woolley, Ph.G.**  
*Thes.*, Pulvis Ipecacuanhæ Compositus.  
 Retail pharmacist. Mem. A. Ph. A.; Nat'l Assn.  
 Retail Druggists; Pres. N. J. Pharm. Assn., 1900.  
 Mem. Board of Education 12 years; Pres. 1907.  
 Mem. I. O. O. F. Masonic affiliation.  
*Ad.*, 43 Main Avenue, Ocean Grove, N. J.
- Clifford Monroe Woolston, Ph.G.**  
*Thes.*, *Pilocarpus Pennatifolius*.
- \*Isaac Wilson Worthington, Ph.G.**  
*Thes.*, The Analysis of Corn Silk.

1883

**E. Floyd Allen, Ph.G.**

*Thes.*, Oleum Gossypii Seminis.  
 Retail pharmacist. Pres. Allen Bros. Drug Co.  
 Vice-pres. Lavoris Chem. Co. Secy. Minn. State  
 Pharm. Assn., 1886-89; Pres. 1890.  
*Ad.*, 1538 Nicollet Avenue, Minneapolis, Minn.

**Charles Howard Andrews, Ph.G.**

*Thes.*, Elaterium.

**\*Milton Shimer Apple, Ph.G.**

*Thes.*, Glechoma.  
 Retail pharmacist, Phila.

**William Charles Armbrrecht, Ph.G.**

*Thes.*, The Essential Qualifications of a Pharmacist.  
 Retail pharmacist. Pres. Loveland Light and Water  
 Co. Vice-pres. Loveland Improvement Co. Pres.  
 Sunny Brook, Inc.  
*Ad.*, Wheeling, West Va.

**\*Charles Frederick Arnold, Ph.G.**

*Thes.*, Relation of Parts by Weight to Parts by  
 Measure.  
 Deceased, 1901.

**Edward Everett Bagge, Ph.G.**

*Thes.*, *Chimaphila Umbellata*.  
 Retired. Formerly retail druggist and representa-  
 tive of the Metropolitan Life Ins. Co.  
*Ad.*, 1352 Ethan Avenue, Cincinnati, Ohio.

- Charles Harry Baker, Ph.G.**  
*Thes.*, Toxicology.  
*Ad.*, Trenton, N. J.
- Allen DeBow Ballentine, Ph.G.**  
*Thes.*, Coccus Cacti.  
*Ad.*, Newark, N. J.
- John Henry Balmer, Ph.G.**  
*Thes.*, Xanthoxylum.
- William Henry Barr, Jr., Ph.G.**  
*Thes.*, Anaesthetics.  
*Ad.*, 147 Oneida Street, Milwaukee, Wis.
- Charles Benjamin Baumgardner, Ph.G.**  
*Thes.*, Pills and Excipients.  
*Ad.*, 1617 8th Avenue, Altoona, Pa.
- William Henry Bellis, Ph.G.**  
*Thes.*, The Advantage of Heat in Percolation.
- Samuel Neuman Benjamin, Ph.G.**  
*Thes.*, Iris Versicolor.
- \*Stephen Conklin Bolton, Ph.G.**  
*Thes.*, Boroglyceride.  
 Pharmacist, Watertown, N. Y. Deceased, June 23, 1918.
- Henry Augustus Boorse, Ph.G.**  
*Thes.*, Pill Excipients.  
 Retired. Formerly retail pharmacist. Graduated Penna. State Normal Sch. degree B.S., 1880. Also Commercial College, Valparaiso, Ind., 1877.  
*Ad.*, 1040 DeKalb Street, Norristown, Pa.
- \*Frederick Smith Booth, Ph.G.**  
*Thes.*, Oleum Morrhuac.  
 Retail pharmacist, Phila. Deceased, October 24, 1890.
- Evan Garrett Boyd, Ph.G.**  
*Thes.*, Rhus Toxicodendron.
- Joseph Henry Brown, Ph.G.**  
*Thes.*, Salicylic Acid.  
*Ad.*, 610 W. 14th Street, Little Rock, Ark.
- Robert Craighead Browning, Ph.G.**  
*Thes.*, Spiritus Aetheris Nitrosi.
- Byron Edwin Bruenenheim, Ph.G.**  
*Thes.*, Cambogia.
- George White Butler, Ph.G.**  
*Thes.*, Pepsin.
- Milton Campbell, Ph.G.**  
*Thes.*, Improved Syrup of Wild Cherry.  
 Mfg. chemist. Pres. H. K. Mulford Co. Retail pharmacist until 1889. Mem. Phila. Art Club; Meridian Club; Easton, Md., County Club; St. Andrews Soc.; Phila. Chamber of Commerce. During World War Chm. Phila. Section of Drug, Paint and Chemical Div. of War Industries Board, and Mem. War Service Com. of Amer. Drug Mfrs. Assn.  
*Ad.*, 4401 Pine Street, Phila., Pa.
- \*Matthew Venable Cheatham, Ph.G.**  
*Thes.*, Xanthum Strumarium.  
 Deceased, 1909.
- John Houston McIntosh Clinch, Ph.G.**  
*Thes.*, An Analysis of the Leaves of Ceanothus Americanus.
- \*Walter Howard Cline, Ph.G.**  
*Thes.*, The Etymology of Some Official Plants and Minerals.
- Edward Nelson Cole, Ph.G.**  
*Thes.*, Glycerin and Its Use in the New Pharmacopœia.
- Mimma William Coleman, Ph.G.**  
*Thes.*, Tinctura Ferri Chloridi.
- \*John William Cook, Ph.G.**  
*Thes.*, Extractum Cannabis Indicae.
- Nathan Alexis Cozens, Ph.G.**  
*Thes.*, Alcohol.  
 Retired. Retail pharmacist until 1909. Charter Mem. Apothecaries Union (Now Phila. Wholesale Drug Co.). Rec. Secy. Phila. Assn. Retail Druggists, 8 years.  
*Ad.*, 15 High Street, Woodbury, N. J.
- Clark Rankin Craig, Ph.G.**  
*Thes.*, Commercial Arsenic.  
 Physician. Graduated in medicine Jeff. Med. College, 1893. Medical director, Presbyterian Ministers' Fund, and Girard Life Ins. Co. On staff St. Agnes Hosp., 11 years.  
*Ad.*, 331 S. 12th Street, Phila., Pa.
- Albert Douglas Cuskaden, Ph.G.**  
*Thes.*, Emulsions.  
 Automobile supplies. Graduated in medicine Jeff. Med. College, 1892.  
*Ad.*, 2 S. Michigan Avenue, Atlantic City, N. J.
- \*John Daly, Ph.G.**  
*Thes.*, Oleum Picis Liquidæ.
- John Henry Dare, Ph.G.**  
*Thes.*, The Pharmacist.  
*Ad.*, Bridgeton, N. J.
- Harry Irvin Davis, Ph.G.**  
*Thes.*, Water.  
*Ad.*, Hollidaysburg, Pa.
- William Henson Davis, Ph.G.**  
*Thes.*, Cinchona.
- Harry H. Deakynne, Ph.G.**  
*Thes.*, Boric Acid.  
 Retail pharmacist. Ex-pres. N. J. Pharm. Assn. Masonic affiliation.  
*Ad.*, 1600 Pacific Avenue, Atlantic City, N. J.
- Howard Dickson Dietrich, Ph.G.**  
*Thes.*, Hydrargyri Chloridum Mite.  
 Agent for Johnson and Johnson, Mfg. chemists. Formerly publisher "The Omaha Druggist," "The Pacific Drug Review," and "The Pharmacal Digest." Prof. of Pharmacy, Oregon College of Pharmacy, 1890-92. One of the organizers of Washington and Oregon State Pharm. Assn.  
*Ad.*, 576 Mission Street, San Francisco, Cal.
- Eoger William Duffey, Ph.G.**  
*Thes.*, Alcohol.  
*Ad.*, 1747 Columbia Road, Washington, D. C.
- Milton Jacob Dunder, Ph.G.**  
*Thes.*, Unguentum Hydrargyri Nitratis.
- Frederick Rudolph Eilinger, Ph.G.**  
*Thes.*, Oil Emulsions with Acacia.
- Joseph Winters England, Ph.G.**  
*Thes.*, Myrtus Cheken.  
 Director, Research Lab., Smith, Kline and French Co., since 1902. Asst. pharmacist, Phila. Gen. Hosp., 1884-86. Chief druggist, 1886-1900. Curator, P. C. P. Museum, 1887-1919. Mem. Board of Trustees since 1892. Mem. Exec. Board Alumui Assn., P. C. P., 1884; Corres. Secy., 1888-89; 2d Vice-pres., 1889-90; 1st Vice-pres., 1890-91; Pres., 1891-92; Recording Secy. since 1904. Degree Ph.M. from P. C. P., 1903. Ed. Alumui Report P. C. P., 1891-1900. Mem. A. Ph. A. Secy. of Council 11 years. Mem. U. S. P. Rev. Com., 1910-20. Secy. Phila. Drug Exchange; Mem. Amer. Med. Assn. Masonic affiliation. Author.  
*Ad.*, 415 N. 33d Street, Phila., Pa.
- \*John Riley Eesenwein, Ph.G.**  
*Thes.*, Syrupus Theobromæ.
- Harry Buckley Faalg, Ph.G.**  
*Thes.*, Absorbent Cotton.  
 Physician and surgeon. Graduated in medicine, College of Physicians and Surgeons, San Francisco, Cal., 1897. Retail pharmacist until 1897.  
*Ad.*, 2121 N. Broadway, Los Angeles, Cal.



- Edgar Burnside Fell, Ph.G.**  
*Thes.*, Extractum Pruni Virginiana Fluidum.  
 Retail pharmacist.  
*Ad.*, Concord Avenue and Monroe Street, Wilmington, Del.
- Frank Byerly Fleming, Ph.G.**  
*Thes.*, Tincture of Vanilla.  
 Retail pharmacist.  
*Ad.*, Shippensburg, Pa.
- \***Daniel William Flemming, Ph.G.**  
*Thes.*, Balsamum Peruvianum.  
 Physician. Graduated in medicine Jeff. Med. College, 1889. Practiced in Phila. Deceased, June 14, 1914.
- William Charles Franciscus, Ph.G.**  
*Thes.*, Volumetric Quantitative Analysis of Liquor Potassii Arsenitis.
- John Frederick Frankkiser, Ph.G.**  
*Thes.*, Hamamelis.
- John Peter Frey, Ph.G.**  
*Thes.*, Canella Alba.  
*Ad.*, 727 N. 64th Street, Phila., Pa.
- \***John William Frey, Ph.G.**  
*Thes.*, Acetic Acid.  
 Retail pharmacist, Phila. Deceased, November 5, 1920.
- \***Charles Joseph Valentine Fries, Ph.G.**  
*Thes.*, Chemical Examination of Volatile Oils.  
 Physician. Graduated in medicine Hahnemann Med. College. Practiced in Phila. Deceased, August 30, 1918.
- William Baumgardner Gleim, Ph.G.**  
*Thes.*, Trifolium Pratense.  
*Ad.*, 4438 Germantown Avenue, Phila., Pa.
- Harvey Jonas Tilghman Good, Ph.G.**  
*Thes.*, Emulsions with Gelatin.
- Harry Tilford Gray, Ph.G.**  
*Thes.*, Sugars.
- Henry Hamilton Gregg, Jr., Ph.G.**  
*Thes.*, Nitric Acid.  
 Retail pharmacist.  
*Ad.*, 4313½ Upton Avenue, S. Minneapolis, Minn.
- Samuel Stratton Gnest, Ph.G.**  
*Thes.*, Gelatin.  
 Retail pharmacist.  
*Ad.*, Swedesboro, N. J.
- Gustave Hahn, Ph.G.**  
*Thes.*, Humulus.
- \***Charles Wesley Hallowell, Ph.G.**  
*Thes.*, Cascara Sagrada.  
 Deceased, June 6, 1920.
- William T. Hanigan, Ph.G.**  
*Thes.*, The Growth of Pharmacy.
- \***Gwen Burdette Hannon, Ph.G.**  
*Thes.*, Gaylussacia Resinosa.  
 Retail pharmacist, Canton, Ohio. Trustee Cleveland Sch. of Pharmacy. Deceased, 1915.
- \***Frank Pierce Harris, Ph.G.**  
*Thes.*, Rhamnus Purshiana.
- James Oliver Harrison, Ph.G.**  
*Thes.*, Crystallography.  
*Ad.*, 451 E. 22d Street, Baltimore, Md.
- \***Susan Hayhurst, M.D., Ph.G.**  
*Thes.*, Dispensary Work.  
 First woman graduate of P. C. P. Graduated in medicine, Woman's Med. College of Phila., 1857. Member of staff of that institution. One of the first women physicians to practice medicine in America.
- \***Thomas Jerdona Haynes, Ph.G.**  
*Thes.*, Pills.  
 Deceased, March 17, 1918.
- John Clement Heisler, Ph.G.**  
*Thes.*, Separation of Potassium Bromide from Potassium Iodide.  
 Physician.  
*Ad.*, 3829 Walnut Street, Phila., Pa.
- Gustav C. F. Helm, Jr., Ph.G.**  
*Thes.*, Analysis of Commercial Solution of Citrate of Magnesia.
- John Marshall Horsey, Ph.G.**  
*Thes.*, Fluid Extract of Wild Cherry.
- Theodore Milton Johnson, Ph.G.**  
*Thes.*, Pills and Their Excipients.  
 Physician. Health officer, Long Beach, N. Y. Mem. Exemption Board.  
*Ad.*, 26 W. 27th Street, New York City.
- \***Daniel R. Jones, Ph.G.**  
*Thes.*, Commercial Pepsin.  
 Retail pharmacist, Milwaukee, Wis. Deceased, February, 1916.
- Henry Morford Jones, Ph.G.**  
*Thes.*, Chemistry.
- James Miles Jones, Ph.G.**  
*Thes.*, Comptonia Asplenifolia.  
 Retail pharmacist.  
*Ad.*, Tamaqua, Pa.
- William Frederick Jungkunz, Ph.G.**  
*Thes.*, Granatum.  
*Ad.*, 2130 Beechwood Drive, Hollywood, Cal.
- Emile F. Kaempfer, Ph.G.**  
*Thes.*, Cubeba and Its Preparations.  
 Retail pharmacist. Studied Jeff. Med. College, 2½ years.  
*Ad.*, 1410 E. Moyamensing Avenue, Phila., Pa.
- Henry George Kalmbach, Ph.G.**  
*Thes.*, Preparations of Aconite and Its Alkaloid.  
 Retired. Formerly retail pharmacist.  
*Ad.*, 226 Woodlyn Avenue, Glenside, Pa.
- Heber Ker, Jr., Ph.G.**  
*Thes.*, Reactions of Mineral Acids and Various Tinctures.
- Frank Gault Kerr, Ph.G.**  
*Thes.*, Carbonic Acid Water.  
 Retail pharmacist. Mem. Arkansas State Board of Pharmacy, 4 years.  
*Ad.*, Vanburen, Ark.
- William D'Olier Kerr, Ph.G.**  
*Thes.*, Pharmaceutical Etiquette.
- \***John Cathcart Keys, Ph.G.**  
*Thes.*, Laws Relating to Drops.
- \***Rudolph Kindig, Ph.G.**  
*Thes.*, Eriodictyon.  
 Physician and pharmacist. Graduated in medicine Jeff. Med. College, 1887. Practiced in Phila. Deceased, June 17, 1916.
- James Edgar Kirk, Ph.G.**  
*Thes.*, Syrupus Sennæ.  
 Pharmacist, City Board of Health, Jacksonville, Fla. Masonic affiliation.  
*Ad.*, 1437 Ernest Street, Jacksonville, Fla.
- Horace Thompson Kline, Ph.G.**  
*Thes.*, Practical Hints.
- John Harrison Klingler, Jr., Ph.G.**  
*Thes.*, Chemical Salts.
- James Delaplaine Krider, Ph.G.**  
*Thes.*, Calabar Bean.  
 With Powers, Weightman, Rosengarten Co.  
*Ad.*, 115 S. 50th Street, Phila., Pa.

- \*William Reif Lacy, Ph.G.**  
*Thes.*, Glycyrrhiza Glabra.
- Frederick Charles Lehman, Ph.G.**  
*Thes.*, The Efflorescence of Salts.  
Physician.  
*Ad.*, 25th and Columbia Avenue, Phila., Pa.
- Louis Charles Leonhard, Ph.G.**  
*Thes.*, Podophyllum Peltatum.  
Retired. Retail pharmacist until 1904.  
*Ad.*, 317 S. Main Street, Dayton, Ohio.
- \*William Wirt Light, Ph.G.**  
*Thes.*, Opuntia Vulgaris.
- Robert McCreight, Ph.G.**  
*Thes.*, Alkaloids.  
*Ad.*, 1340 E. Montgomery Avenue, Phila., Pa.
- Whitmel Horne MacNair, Ph.G.**  
*Thes.*, Viburnum Prunifolium.  
Retired. Retail pharmacist until 1910.  
*Ad.*, Tarboro, N. C.
- William Worrell Maddock, Ph.G.**  
*Thes.*, Pilula.  
Retail pharmacist.  
*Ad.*, 8th and Ashbury Avenue, Ocean City, N. J.
- Thomas Chew Marshall, Ph.G.**  
*Thes.*, Ergot and Its Preparations.
- Bernard Michel, Ph.G.**  
*Thes.*, Alcoholic Strength of Commercial Liquid Malt.  
Physician.  
*Ad.*, Dubuque, Iowa.
- Ewald Gustav Ferdinand Mickley, Ph.G.**  
*Thes.*, Accuracy, Purity and Presence of Mind in Pharmacy.
- Harold Baughman Miller, Ph.G.**  
*Thes.*, Seidlitz Powders.  
Physician. Med. Director, Security Mut. Life Ins. Co. Courses in medicine, Univ. of Penna. and Jeff. Med. College. Med. Advisor Selective Service System.  
*Ad.*, Lincoln, Neb.
- Turner Ashby Miller, Ph.G.**  
*Thes.*, Tinctura Opii.  
Retail pharmacist. Mem. Board of Pharmacy 22 years. Pres. Va. Pharm. Assn. 2 terms. Vice-pres. A. Ph. A.  
*Ad.*, 519 E. Broad Street, Richmond, Va.
- Thomas Newman Millikin, Jr., Ph.G.**  
*Thes.*, Sodio Citrate of Bismuth.  
*Ad.*, 1013 Madison Street, Wilmington, Del.
- James Moffet, Jr., Ph.G.**  
*Thes.*, Hamamelis Virginica.
- Horace Moll, Ph.G.**  
*Thes.*, Syrnus Pruni Virginianæ.
- \*Malcolm Murray, Ph.G.**  
*Thes.*, Humulus Lupulus.
- \*Lawrence August Neuhart, Ph.G.**  
*Thes.*, Cimicifuga.  
Deceased, June 7, 1883.
- Alfred Black Norcross, Ph.G.**  
*Thes.*, Miscibility of Powders with Water.  
With Crucible Steel Co. of America. Retail pharmacist until 1905. Pharmacist, City Hosp., Newark, N. J., 1909-16. With Thomas A. Edison, 1917-18, doing experimental chemical work.  
*Ad.*, 63 Center Street, Orange, N. J.
- Christopher O'Brian, Ph.G.**  
*Thes.*, Comparison of Syrup of Tolu in the New and Old Pharmacopœias.
- John Ogden, Ph.G.**  
*Thes.*, Glyceril Borate.  
Metallurgical chemist. Mine operator. Mem. Amer. Electro-chem. Soc.  
*Ad.*, 1657 Logan Street, Denver, Colo.
- Charles William Ott, Ph.G.**  
*Thes.*, Mitchella Repens.  
Retired. Retail pharmacist until 1919.  
*Ad.*, 2447 N. Fairhill Street, Phila., Pa.
- Thomas Pleasant Parish, Ph.G.**  
*Thes.*, Cinchona Flava.
- Isaac Spencer Phillips, Ph.G.**  
*Thes.*, Viburnum Prunifolium.
- Jacques Voorhees Quirk, Ph.G.**  
*Thes.*, Syrups.  
*Ad.*, Wahpeton, N. Dak.
- George Forester Kalaton, Ph.G.**  
*Thes.*, Preparations of Quebracho.  
Physician and pharmacist. Graduated in medicine, Jeff. Med. College, 1886. Med. Director Atlanta Research Lab.  
*Ad.*, Somers Point, N. J.
- \*Charles Filtz Randolph, Ph.G.**  
*Thes.*, Examination of Granulated Cane Sugar for Glucose.
- \*Benedict Nicholas Rapp, Ph.G.**  
*Thes.*, Phosphorus.  
Retail pharmacist, Phila. Deceased, January 25, 1890.
- Charles Sumner Reed, Ph.G.**  
*Thes.*, Salicornia.  
Retail pharmacist.  
*Ad.*, 805 Atlantic Avenue, Atlantic City, N. J.
- John Weasley Reeser, Ph.G.**  
*Thes.*, Camphora.
- Charles Wolf Reichard, Ph.G.**  
*Thes.*, Unguentum Hydrargyri Nitratis.
- Harrie Knox Richardson, Ph.G.**  
*Thes.*, Oleum Erigerontis.
- Charles Frank Rickey, Ph.G.**  
*Thes.*, Our Ph.G.
- \*William Ruthrauff Roedel, Ph.G.**  
*Thes.*, The Efflorescence of Salts.  
Deceased, May 4, 1922.
- \*George Frederick Roehrig, Ph.G.**  
*Thes.*, Unguentum Hydrargyri Nitratis.  
Deceased, February 17, 1918.
- Frank Randall Rohman, Ph.G.**  
*Thes.*, Characteristics of Pharmacy.  
Pres. Phila. Wholesale Drug Co. Retail pharmacist until 1891. Vice-pres. P. C. P., 1921—.  
*Ad.*, 4603 Wayne Avenue, Phila., Pa.
- William Augustus Ruth, Ph.G.**  
*Thes.*, Queen of the Meadow.  
Steel foundry.  
*Ad.*, 332 S. Michigan Avenue, Chicago, Ill.
- \*George Washington Salot, Ph.G.**  
*Thes.*, On the Dispensing of Medicines in Drop Doses.  
Deceased, August 7, 1896.
- William E. Saunders, Ph.G.**  
*Thes.*, Insects Injurious to Drugs.
- \*James Samuel Scheffler, Ph.G.**  
*Thes.*, Glycerinum.  
Retail pharmacist, Pen Argyll, Pa. Deceased, February 5, 1915.
- Gustav Scherling, Ph.G.**  
*Thes.*, Cosmoline as a Base for Ointments.  
Retail pharmacist. Mem. A. Ph. A.  
*Ad.*, 1201 4th Street, Sioux City, Iowa.



- Charles Schindler, Ph.G.**  
*Thes.*, Confections.
- F. Joseph Schmidt, Ph.G.**  
*Thes.*, Specific Gravity.  
Retail pharmacist.  
*Ad.*, West Palm Beach, Fla.
- \*Daniel Schramm, Jr., Ph.G.**  
*Thes.*, Chloral.
- Andrew Jackson Seeler, Ph.G.**  
*Thes.*, Viburnum Radix Cortex.  
Dentist. Graduated Phila. Dental College, 1900.  
Served in U. S. N. as apothecary on S. Atlantic Sta., 3½ years. Retail pharmacist, 10 years. Mem. P. C. P. Alumni Assn.; Phila. Dental College Alumni Soc.; Acad. of Stomatology. Assoc. mem. Legal Advisory Board, 9th Dist. Masonic affiliation.  
*Ad.*, 525 N. 19th Street, Phila., Pa.
- \*Albert Tobias Sellera, Ph.G.**  
*Thes.*, Manipulations.
- Robert Simpson, Ph.G.**  
*Thes.*, Creasote.  
Retail pharmacist.  
*Ad.*, 201 N. 36th Street, Phila., Pa.
- Charles Michael Smith, Ph.G.**  
*Thes.*, Ipecacuanha.  
In printing and stationery business.  
*Ad.*, 1500 Franklin Street, Wilmington, Del.
- \*Stephen Douglas Smith, Ph.G.**  
*Thes.*, The Drug Apprentice.  
Deceased, February 17, 1889.
- Lewis Reed Souder, Ph.G.**  
*Thes.*, Successful Pharmacy.  
Physician.  
*Ad.*, 5 S. Victoria Avenue, Atlantic City, N. J.
- \*William Bayne Spence, Ph.G.**  
*Thes.*, The Manufacture of Olein.
- \*Frank Hernle Steacy, Ph.G.**  
*Thes.*, Jacaranda Caroba.  
Deceased, June 10, 1896.
- Jamea Buchanan Stoner, Ph.G.**  
*Thes.*, Cinchona.  
Surgeon, U. S. Pub. Health Service. Graduated in medicine Jeff. Med. College, 1885. Pharmacist, U. S. Marine Hosp. Service, 1883-88. Commissioned Med. Officer, U. S. Pub. Health Service, 1888. Special courses in bact. sanitation, hygiene, public health, quarantine procedure, hosp. management.  
*Ad.*, U. S. Marine Hosp., Pittsburgh, Pa.
- Nehemiah Dunham Streeter, Ph.G.**  
*Thes.*, Preparations of Syrups.  
Retail pharmacist.  
*Ad.*, N. W. Cor. Erie and Pulaski Avenues, Philadelphia, Pa.
- \*Anton Swabarter Tatzel, Ph.G.**  
*Thes.*, The Advantages of the Metric System.
- Samuel Henry Titus, Ph.G.**  
*Thes.*, Proprietary Medicines and the Retail Drug Trade.
- Alva Forman Tod, Ph.G.**  
*Thes.*, Sulphuric Acid.  
Physician. Graduated in medicine Jeff. Med. College, 1890. Retail pharmacist until 1900. Med. Examiner Local Draft Board.  
*Ad.*, 447 Diamond Street, Phila., Pa.
- Charles Lawrence Trusler, Ph.G.**  
*Thes.*, The Principle in Quillaja Bark.  
Representative, J. J. Grover's Sons Co., Lynn, Mass., Shoe Mfrs. Formerly with Eli Lilly and Co. and with Parke, Davis and Co.  
*Ad.*, 875 Woodruff Place, Indianapolis, Ind.
- George Allen Walker, Ph.G.**  
*Thes.*, Adulterations.
- William Henry Walter, Ph.G.**  
*Thes.*, Digitalis Purpurea.  
*Ad.*, 67 E. Slocum Street, Phila., Pa.
- George Washington Weber, Ph.G.**  
*Thes.*, Acidum Boricum.  
Retail pharmacist.  
*Ad.*, Millville, N. J.
- Morris Ellaworth Weber, Ph.G.**  
*Thes.*, Glycerin.
- Reinhard Julius Weber, Ph.G.**  
*Thes.*, Luffa *Ægyptiaca*.  
Insurance adjuster. Retail pharmacist until 1900. Health Officer 6 years. Deputy County Treas. Montgomery Co., 7 years.  
*Ad.*, 600 S. 40th Street, Phila., Pa.
- John Wasley Weir, Jr., Ph.G.**  
*Thes.*, Base for Ointments.
- Allen Leidig Werst, Ph.G.**  
*Thes.*, Sulphur.  
Retail pharmacist.  
*Ad.*, 2301 N. 2d Street, Phila., Pa.
- William Wilcox, Ph.G.**  
*Thes.*, Syrups.  
Representative, Henry K. Wampole and Co., Inc. Formerly with Lehn and Fink and with Schiefelin and Co.  
*Ad.*, 7502 Kelly Street, Pittsburgh, Pa.
- \*Theophilus Newton Willard, Ph.G.**  
*Thes.*, Diffusibility of Powders.
- James Williamson, Ph.G.**  
*Thes.*, Pharmacopœia, 1880.  
Physician. Graduated in medicine, Univ. of Penna., 1895. Retail pharmacist until 1901. Mem. Volunteer Med. Service Corps.  
*Ad.*, 2030 W. Tioga Street, Phila., Pa.
- Charles Wittig, Ph.G.**  
*Thes.*, Malt and Its Preparations.
- \*Otto Frank Zacherle, Ph.G.**  
*Thes.*, Unguentum Hydrargyri Nitratis.
- Joseph Philip Zoeller, Ph.G.**  
*Thes.*, Glycerin and Its Tests.

1884

**Frederick William Alexander, Ph.G.**  
*Thes.*, Linimentum Ammonia.

**\*Charles Spencer Allen, Ph.G.**  
*Thes.*, Pharmacy Laws and Ethics.  
Retail pharmacist, Bloomsbury, N. J. Deceased, July 11, 1909.

**Henry Warren Anderson, Ph.G.**  
*Thes.*, The Medicine Chest—Its Abuses.

**Grace Lee Babb, (Mrs. Griffith Abbot), Ph.G.**  
*Thes.*, The Microscopical Determination of the Value of Malt.  
Second woman to graduate from P. C. P.  
*Ad.*, Sleighton Farm, Darling, Pa.

**Thomas David Baker, Ph.G.**  
*Thes.*, *Piscidia Erythrina*.  
Retail pharmacist.  
*Ad.*, Lewisburg, Pa.

**Abraham Lincoln Ballinger, Ph.G.**  
*Thes.*, Impurities in Myrrh with Remarks on Syrup of Myrrh.  
Retail pharmacist.  
*Ad.*, Meadville, Pa.

**Harry Lee Barber, Ph.G.**  
*Thes.*, *Menispermum Canadense*.

**Edwin K. Beans, Jr., Ph.G.**  
*Thes.*, Tobacco.



- \*William Hart Betts, Ph.G.**  
*Thes.*, Caffea.
- Charles Wesley Bollinger, Ph.G.**  
*Thes.*, The Preparation and Manipulation of Medicines.  
Retail pharmacist.  
*Ad.*, Apollo, Pa.
- \*Curtis Jacob Bollman, Ph.G.**  
*Thes.*, Clerk and Student.  
Deceased, November 15, 1884.
- Edgar Ellsworth Booze, Ph.G.**  
*Thes.*, Lead and Lead Salts.
- \*William Cariton Boynton, Ph.G.**  
*Thes.*, Spigelia Marilandica.  
Deceased, August 5, 1885.
- Walter S. Bray, Ph.G.**  
*Thes.*, Tests for Albumen.  
Physician. Graduated in medicine, Jeff. Med. College, 1887. Visiting surg. Cooper Hosp. Camden. Chm. Camden Co. Democratic Exec. Com. Retired major surgeon, 3d Reg. N. G. N. J.  
*Ad.*, 210 State Street, Camden, N. J.
- Frank Frederick Bridgeman, Ph.G.**  
*Thes.*, Sodii Bromidum.
- Matthew Ashley Briggs, Ph.G.**  
*Thes.*, Eriodictyon Californicum.
- Buchanan Carter, Ph.G.**  
*Thes.*, Chloride of Sodium.  
*Ad.*, 109 Ralph Avenue, Brooklyn, N. Y.
- William E. Cassell, Ph.G.**  
*Thes.*, Convallaria Majalis.  
*Ad.*, 2235 N. 6th Street, Harrisburg, Pa.
- Isaac Eugene Chandler, Ph.G.**  
*Thes.*, Opium.  
*Ad.*, Kennett Square, Pa.
- \*Abraham Theophilus Clayton, Ph.G.**  
*Thes.*, Castanea.  
Deceased, June 6, 1922.
- William Lincoln Cliffe, Ph.G.**  
*Thes.*, Iris Versicolor.  
Retail pharmacist. Mem. A. Ph. A. Ex-pres. Penna. Pharm. Assn. Ex-mem. Penna. Board of Pharmacy. Trustee P. C. P.  
*Ad.*, 2803 Kensington Avenue, Phila., Pa.
- LaRue Robert Colegrove, Ph.G.**  
*Thes.*, Adulterations.  
Physician and surgeon. Surg. Arnot-Ogden Mem. Hosp., Elmira. Pres. U. S. Exam. Board of Pensions; State Examiner N. Y. State Hosp. for Incipient Tuberculosis. Ex-pres. Elmira Acad. of Medicine and Channing Co. Med. Soc. Mem. Draft Board. Post grad. courses, New York City, Berlin, Vienna, and London.  
*Ad.*, 423 W. Church Street, Elmira, N. Y.
- John Joseph Coleman, Ph.G.**  
*Thes.*, Cephaelis Ipecacuanha.  
Chemist and bacteriologist. Special courses in chem. and bact. P. C. P., 1904. Past treas. Nat'l Assn. Retail Druggists.  
*Ad.*, 2140 Chapline Street, Wheeling, W. Va.
- L. D. Paul Collins, Ph.G.**  
*Thes.*, Rhus.
- \*Harry C. Cook, Ph.G.**  
*Thes.*, Erythroxyton.  
Deceased, January 26, 1893.
- \*William Alexander Cook, Ph.G.**  
*Thes.*, The Action of Potassium Chlorate on Syrup of Iodide of Iron.
- Joseph Crawford, Ph.G.**  
*Thes.*, Martynia and Humble Servants.  
Pharmacist, Phipps Inst. Retail pharmacist until 1899. Director, Botanical Sec. Acad. Natural Sciences, Phila.  
*Ad.*, 16 E. Stewart Avenue, Lansdowne, Pa.
- \*Samuel Douglass Crawford, Ph.G.**  
*Thes.*, Ergot.
- \*Charles Thomas William Cress, Ph.G.**  
*Thes.*, Disinfectants.  
Deceased, June 30, 1902.
- John Whiteside Custer, Ph.G.**  
*Thes.*, Pills.
- \*Frederick Augustus Dalpe, Ph.G.**  
*Thes.*, Baycura.  
Deceased, April 29, 1920.
- Francis Leaming Darrach, Ph.G.**  
*Thes.*, Phytolacca Decandra.
- John Jenkins Davies, Ph.G.**  
*Thes.*, Boric Acid.  
Retail pharmacist.  
*Ad.*, 106 S. Main Avenue, Scranton, Pa.
- Bernard H. DeHuy, Ph.G.**  
*Thes.*, Aqua Marina.  
*Ad.*, Abilene, Kan.
- \*William Dutton, Ph.G.**  
*Thes.*, Pharmacy.
- Eugene Gustavus Eberle, Ph.G.**  
*Thes.*, Cascara Sagrada.  
Editor Journal A. Ph. A. Formerly Prof. of Pharmacy and Dean of Sch. of Pharmacy Baylor Univ. Dallas, Tex. Established and edited Southern Pharmaceutical Journal. Pres. Tex. Pharm. Assn., 1900-02. Pres. A. Ph. A., 1910-11. M.A. degree Baylor Univ., 1910. Ph.M., P. C. P., 1915. Mem. Rev. Com. U. S. P. Author. Masonic affiliation. Mem. Kappa Psi Frat.  
*Ad.*, 253 Bourse Bldg., Phila., Pa.
- \*Charles Matthew Edwards, Ph.G.**  
*Thes.*, Sanguinaria.  
Representative for Johnson and Johnson. Deceased, May 17, 1913.
- \*Edmund Hann Evans, Ph.G.**  
*Thes.*, Condensed Milk.  
Deceased, January 26, 1906.
- Milton Smoker Falck, Ph.G.**  
*Thes.*, Cimicifuga Racemosa.  
Treasury Dept. Lancaster Co., Pa. Formerly retail pharmacist. Supervisor U. S. Census, 4th Penna. Dist., 1910.  
*Ad.*, 517 W. James Street, Lancaster, Pa.
- John Charles Falk, Ph.G.**  
*Thes.*, The Assay of Citrate of Iron and Quinine.  
Physician. Graduated in medicine, 1890. Pres. St. Louis College of Pharm., 1915-17. Assoc. Prof. of Therapeutics Missouri Med. College, 1901-03.  
*Ad.*, 4568 Page Boulevard, St. Louis, Mo.
- Charles Louis Feldkamp, Ph.G.**  
*Thes.*, The Extracts of the Pharmacopœia.  
*Ad.*, 3269 Cottage Grove Avenue, Chicago, Ill.
- \*Frank Penicks Feters, Ph.G.**  
*Thes.*, Opium.
- \*William Anderson Feters, Ph.G.**  
*Thes.*, Potassium.  
Retail pharmacist, Phila. Deceased, May 22, 1916.
- \*Eugens A. Fillman, Ph.G.**  
*Thes.*, Datura Stramonium.  
Deceased, February 28, 1901.

- \*Robert Fechtig Finck, Ph.G.**  
*Thes.*, "To Know All This Is Wholesome."  
Deceased, December 10, 1884.
- George Thomas Fitzgeorge, Ph.G.**  
*Thes.*, Glycerin.  
Retail pharmacist. Secy. and treas. N. J. Pharm. Assn. Mem. Board of Education, Trenton, N. J. Served in U. S. A. Med. Dept. as Sgt. 1st Class.  
*Ad.*, Steel Pier Block, Atlantic City, N. J.
- Philip Thomas Fitzpatrick, Ph.G.**  
*Thes.*, Cambogia.  
Physician.  
*Ad.*, Care of Standard Drug Co., Lancaster, Pa.
- \*Daniel Follmer, Ph.G.**  
*Thes.*, Honey.  
Deceased, April 11, 1903.
- Frederick Henry Fox, Ph.G.**  
*Thes.*, Analysis of Syracuse Salt Water.
- William H. Gano, Jr., Ph.G.**  
*Thes.*, Scaled Salts of Iron.  
Director Girard Avenue, Title and Trust Co. Mem. and Treas. Alumni Assn. P. C. P. Formerly retail pharmacist.  
*Ad.*, Hampton Court, 207 N. 35th Street, Philadelphia, Pa.
- Charles Gardner, Ph.G.**  
*Thes.*, Zea Mays.
- John C. Goldbach, Ph.G.**  
*Thes.*, Decoctions and Infusions from Fluidextracts.
- Frank Barr Groff, Ph.G.**  
*Thes.*, Permanganate of Potash Pills.  
*Ad.*, 222 N. 13th Street, Phila., Pa.
- \*Humes Hall, Ph.G.**  
*Thes.*, Pepsin.
- Robert Newton Harper, Ph.G.**  
*Thes.*, Extractive Matter of Some Drugs.  
Banker and manufacturer. Treas. Wash. Wholesale Drug Exchange. Pres. Wash. Chamber of Commerce. Pres. Dist. of Columbia Bankers Assn. Delegate to Nat'l Democratic Conv. Four years on staff of Governor of Va.  
*Ad.*, 1406 G Street, N.W. Washington, D. C.
- William Henry Harrison Headley, Ph.G.**  
*Thes.*, Acidum Salicylicum.  
Retail pharmacist.  
*Ad.*, Wood and Washington Streets, Bristol, Pa.
- Eugene S. Heiberger, Ph.G.**  
*Thes.*, Creasotum.  
Retail pharmacist.  
*Ad.*, 6606 Chew Street, Germantown, Phila., Pa.
- \*Robert Lewis Hesson, Ph.G.**  
*Thes.*, Caffeina.  
Deceased, May 25, 1885.
- John Michael Hillan, Ph.G.**  
*Thes.*, Maydis Stigmata.
- \*Levi Ellsworth Hinckley, Ph.G.**  
*Thes.*, Our Pharmacists.  
Deceased, January 23, 1894.
- Levi Brook Hirst, Ph.G.**  
*Thes.*, Extemporaneous Coating of Pills.  
Physician. Graduated in medicine Jeff. Med. College, 1894. Oto-laryngologist to Cooper Hosp. Mem. Med. Advisory Board of N. J.  
*Ad.*, 586 Federal Street, Camden, N. J.
- Ephraim Zeigler Hoffman, Ph.G.**  
*Thes.*, Convallaria Majalis.
- \*Calvin Jerome Houck, Ph.G.**  
*Thes.*, Sanicula Marilandica.
- Oscar Houck, Ph.G.**  
*Thes.*, Sorghum Sugar.
- John Thompson Huff, Ph.G.**  
*Thes.*, Oleum Morrhuæ.
- \*George Herman Ischler, Ph.G.**  
*Thes.*, Cosmoline.  
Physician. Practiced in Phila. Deceased, October 4, 1904.
- Thomas C. Johnaton, Ph.G.**  
*Thes.*, Crystallography.
- \*James Frederick Judd, Ph.G.**  
*Thes.*, Rhamnus Purshiana.
- Frederick Rudolph Keller, Ph.G.**  
*Thes.*, Syrupi Pharmacopœiæ Novæ.  
Retail pharmacist.  
*Ad.*, 1812 S. 4th Street, Phila., Pa.
- \*George Dering Keller, Ph.G.**  
*Thes.*, A Good Elementary Education as Essential to the Study of Pharmacy.
- John William Keller, Ph.G.**  
*Thes.*, Emulsions.  
*Ad.*, 5534 Cedar Avenue, Phila., Pa.
- \*William Clarence Kelly, Ph.G.**  
*Thes.*, Acetic Acid.  
Deceased, 1917.
- William Henri King, Ph.G.**  
*Thes.*, Opium.
- \*Albert Henry Kinsey, Ph.G.**  
*Thes.*, Dispensing by Drops.  
Retail pharmacist 27 years.
- \*George Lewis Klump, Ph.G.**  
*Thes.*, Abuses in Pharmacy.
- William Matthew Koenig, Ph.G.**  
*Thes.*, Prunus Virginiana and Its Preparations.  
Pharmacist, Reading Hosp., Reading, Pa.  
*Ad.*, 703 N. 11th Street, Reading, Pa.
- \*Charles Franklin Krum, Ph.G.**  
*Thes.*, Phosphorus.  
Deceased, July 7, 1922.
- \*Louis Carl Kusenberg, Ph.G.**  
*Thes.*, Hydrogen Sulphide.  
Deceased, August 2, 1896.
- John Douty Kutzner, Ph.G.**  
*Thes.*, Chemical Affinity.
- \*William Harrison Laubach, Jr., Ph.G.**  
*Thes.*, Biborate of Lithium.  
Deceased, March 12, 1902.
- \*Charles Elsner Lawall, Ph.G.**  
*Thes.*, Glyceritum Amyli.
- Harry Bellerjean Leeds, Ph.G.**  
*Thes.*, Rhus Aromatica.  
Retail pharmacist. Vice-pres. Atlantic City Drug-gists Assn. Mem. Alumni Assn. P. C. P.  
*Ad.*, 1238 Atlantic Avenue, Atlantic City, N. J.
- Robert Leithead, Jr., Ph.G.**  
*Thes.*, Pilocarpus Pennatifolius.  
*Ad.*, 901 1st Avenue, Seattle, Wash.
- Isaac Edward Leonard, Ph.G.**  
*Thes.*, Oleum Ganththeriæ.  
Physician.  
*Ad.*, Atlantic and Brighton Avenues, Atlantic City, N. J.
- Clement Belton Lowe, Ph.G.**  
*Thes.*, Silico Fluorides.  
Prof. of Mat. Med. P. C. P. (See page 414.)  
*Ad.*, 21 Howard Street, Vineland, N. J.

- John Sloan McCauley, Ph.G.**  
*Thes.*, Jamaica Dogwood.  
 Sales mgr., Tex. and Okla., for Parke, Davis and Co.  
*Ad.*, 4611 Swiss Avenue, Dallas, Tex.
- \*James Ralston McCusland, Ph.G.**  
*Thes.*, Estimation of the Value of Laudanum.  
 Deceased, March 4, 1906.
- \*William John McConn, Ph.G.**  
*Thes.*, The Precipitate from Tincture of Sanguinaria.  
 Deceased, December 17, 1889.
- Franklin McCoy, Ph.G.**  
*Thes.*, Maydis Stigmata.  
 Retail pharmacist. Masonic affiliation.  
*Ad.*, Lexington, Ohio.
- Tracy McKenzie, Ph.G.**  
*Thes.*, The Assay of Cinchona Bark.  
 Land investments. Formerly retail pharmacist.  
 Mem. Sch. Board 16 years. Councilman 10 years.  
 Chm. Fuel Commission, Limestone Co., and Mem.  
 Council Nat'l Defense.  
*Ad.*, Box 284, Mexia, Tex.
- \*John Clarence McVickers, Ph.G.**  
*Thes.*, The Mineral Water Resources of West Virginia.
- George Frederick Maddock, Ph.G.**  
*Thes.*, Salts of Lithium.  
 Physician. Graduated in medicine, Univ. of City of New York. Ex-pres. Kings Co. Med. Assn.  
 Masonic affiliation.  
*Ad.*, 151 Clinton Street, Brooklyn, N. Y.
- Andrew Herman Joseph Maguire, Ph.G.**  
*Thes.*, Tinctura Nucis Vomicae.  
 Retail pharmacist. Mem. A. Ph. A.; Ill. Pharm. Assn.  
*Ad.*, 6543 Sheridan Avenue, Chicago, Ill.
- \*Henry Wilbur Maitland, Ph.G.**  
*Thes.*, Success in Pharmacy.
- Emlen Martin, Ph.G.**  
*Thes.*, Cantharis.  
 Retail pharmacist.  
*Ad.*, 315 Radcliffe Street, Bristol, Pa.
- John Edwin Martin, Ph.G.**  
*Thes.*, Emulsions.  
 Retail pharmacist. Served in Spanish-Amer. War with G Co., 12th Reg. Penna. Volunteers.  
*Ad.*, 416 S. Main Street, Jersey Shore, Pa.
- Harry Lovett Millar, Jr., Ph.G.**  
*Thes.*, Analysis of Acidum Phosphoricum.
- Frank Xavier Moerk, Ph.G.**  
*Thes.*, Malt.  
 Prof. of Analytical Chem. P. C. P. (See page 413.)  
*Ad.*, 145 N. 10th Street, Phila., Pa.
- \*Christian Moora, Ph.G.**  
*Thes.*, Bismuth.  
 Deceased, December 26, 1901.
- John August Morris, Ph.G.**  
*Thes.*, Symps.  
*Ad.*, 210 Rochelle Avenue, Roxborough, Phila., Pa.
- Louis Murjahn, Ph.G.**  
*Thes.*, Teucrium Scordium.
- \*James Whita Murrow, Ph.G.**  
*Thes.*, Cascara Sagrada.
- John Anthony Murtagh, Ph.G.**  
*Thes.*, Bland's Pills.  
*Ad.*, 3247 N. 13th Street, Phila., Pa.
- Thomas Oliver Nock, Ph.G.**  
*Thes.*, Abstracta.  
 Physician.  
*Ad.*, 821 N. 24th Street, Phila., Pa.
- Charles Hsrman Oberholtzer, Ph.G.**  
*Thes.*, Pharmaceutical Preparations of Maydis Stigmata.  
 Retail pharmacist.  
*Ad.*, Phoenixville, Pa.
- William Ogilby, Ph.G.**  
*Thes.*, Mineral Acids and Their Value.  
*Ad.*, Carlisle, Pa.
- Frank Boyd Olmstead, Ph.G.**  
*Thes.*, Potassii Iodidum.
- \*Melmoth Mercer Osborne, Ph.G.**  
*Thes.*, Boroglyceride.  
 Retail pharmacist and postmaster, Elkins Park, Pa.  
 Mem. numerous nat'l and state assns.; Amer. Acad. of Political and Social Science, etc. Deceased, July 25, 1922.
- Gomer David Owen, Ph.G.**  
*Thes.*, The Alkalinity of Commercial Bromide of Potassium.
- \*Evan Ingstrum Pattengill, Ph.G.**  
*Thes.*, Preparation of Fluid Extracts.  
 For many years mgr. Frostilla Plant, Elmira, N. Y.  
 Deceased, August 16, 1920.
- Edward Sing Petrie, Ph.G.**  
*Thes.*, Cinnamic Acid.
- \*Harlan Page Pettigrew, Ph.G.**  
*Thes.*, The Chemical Composition of Oils of Birch and Gaultheria.  
 Deceased, April, 1917.
- \*William Chsndler Pierca, Ph.G.**  
*Thes.*, Adeps Benzoinatus.
- Henry Charles Plange, Ph.G.**  
*Thes.*, Aloin.  
*Ad.*, Charleston, S. C.
- James A. Pool, Ph.G.**  
*Thes.*, Analysis of Magnesii Citras Granulatus.  
 Retail pharmacist. Pres. So. Dakota State Pharm. Assn. Mem. Board of Pharmacy.  
*Ad.*, Redfield, S. Dakota.
- \*Edmond Preston, Jr., Ph.G.**  
*Thes.*, Phytolacca Radix.  
 Deceased, December 18, 1894.
- Elmer Delaney Prickett, Ph.G.**  
*Thes.*, Corn Silk.  
 Physician. Graduated in medicine, 1898. Mem. Staff and supt. Bar Co. Hosp.; Mem. Board of Managers Bar Co. Tuberculosis Sanitarium.  
*Ad.*, Mt. Holly, N. J.
- \*William Van Dyke Reading, Ph.G.**  
*Thes.*, Percolation.  
 Retail pharmacist, Norristown, Pa. Deceased, July 23, 1911.
- William Reisert, Ph.G.**  
*Thes.*, The So-Called Bismuth Breath.  
 Physician. Mem. Med. Reserve Corps.  
*Ad.*, 1429 Morris Street, Phila., Pa.
- Charles Templeton Ritter, Ph.G.**  
*Thes.*, Preparations of Iron.
- Joshua Ellis Rohrer, Ph.G.**  
*Thes.*, Caulophyllum Thalictroides.  
 Pres. and Treas., Rohrer Drug Co.  
*Ad.*, 410 Fenimore Street, Brooklyn, N. Y.
- Walter Arabin Rumsey, Ph.G.**  
*Thes.*, Cornus Florida.  
 Retail pharmacist. Pres. Rumsey Drug Co. Ex-pres. Phila. Assn. Retail Druggists. Ex-pres. Alumni Assn. P. C. P. Vice-Chm. and Mem. P. C. P. Board of Trustees.  
*Ad.*, 6917 N. Broad Street, Phila., Pa.
- \*Frank Gibbs Ryan, Ph.G.**  
*Thes.*, Estimation of Magnesii Carbonas.  
 Formerly Pres. Parke, Davis and Co. and Instr. at P. C. P. (See page 423.) Deceased, April 4, 1920.



# 518 First Century of the Philadelphia College of Pharmacy

- Luther Johnson Schroeder, Ph.G.**  
*Thes.*, Examination of Glycyrrhiza Extracts.  
*Ad.*, Columbia, Pa.
- Henry Francis Schuldt, Ph.G.**  
*Thes.*, Guarana.  
Retail pharmacist. In partnership with David A. Eberly, P. C. F., 1895.  
*Ad.*, Alameda, Cal.
- Edward Wolf Sharp, Ph.G.**  
*Thes.*, Electricity.
- \*Austin Charles Sherman, Ph.G.**  
*Thes.*, Sublimation.
- William August Singer, Ph.G.**  
*Thes.*, Estimation of Iron Ore.
- George Ellaworth Spangler, Ph.G.**  
*Thes.*, Aqua Prunus Serotina.  
In charge of pharmaceutical laboratory, Shoemaker and Busch, Phila.  
*Ad.*, 251 W. Seymour Street, Germantown, Philadelphia, Pa.
- B. Franklin Stahl, Ph.G.**  
*Thes.*, Acidum Hydrocyanicum Dilutum.  
Physician. Graduated in medicine, Univ. of Penna., 1887. Res. phys. Phila. Gen. Hosp. Visiting phys. Phila. Gen. and St. Agnes Hosps. Clinical Prof. medicine, Woman's Med. College; Lecturer on Diagnostics and Assoc. in Medicine, Univ. of Penna. Lecturer P. C. F., 1895-96. Pres. Phila. Co. Med. Soc., 1919. Author, Mem. Pepper Med. Soc.; Amer. Soc. of Tropical Medicine. Masonic affiliation.  
*Ad.*, 1727 Pine Street, Phila., Pa.
- \*Charles Maya Steinmetz, Ph.G.**  
*Thes.*, Elixirs.  
Deceased, January 12, 1916.
- Alexander Frederick Streltz, Ph.G.**  
*Thes.*, White Wax and Its Adulterations.  
Mayor of North Platte, Neb. Retail pharmacist until 1908. Mem. State Board of Pharmacy, 1887-90. Coroner Lincoln Co., 1886-87. County Commissioner, 1910-12. Mem. Board of Education.  
*Ad.*, North Platte, Neb.
- Clarence Draper Sypherd, Ph.G.**  
*Thes.*, Rhubarb.  
Asst. Postmaster.  
*Ad.*, Dover, Del.
- Edward Weeks Tedford, Ph.G.**  
*Thes.*, Department of Students.
- James Harry Thomas, Ph.G.**  
*Thes.*, Prinos Verticillatus.
- Edwin Allen Trist, Ph.G.**  
*Thes.*, Scutellaria Lateriflora.  
Physician. Graduated in medicine, Jeff. Med. College, 1890.  
*Ad.*, Mauch Chunk, Pa.
- \*John Henry Trout, Ph.G.**  
*Thes.*, Chelidonium Majus.  
Deceased, August 20, 1912.
- Frederick Lang Urban, Ph.G.**  
*Thes.*, Ether and Its Therapy.  
Retail pharmacist. City Treas. 4 years.  
*Ad.*, Arcadia, Cal.
- Frank Elliott Valentine, Ph.G.**  
*Thes.*, Infusion of Digitalis.
- Parry Wyche Vaughan, Ph.G.**  
*Thes.*, Prunus Virginiana.  
*Ad.*, Durham, N. C.
- \*John Martin Bromall Ward, Ph.G.**  
*Thes.*, Unguentum Aquæ Rosæ.  
Deceased, January 21, 1903.
- William Porter Watson, Ph.G.**  
*Thes.*, Potassium.  
Retired. Retail pharmacist 25 years.  
*Ad.*, Clearfield, Pa.
- \*John Alvin Weaver, Ph.G.**  
*Thes.*, Guaiacum.  
Retail pharmacist 20 years. Deceased, June 9, 1919.
- Alfred Arthur Weber, Ph.G.**  
*Thes.*, Verbena.
- \*George Alcimua Weirich, Ph.G.**  
*Thes.*, Boldo.
- \*Alfred Jefferson Wenner, Ph.G.**  
*Thes.*, Oleic Acid and Its Compounds.  
Deceased, October, 1913.
- Anthony Smith Wickham, Ph.G.**  
*Thes.*, Potassii Bromidum and Its Adulterations.  
*Ad.*, Seaside Park, N. J.
- George Thomas Williams, Ph.G.**  
*Thes.*, Syrupus Calcii Lactophosphatis.  
*Ad.*, Burlington, N. J.
- Elmer Ellaworth Wilson, Ph.G.**  
*Thes.*, Pharmaceutical Manipulations.  
Physician. Graduated in medicine, Univ. of Penna., 1889.  
*Ad.*, Orlando, Fla., R. F. D. No. 1.
- Special Student.**
- George D. Rosengarten.**  
Manufacturing Chemist. With Rosengarten and Sons, 1893-1901. Vice-pres. Rosengarten and Sons, 1901-1905. Vice-pres. Powers-Weightman-Rosengarten Co., 1905 to date. Past Pres. Amer. Inst. Chemical Engineers. Director and Councilor at Large Amer. Chem. Soc. Mem. U. S. P. Rev. Com.  
*Ad.*, P. O. Box 1625, Phila., Pa.

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\*George Sidney Amsden, Ph.G.

*Thes.*, Materia Medica for Students.  
Deceased, January 11, 1918.

Philip Anthes, Ph.G.

*Thes.*, Lard and Its Adulterations.

James Henry Barker, Ph.G.

*Thes.*, Fluid Extracts.

Max Bartel, Ph.G.

*Thes.*, Caryophyllus.  
Retail pharmacist.  
*Ad.*, 1124 Vliet Street, Milwaukee, Wis.

Henry Bechberger, Ph.G.

*Thes.*, Our Own vs. Patent Preparations.

William Blchy, Ph.G.

*Thes.*, Stillingia Sylvatica.  
*Ad.*, 1852 N. 20th Street, Phila., Pa.

\*Wayne Barker Bissell, Ph.G.

*Thes.*, Hop Extract.  
Retail pharmacist, Syracuse, N. Y. Pres. N. Y. State Board of Pharmacy. Deceased, December 15, 1915.

Luther Pascal Bowers, Ph.G.

*Thes.*, Aether Aceticus.  
*Ad.*, 620 N. 10th Street, Phila., Pa.

William Theodore Bozenhard, Ph.G.

*Thes.*, Hypophosphorous Acid.  
*Ad.*, 3rd and Torrence Streets, Dayton, Ohio.

Henry Brandner, Jr., Ph.G.

*Thes.*, Assay of Cinchona.  
In real estate business. Retail pharmacist until 1907.  
*Ad.*, 509 W. 4th Street, Tulsa, Okla.

- \*Albert Edward Brown, Ph.G.**  
*Thes.*, Analysis of Sulphate of Morphia.  
Mfg. chemist, Mobile, Ala. Deceased, July 7, 1920.
- Robert Clark Cadmus, Ph.G.**  
*Thes.*, Liquor Ferri Chloridi.  
Retail pharmacist.  
*Ad.*, 1941 Spring Garden Street, Phila., Pa.
- \*Edward Daily Cahoon, Ph.G.**  
*Thes.*, Early Chemistry.  
One of the organizers and once pres. of chain of Riker drug stores. Deceased, November 18, 1920.
- George Lewis Carnan, Ph.G.**  
*Thes.*, Concentrated Nitrous Ether.  
Retail pharmacist.  
*Ad.*, 2123 Hunting Park Ave., Phila., Pa.
- Carleton Cole Champion, Ph.G.**  
*Thes.*, The Future of the Retail Pharmacist.
- Thomas Clements Coltman, Ph.G.**  
*Thes.*, Fraxinus Americana.  
Retail pharmacist. Sch. director Jenkintown, Pa., 11 years. Colorado State Senator since 1917.  
*Ad.*, La Junta, Col.
- James Sherman Cooley, Ph.G.**  
*Thes.*, Pharmacy Laws.  
Retail pharmacist.  
*Ad.*, Flemington, N. J.
- Charles John Craythorn, Ph.G.**  
*Thes.*, Alcohol.  
Physician.  
*Ad.*, W. State and Calhoun Streets, Trenton, N. J.
- Samuel Ross Crothers, Ph.G.**  
*Thes.*, Pharmacy.  
Physician. Graduated in medicine, Univ. of Penna., 1889. Chief surg. Chester Hosp. since 1900. Mayor of Chester. Head of Draft Board.  
*Ad.*, 415 E. 9th Street, Chester, Pa.
- \*Frederick Horace Davis, Ph.G.**  
*Thes.*, Ailanthus Glandulosa.  
Deceased, December 22, 1921.
- Blythe James Davison, Ph.G.**  
*Thes.*, Mentha Piperita.
- \*Oscar Boone Deakne, Ph.G.**  
*Thes.*, Citric Acid.
- David Ferguson Deem, Ph.G.**  
*Thes.*, Oleum Morrhuæ.  
Drug Inspector. Mem. Board of Health. Secy. Kansas Pharm. Assn. Formerly retail pharmacist.  
*Ad.*, Stark, Kansas.
- \*William Edward DeLong, Ph.G.**  
*Thes.*, Chemistry and Pharmacy.
- \*George Eicholtz Dennison, Ph.G.**  
*Thes.*, Sanguinaria Canadensis.
- Ulysses Grant Dennison, Ph.G.**  
*Thes.*, Oleum Morrhuæ.  
*Ad.*, Winnebago, Ill.
- \*William Milliken Denniston, Ph.G.**  
*Thes.*, Arsenious Acid.  
Deceased, November 20, 1917.
- William D. Denschle, Ph.G.**  
*Thes.*, Elixirs.
- Morton Phelps Dickeson, Ph.G.**  
*Thes.*, Eucalyptus Globulus.  
Physician and surgeon. Graduated in medicine Medico-chi College, 1887. Mem. Penna. Board Med. Examiners, 1902-09. Pres. Burmont Specialty Co. Private Hosp.  
*Ad.*, 121 W. Washington Street, Media, Pa.
- Henry Diefenbeck, Ph.G.**  
*Thes.*, Hydrangea Arborescens.
- Louis Henry Dielman, Ph.G.**  
*Thes.*, Erythroxydon.  
Exec. Secy. Peabody Inst., Baltimore, 1911—.  
Retail pharmacist until 1900. Cataloguer, Md. State Library, 1900-04; Asst. Librarian Enoch Pratt Free Library, 1904-1911. Camp Librarian, Camp Meade, Md.  
*Ad.*, Care of Peabody Inst., Baltimore, Md.
- Herman Edward Frederick Dreiss, Ph.G.**  
*Thes.*, Pepsin.  
*Ad.*, 119 Alamo Plaza, San Antonio, Tex.
- \*Thomas Dunbar, Jr., Ph.G.**  
*Thes.*, Liriodendron Tulipifera.  
Physician. Graduated in medicine, Jeff. Med. Col-  
lege. Served as quarantine station physician and later as marine physician at Phila. Deceased, March 18, 1909.
- \*George Henry Ebeling, Ph.G.**  
*Thes.*, Hydrargyri Iodidum Viride.  
Deceased, May, 1913.
- Jacob Addison Eberly, Ph.G.**  
*Thes.*, Suppositories.  
Retail pharmacist.  
*Ad.*, 2601 Columbia Avenue, Phila., Pa.
- George Washington Edmonds, Ph.G.**  
*Thes.*, Pepsin and Peptones.  
Member of Congress. Retail pharmacist 10 years. In coal business 25 years. Mem. City Council 6 years.  
*Ad.*, 1520 Spruce Street, Phila., Pa.
- \*Joseph Johnson Eldredge, Ph.G.**  
*Thes.*, Pill Excipients.  
Pharmacist, Laurel Springs, N. J. Deceased, February 19, 1915.
- \*Samuel S. Ely, Ph.G.**  
*Thes.*, Crystallization.
- \*John George Engler, Ph.G.**  
*Thes.*, Syrupus Pruni Virginiana.  
Deceased, February 18, 1889.
- \*Theodore Fearheller, Ph.G.**  
*Thes.*, Emulsions.
- \*Edward Henry Flenhold, Ph.G.**  
*Thes.*, The Pharmacist.  
Retail pharmacist, Phila. Deceased, May 4, 1911.
- Ralph Banton Gable, Ph.G.**  
*Thes.*, Comparision of Formulæ of 1870 and 1880.  
Pharmacopœias.  
*Ad.*, 544 Landis Avenue, Vineland, N. J.
- \*Adolf Emil Gebhard, Ph.G.**  
*Thes.*, Mounting of Botanical Specimens.
- Peter Spang Gehris, Ph.G.**  
*Thes.*, Piscidia Erythrina.  
Retail and wholesale pharmacist. Mgr. The Par-  
rish Pharmacy, successor to Clemmons Parrish.  
*Ad.*, 105 Clark Street, Brooklyn, N. Y.
- \*Benjamin Wallace Green, Ph.G.**  
*Thes.*, Pharmaceutical Extracts.  
Retail pharmacist, Phila. Masonic affiliation. De-  
ceased, October 13, 1920.
- George Adam Haffa, Ph.G.**  
*Thes.*, Hydrargyri Iodidum Viride.  
Retired. With Wm. R. Warner and Co., 43 years.  
Sheldon Course. Advertising course Univ. of  
Penna.  
*Ad.*, 730 N. 20th Street, Phila., Pa.
- James Harvey Hagenbuch, Ph.G.**  
*Thes.*, Chocolate.  
Physician and pharmacist. Graduated in medicine  
Jeff. Med. College, 1894.  
*Ad.*, Mahanoy City, Pa.



**Jesse Barclay Hall, Ph.G.**

*Thes.*, Some of the Medicinal Herbs of Montgomery County.  
Retail pharmacist. Sch. director Norristown schs.  
*Ad.*, Yorkship, Camden, N. J.

**William Swearingen Hamilton, Ph.G.**

*Thes.*, Gaultheria.  
Salesman. Retail pharmacist 20 years. Mem. City Council.  
*Ad.*, Fairmont, West Va.

**Arthur Browne Hammond, Ph.G.**

*Thes.*, Liquor Magnesii Citratis.

**\*William Franklin Harper, Ph.G.**

*Thes.*, Physostigma Venenosum.

**Silaa Marion Harrington, Ph.G.**

*Thes.*, Estimation of the Alkaloids in Ignatia.

**Clinton Kelty Harria, Ph.G.**

*Thes.*, Simple Elixirs.  
*Ad.*, Scipioville, N. Y.

**Norton G. Harria, Ph.G.**

*Thes.*, Oleum Morrhuæ.  
Retail pharmacist. Chm. Local Draft Board.  
*Ad.*, 4304 Sansom Street, Phila., Pa.

**Daniel Herr Haasler, Ph.G.**

*Thes.*, Lime Fruit Juice.  
*Ad.*, 5303 Chester Avenue, Phila., Pa.

**Julius Dargan Haynaworth, Ph.G.**

*Thes.*, Oil of Turpentine and Its Manufacture.

**Henry George Heider, Ph.G.**

*Thes.*, Syrupus Rhei.

**Henry Erneat Helnitah, Ph.G.**

*Thes.*, Tincture Avena Sativa.

**Edwin Hutter Heas, Ph.G.**

*Thes.*, Dover's Solution.  
Retail pharmacist.  
*Ad.*, 1530 N. 6th Street, Harrisburg, Pa.

**James Owen Howells, Ph.G.**

*Thes.*, Ohio Wine and Its Derivatives.  
Physician and surgeon. Graduated in medicine, Univ. of Penna., 1894. Med. Mem. Draft Board.  
*Ad.*, Bridgeport, Ohio.

**James Hunter, Jr., Ph.G.**

*Thes.*, Carbo Animalis.  
Physician. Graduated in medicine, Univ. of Penna., 1888. 3rd Vice-pres. Med. Soc. of N. J. Served 2 terms as coroner Gloucester Co., N. J. Asst. Surg. Wills Hosp. Chm. Med. Advisory Board, Gloucester Co., N. J.  
*Ad.*, Westville, N. J.

**James Stanton Hunter, Ph.G.**

*Thes.*, Pulvis Ipecacuanhæ et Opii.

**George Edward Hurd, Ph.G.**

*Thes.*, Oleum Anthemidis.  
Chemist and Dept. Mgr. Thomson and Taylor Spice Co.  
*Ad.*, 2727 Hampden Street, Chicago, Ill.

**Harry Ellsworth Jones, Ph.G.**

*Thes.*, Nitrate of Silver.  
Retail pharmacist.  
*Ad.*, 1735 Butler Street, Phila., Pa.

**Alexander George Keller, Ph.G.**

*Thes.*, Oleic Acid and Oleates.  
Retail pharmacist. Mem. Phila. Assn. Retail Drug-gists, pres. 1912; Penna. Pharm. Assn.  
*Ad.*, 2105 N. 17th Street, Phila., Pa.

**Stephen Rush Ketcham, Ph.G.**

*Thes.*, Emulsions.

**Grant Elmer Kirk, Ph.G.**

*Thes.*, Eriodictyon Californicum.  
Physician. Graduated in medicine, Jeff. Med. Col-lege, 1897. City Councilman, 1914—. Com-missioned 1st Lieut. Med. Reserve Corps.  
*Ad.*, 114 E. Madison Avenue, Collingswood, N. J.

**\*Gustav Frank Kuehnel, Ph.G.**

*Thes.*, Rhododendron Maximum.

**William Evans Kunkel, Ph.G.**

*Thes.*, Petroleum Ointments.

**Elmer Bryan Kyle, Ph.G.**

*Thes.*, Menthol.

**\*James Almer Kyner, Ph.G.**

*Thes.*, Butter.  
Deceased, January 30, 1896.

**Frank Theodore Landis, Ph.G.**

*Thes.*, Japanese Menthol.  
Retail pharmacist. Director and secy., Womels-dorf Union Bank. Sch. Director. Mem. Town Council. Pres. Board of Trade.  
*Ad.*, Womelsdorf, Pa.

**Irvin Lincoln Lautenbacher, Ph.G.**

*Thes.*, Milk and Its Derivatives.  
Mfr. of underwear. Retail pharmacist 22 years.  
*Ad.*, Schuylkill Haven, Pa.

**William John Laval, Ph.G.**

*Thes.*, Menthol.  
Physician and pharmacist. Director, Nat'l Bank. Mem. Med. Reserve Corps.  
*Ad.*, 220 Main Street, Evansville, Ind.

**Llewellyn Hughes Lewis, Ph.G.**

*Thes.*, Erythroxylo-n Coca.

**William M. Lewis, Ph.G.**

*Thes.*, Pills and Their Excipients.

**\*Frederick Jacob Lichtenberger, Ph.G.**

*Thes.*, Thesis Writing.

**Charles Napier Lochman, Ph.G.**

*Thes.*, Collinsonia Canadensis.  
Member of firm, Simon Rau and Co.  
*Ad.*, 420 Main Street, Bethlehem, Pa.

**\*Henry Charles Christian Maisch, Ph.G.**

*Thes.*, Illicium Floridanum.  
Son of Prof. John M. Maisch. Deceased, July 1, 1901. (See page 269.)

**\*Joseph Mark Malatesta, Ph.G.**

*Thes.*, Opium.  
Deceased, November 21, 1917.

**Robert B. Matter, Ph.G.**

*Thes.*, Hydrargyrum Gum Creta.  
Mgr. for George B. Evans.  
*Ad.*, 1106 Chestnut Street, Phila., Pa.

**\*Charles Milton Mauch, Jr., Ph.G.**

*Thes.*, Improved Tinctura Cinchonæ Composita and Its Precipitation.

**\*Rollin R. May, Ph.G.**

*Thes.*, Amyl Nitris.

**\*Charles Eugene Mayer, Ph.G.**

*Thes.*, A Pharmacy.  
Retail pharmacist, Boyertown, Pa. Deceased, January 20, 1908.

**\*Paul Erneat Meissner, Ph.G.**

*Thes.*, An Indispensable.

**Robert Stockton Johnson Mitcheson, Ph.G.**

*Thes.*, Olea Volatilea.  
Physician. Graduated in medicine, Univ. of Penna., 1891.  
*Ad.*, 3348 N. 16th Street, Phila., Pa.

**Frank Morae, Ph.G.**

*Thes.*, Advantages of Pharmaceutical Manu-facturing.  
*Ad.*, 1044 12th Street, Santa Monica, Cal.



**Matthew Ulysses Grant Moses, Ph.G.**

*Thes.*, Formation of Honey.

**Elmer Marshall Mount, Ph.G.**

*Thes.*, Pepsin.  
Retail pharmacist.  
*Ad.*, 200 Washington Street, Jersey City, N. J.

**Edwin Oliver Moyer, Ph.G.**

*Thes.*, Oleates.  
*Ad.*, Bradford, Pa.

**\*Edgar Harman Naudain, Ph.G.**

*Thes.*, Pinckneya Pubins.  
Retail pharmacist, Phila. Deceased, August 2, 1889.

**Jacob Lewis Nebinger, Ph.G.**

*Thes.*, Some Official Syrups.  
Retail pharmacist. Assisted in revising Parrish's Pharmacy. Mem. Penna. State Pharm. Assn.  
*Ad.*, 130 N. Paxon Street, Phila., Pa.

**John W. Newton, Ph.G.**

*Thes.*, An Investigation of the Coloring Matter of Hydrastis Canadensis.  
*Ad.*, 3348 N. 16th Street, Phila., Pa.

**\*Harry Louis Odenwelder, Ph.G.**

*Thes.*, Chloral Hydrate.

**\*George Widdifield Pancoast, Ph.G.**

*Thes.*, Solubility of Quinine Pills.

**Albert Raymond Patterson, Ph.G.**

*Thes.*, Pharmacy.  
*Ad.*, 704 Riverside Avenue, Trenton, N. J.

**\*Leopold Peters, Ph.G.**

*Thes.*, Vinum Ipecacuanhæ.  
Instr. College of Pharm., Univ. of Minn. Deceased, December 2, 1920.

**Charles Clifton Ramey, Ph.G.**

*Thes.*, Gossypium Herbaceum.

**Dennis Reagan, Ph.G.**

*Thes.*, Mentha Piperita.  
Physician.  
*Ad.*, 343 Cattel Street, Easton, Pa.

**\*Charles Morris Rebner, Ph.G.**

*Thes.*, Scammony.  
Deceased, August 1, 1889.

**Charles Frederick Rebsaman, Ph.G.**

*Thes.*, A Few Practical Remarks and Suggestions Pertaining to Modern Pharmacy.  
*Ad.*, 5th and Shawnee Streets, Leavenworth, Kan.

**Henry Otto Reinholdt, Ph.G.**

*Thes.*, Magnesii Sulphas.  
Retail pharmacist. Mem. State Legislature. Assemblyman, 1897-98. State Senator, 1917-18.  
*Ad.*, 2630 Lisbon Avenue, Milwaukee, Wis.

**Walter Reynolds, Ph.G.**

*Thes.*, Oleum Gossypii Seminis.  
Physician. Graduated in medicine, Univ. of Penna., 1894. Health Officer, Atlantic City, 1896-97. Res. phys. St. Agnes Hospital. Pres. Atlantic Co. Med. Soc., 1898. LL.D. Villanova College, 1900. Mem. and Vice-pres. Board of Education.  
*Ad.*, 27 S. Indiana Avenue, Atlantic City, N. J.

**William Stevens Rhoads, Ph.G.**

*Thes.*, Oleum Menthæ Piperitæ.  
*Ad.*, Du Bois, Pa.

**Elias Ellsworth Riggs, Ph.G.**

*Thes.*, Emulsions.  
Retail pharmacist.  
*Ad.*, Monmouth Street and Walnut Avenue, Trenton, N. J.

**Joseph Cuttell Roberts, Ph.G.**

*Thes.*, Fraxinus Americana.  
Mgr. Laboratories, Sharp and Dohme, Baltimore. Mem. Exec. Com. Alumni Assn. P. C. P., 1890-94; Mem. Amer. Drug Mfrs. Assn.; Com. on Legislation and Chm. of delegates to U. S. P. Convention, 1920.  
*Ad.*, 3822 Kate Avenue, Baltimore, Md.

**George Roessler, Ph.G.**

*Thes.*, Examination of Urine.

**Benjamin Rosenzweig, Ph.G.**

*Thes.*, Extractum Rhei Fluidum.  
Wholesale druggist. Trustee Brooklyn College of Pharmacy.  
*Ad.*, 495 Eighth Avenue, Brooklyn, N. Y.

**Andrew Curtin Santee, Ph.G.**

*Thes.*, Rubus.

**Henry Scholey Saunders, Ph.G.**

*Thes.*, Cross Sections.

**Emil Schaible, Ph.G.**

*Thes.*, Ammonii Carbonas.  
Physician.  
*Ad.*, 409 N. 5th Street, LaFayette, Ind.

**Carl Edward Schlegel, Ph.G.**

*Thes.*, Illicium.  
Retail pharmacist.  
*Ad.*, 220 W. 2d Street, Davenport, Iowa.

**Allen Curtis Schofield, Ph.G.**

*Thes.*, Hamamelis.  
Retail pharmacist. Masonic affiliation.  
*Ad.*, 2200 N. 15th Street, Phila., Pa.

**Herman J. Schnchard, Ph.G.**

*Thes.*, The Mesquite.  
Treas. Pioneer Flour Mills. Formerly retail pharmacist.  
*Ad.*, 221 E. Guenther Street, San Antonio, Texas.

**Frederick Schwartz, Ph.G.**

*Thes.*, Grains of Paradise.  
*Ad.*, 2414 E. Allegheny Avenue, Phila., Pa.

**\*William Frederick Seiler, Ph.G.**

*Thes.*, Ammonia.  
Deceased, June 30, 1896.

**\*Abraham Lincoln Serfass, Ph.G.**

*Thes.*, Pills and Excipients.  
Deceased, January 23, 1920.

**Henry Clay Shaw, Jr., Ph.G.**

*Thes.*, Orange Trees.  
Retail pharmacist. Mayor of Piedmont, W. Va.  
*Ad.*, Piedmont, W. Va.

**Frederick Paul Sher, Ph.G.**

*Thes.*, Simaruba Excelsa.  
*Ad.*, 119 W. Mt. Pleasant Avenue, Phila., Pa.

**\*Hans Heinrich Sinne, Ph.G.**

*Thes.*, Salicylic Acid.

**Christopher Columbus Smith, Ph.G.**

*Thes.*, Bismuth and Its Preparations.

**George Mark Smith, Ph.G.**

*Thes.*, The Assay of Commercial Powdered Opium.

**Harry Barr Snavely, Ph.G.**

*Thes.*, Thymus Vulgaris.  
Physician. Graduated in medicine, Univ. of Penna., 1888.  
*Ad.*, 41 W. Orange Street, Lancaster, Pa.

**\*George Augustus Steinicken, Ph.G.**

*Thes.*, Petroleum and Its Products.

**John Henry Stermer, Ph.G.**

*Thes.*, Hydrocyanic Acid.  
Retail pharmacist. Pres. Lumberton Water Co.; Treas. Lumberton Township.  
*Ad.*, Lumberton, N. J.

- Henry Delscher Stichter, Ph.G.**  
*Thes.*, The Opiates and Other Narcotic Stimulants.  
Physician.  
*Ad.*, 1720 W. Tioga Street, Phila., Pa.
- Henry Lippincott Stiles, Ph.G.**  
*Thes.*, Abstracta.  
Retail pharmacist. Ex-mem. P. C. P. Board of Trustees. Ex-pres. P. C. P. Alumni Assn.  
*Ad.*, 75 E. Main Street, Moorestown, N. J.
- Samuel Franklin Stoll, Ph.G.**  
*Thes.*, Excipients for Pilulæ Potassii Permanganatis.
- Harry Swain, Ph.G.**  
*Thes.*, Pulverization of Drugs.  
*Ad.*, 1427 E. Susquehanna Avenue, Phila., Pa.
- \*Samuel Davis Swann, Ph.G.**  
*Thes.*, Erythroxylo-n Coca.
- Hugh McCallum Thiebaud, Ph.G.**  
*Thes.*, Erigeron Canadense.
- William Cochran Thompson, Ph.G.**  
*Thes.*, Ustilago.  
*Ad.*, Coatesville, Pa.
- Frederick Alden Tiffit, Ph.G.**  
*Thes.*, Cellulose.
- \*Thomas Crowell Trefry, Ph.G.**  
*Thes.*, Oils of Rose and Wintergreen.  
Deceased, November 4, 1917.
- \*Samuel Levick Van Buskirk, Ph.G.**  
*Thes.*, Maydis Stigmata.  
Physician. Deceased, September 27, 1922.
- \*William Augustus Van Nort, Ph.G.**  
*Thes.*, Acidum Hydrocyanicum Dilutum.  
Deceased, August 18, 1915.
- \*Frank Herman Von Achen, Ph.G.**  
*Thes.*, An Assay of Quinine Pills.  
Deceased, January 11, 1902.
- Samuel C. Webster, Ph.G.**  
*Thes.*, Gossypium.  
Physician. Supt. of Health, Town of Westery.  
*Ad.*, 99 High Street, Westery, R. I.
- Henry J. Wegener, Jr., Ph.G.**  
*Thes.*, Aspidosperma Quebracho.
- Benjamin Franklin Welsel, Ph.G.**  
*Thes.*, Nitrate of Silver.  
Retail pharmacist. Mem. Norfolk Sch. Board.  
*Ad.*, Colonial and Westover Avenue, Norfolk, Va.
- Charles Bennett Whilden, Ph.G.**  
*Thes.*, Iodoform and Its Deodorization.  
Retail pharmacist. Vice-pres. and secy. Chamber of Commerce. Director People's Bank and Trust Co. Mem. S. C. Pharm. Assn.; A. Ph. A.; Delegate to U. S. P. Convention, 1920. Formerly Secy. California Board of Pharmacy.  
*Ad.*, Marion, S. C.
- Neri Barndt Williams, Ph.G.**  
*Thes.*, Nahalus Albus.  
Physician. Graduated in medicine, Jeff. Med. College.  
*Ad.*, Perkasio, Pa.
- J. Frederick Windolph, Ph.G.**  
*Thes.*, Syrups by Cold Percolation.  
With Norwich Pharmacal Co.  
*Ad.*, Norwich, N. Y.
- Alfred Conard Wood, Ph.G.**  
*Thes.*, Chloride of Gold and Sodium.  
Physician and surgeon. Asst. Prof. of Surgery, Univ. of Penna.; Surgeon to Univ. Hosp.; Phila. Gen. Hosp.; Howard Hosp., St. Timothy's, etc. Mem. Med. Advisory Board, Univ. of Penna. and St. Timothy's Hosp.  
*Ad.*, 2035 Walnut Street, Phila., Pa.
- \*Robert Wellesley Woodill, Ph.G.**  
*Thes.*, Alcohol.
- \*James Edward Wright, Ph.G.**  
*Thes.*, Cane Sugar.  
Deceased, 1904.
- William Oscar Yost, Ph.G.**  
*Thes.*, Verbascum Thapsus.  
Retail pharmacist.  
*Ad.*, 623 Haws Avenue, Norristown, Pa.
- 1886
- \*William Warner Abell, Ph.G.**  
*Thes.*, Pimentæ Folium.  
Deceased, November 4, 1922.
- \*Ellsworth Smith Adams, Ph.G.**  
*Thes.*, Troches.
- Charles Wesley Albright, Ph.G.**  
*Thes.*, Chloral Camphor.  
Capt., U. S. A. Retail pharmacist until 1901. Served in Spanish-Amer. War in Hosp. Corps, U. S. A. Hosp. Steward, 1901-05. In commercial life until 1917. Served with A. E. F. in France.
- \*Everett Vincent Alexander, Ph.G.**  
*Thes.*, Starch.  
Deceased, February 19, 1888.
- Claude Horace Arnold, Ph.G.**  
*Thes.*, Potassii Bitartras.  
*Ad.*, Georgetown, Ky.
- \*Thomas Joseph Backes, Ph.G.**  
*Thes.*, Cinchonidinæ Sulphas.  
Physician. Graduated in medicine, Bellevue Med. College. Deceased, March 30, 1912.
- David Wiley Baker, Ph.G.**  
*Thes.*, Haematoxylon.  
*Ad.*, 577 N. Clinton Avenue, Trenton, N. J.
- Louis Eugene Barlow, Ph.G.**  
*Thes.*, Cork.  
Physician. Graduated in medicine, Jeff. Med. College, 1896. Retail pharmacist until 1912. Mem. Vol. Med. Service Corps.  
*Ad.*, 3113 Richmond Street, Phila., Pa.
- \*William G. Barrowman, Ph.G.**  
*Thes.*, Oleum Olivæ.  
Deceased, July 30, 1887.
- Harry Vane Becker, Ph.G.**  
*Thes.*, Chloral and Menthol.  
Drug mfr. Retail pharmacist until 1915.  
*Ad.*, 576 Mission Street, San Francisco, Cal.
- Robert Matthew Bell, Ph.G.**  
*Thes.*, Hydrastis Canadensis.
- \*Arthur Berret, Ph.G.**  
*Thes.*, Imperfect Official Syrup.
- Milton Horace Bickley, Ph.G.**  
*Thes.*, Pycnanthemum Linifolium.  
*Ad.*, 418 Market Street, Chester, Pa.
- Robert Cook Bicknell, Ph.G.**  
*Thes.*, Chlorinated Lime.
- Frank John Birt, Ph.G.**  
*Thes.*, Gossypium.  
Retired. Formerly retail pharmacist.  
*Ad.*, 525 S. Broad Street, Trenton, N. J.
- Charles Frederick Bonnet, Ph.G.**  
*Thes.*, Myristica.
- \*Lin Light Bowman, Ph.G.**  
*Thes.*, Anaesthetics.
- John Charles Boyd, Ph.G.**  
*Thes.*, Dialysed Iron.
- \*Charles Shreve Braddock, Jr., Ph.G.**  
*Thes.*, Aluminum.  
Deceased, March 23, 1917.

- Morris Winfield Brecht, Ph.G.**  
*Thes.*, Pharmaceutical Requisites.
- \***Albert Edward Brown, Ph.G.**  
*Thes.*, Erythroxyton and Its Derivatives.
- Frank L. Brown, Ph.G.**  
*Thes.*, Suppositories.  
*Ad.*, Auburn, Pa.
- James Edward Buckley, Ph.G.**  
*Thes.*, Investigation of Cerates and Ointments.
- William Anthony Bullock, Ph.G.**  
*Thes.*, The Relation of Pharmacy to Physics.  
Son of Charles Bullock, Pres. of P. C. P.  
*Ad.*, 64 N. 34th Street, Phila., Pa.
- John Dellinger Burg, Ph.G.**  
*Thes.*, Olives and Olive Oil.  
Retail pharmacist.  
*Ad.*, 1323 S. 58th Street, Phila., Pa.
- \***William Thompson Burke, Ph.G.**  
*Thes.*, Compounds in Pharmacy.  
Retail pharmacist, Phila. Ex-pres. Phila. Assn.  
Retail Druggists. Deceased, April 5, 1915.
- Herman Adolphus Burkhart, Ph.G.**  
*Thes.*, Chlorophyll.  
Physician and pharmacist. Graduated in medicine,  
Univ. of Penna., 1893.  
*Ad.*, Bethlehem, Pa.
- William Walter Cafky, Ph.G.**  
*Thes.*, Boroglyceride.  
Deputy State Oil Inspector, Colo., and Dist. Mgr.  
Mutual Life Ins. Co., N. Y. Retail pharmacist  
until 1909.  
*Ad.*, Florence, Colo.
- Daniel William Cahill, Ph.G.**  
*Thes.*, Fraxinus Americana.  
Manufacturer. Health commissioner; Pres. Common  
Council; Mayor of Watertown, and State  
Supt. Pub. Bldgs.; Ex-pres. Watertown Pharm.  
Assn.; Ex-pres. Trinity Men's Club; Mem. Board  
of Education.  
*Ad.*, Watertown, N. Y.
- \***Henry Belting Campbell, Ph.G.**  
*Thes.*, Calcinated Boric Acid.
- \***Walter Bowden Cheney, Ph.G.**  
*Thes.*, Hamamelis Virginica.  
Deceased, 1920.
- \***Nathan Alexander Cohen, Ph.G.**  
*Thes.*, Hamamelis Virginica.  
Physician. Graduated in veterinary medicine,  
Univ. of Penna., 1890; graduated in medicine,  
Jeff. Med. College, 1892. Deceased, April, 1922.
- Arthur Hugo Cohn, Ph.G.**  
*Thes.*, Smilax Rotundifolia.  
Physician and surgeon. Retail pharmacist until  
1896. Graduated in medicine, Milwaukee Med.  
College, 1896. Prof. of Mat. Med. and Thera-  
peutics, Marquette Univ. 20 years. Mem. Mil-  
waukee Co. Med. Soc.; Wis. Med. Soc.; Amer.  
Med. Assn.  
*Ad.*, 4141 Highland Blvd, Milwaukee, Wis.
- Isaiah Grant Colborn, Ph.G.**  
*Thes.*, Hydrochlorate of Cocaine.  
*Ad.*, 720 W. Elm Street, Scranton, Pa.
- Charles Samuel Commings, Ph.G.**  
*Thes.*, Honey.  
Clerk, County Commissioners, Pottsville, Pa. Re-  
tail pharmacist until 1898.  
*Ad.*, Schuylkill Haven, Pa.
- Edwin Sherman Craig, Ph.G.**  
*Thes.*, Glycerinum.  
Retail pharmacist.  
*Ad.*, Massillon, Ohio.
- \***Prosper Martin Dallett, Ph.G.**  
*Thes.*, Pills.
- George William Danzberger, Ph.G.**  
*Thes.*, Responsibilities of a Pharmacist.
- Alfred Ivins Davis, Ph.G.**  
*Thes.*, Druggists' Clerks.  
Cranberry culture. Retail pharmacist until 1915.  
*Ad.*, Pemberton, N. J.
- William Harry Davis, Ph.G.**  
*Thes.*, Glycerin.
- Thomas Irvin Deibert, Ph.G.**  
*Thes.*, Kalmia Angustifolia.  
*Ad.*, 103 N. Centre Street, Pottsville, Pa.
- Hugh Leonard DeKalb, Ph.G.**  
*Thes.*, Quinine Pills and Excipients.  
*Ad.*, 1810 Welsh Avenue, Bustleton, Pa.
- Otto M. de Kieffer, Ph.G.**  
*Thes.*, Coca.  
Physician and surgeon. Studied medicine George-  
town Med. College; Heidelberg; Gottingen; Univ.  
of Penna.; Harvard Med. College; Jenner Med.  
College as Prof. of Bact. and Non-medical Thera-  
peutics, Mem. Amer. Med. Assn.; Chicago Med.  
Soc.; Ill. Med. Soc. Masonic affiliation.  
*Ad.*, 5430 Harper Avenue, Chicago, Ill.
- \***William Edgar Donough, Ph.G.**  
*Thes.*, Toxicology.
- Clarence Eugene Downes, Ph.G.**  
*Thes.*, Solution and Ointment of Boroglyceride.
- Randolph Hinson Downes, Ph.G.**  
*Thes.*, Electricity.
- A. Damer Drew, Ph.G.**  
*Thes.*, Nickel and Its Haloid Salts.
- Silas Johnstone Duffie, Ph.G.**  
*Thes.*, Syrup of Tolu.
- \***Frederick V. Dunn, Ph.G.**  
*Thes.*, Syrupus Ipecacuanha.  
Physician and pharmacist. Graduated in medicine,  
Jeff. Med. College, 1898.  
Deceased, March 23, 1922.
- Walter Dunn, Ph.G.**  
*Thes.*, Digitalin.  
Physician.  
*Ad.*, Clifton Heights, Pa.
- Foster Benjamin Eisenhart, Ph.G.**  
*Thes.*, Creasotum.  
*Ad.*, Hellertown, Pa.
- Charles Edward Escott, Ph.G.**  
*Thes.*, Gum from Balsamodendron Myrrha.
- George Brinton Evans, Ph.G.**  
*Thes.*, Camphor Water.  
*Ad.*, Lyceum and Manayunk Avenue, Phila., Pa.
- \***Edward H. Fahey, Ph.G.**  
*Thes.*, Vanilla.  
Retail pharmacist, Phila. Mem. Phila. Select  
Council and Penna. House of Representatives.  
Deceased, June 1, 1913.
- Henry Herman Fetter, Ph.G.**  
*Thes.*, Arsenicum.
- Albert Martin Fischer, Ph.G.**  
*Thes.*, Brayera Anthelmintica.  
*Ad.*, Houston Street and Avenue D, San Antonio,  
Texas.
- Jacob Livingood Fisher, Ph.G.**  
*Thes.*, Ustilago Maydis.  
*Ad.*, Punxsutawney, Pa.
- Oscar Conrad Fletcher, Ph.G.**  
*Thes.*, Colleges of Pharmacy.  
Retail pharmacist. Recruiting agt. U. S. Merchant  
Marine.  
*Ad.*, Bowling Green, Ky.



- \*John Joseph Flynn, Ph.G.**  
*Thes.*, Resins and Oleoresins.  
Pharmacist, Mt. Holly, N. J. Deceased, December 31, 1917.
- Harry Fritsch, Ph.G.**  
*Thes.*, Resina Podophylli.  
With Hance Brothers and White, Phila., Pa.  
*Ad.*, 6224 Ogontz Avenue, Phila., Pa.
- Frank Edwin Gardner, Ph.G.**  
*Thes.*, Aquæ Medicata.
- Henry E. Giffin, Ph.G.**  
*Thes.*, Vanilla.
- James Smith Grant, Ph.G.**  
*Thes.*, Isinglass and Its Adulterations.  
*Ad.*, 24 S. Main Street, Asheville, N. C.
- William Grant Greenawalt, Ph.G.**  
*Thes.*, Botany and Its Value to the Pharmacist.  
Retail pharmacist. Prof. Mat. Med. Medico-Chi College, 1906-07.  
*Ad.*, Chambersburg, Pa.
- Frank Devie Hall, Ph.G.**  
*Thes.*, Sulphur Precipitatum.  
Retail pharmacist. Mem. Ohio State Pharm. Assn.; Chamber of Commerce. Pres. Newark Ice and Cold Storage Co. Mem. Rotary Club.  
*Ad.*, 125 N. 5th Street, Newark, Ohio.
- \*Harry Newbury Hall, Ph.G.**  
*Thes.*, Camellia Thea.  
Deceased, February 23, 1896.
- John William Harrigan, Ph.G.**  
*Thes.*, Percolations of Resins and Gum Resins.  
*Ad.*, Darby, Pa.
- \*Allen Wesley Hauck, Ph.G.**  
*Thes.*, The Present of Pharmacy.  
Deceased, July 27, 1887.
- Henry Lewis Heim, Ph.G.**  
*Thes.*, Grindelia.  
*Ad.*, 1728 N. 62d Street, Phila., Pa.
- Charles Tompkins Heller, Ph.G.**  
*Thes.*, Bryonia.  
Retail pharmacist.  
*Ad.*, 484 Wabash Street, St. Paul, Minn.
- James Rutledge Henderson, Ph.G.**  
*Thes.*, Gossypium Herbaceum.
- Doane Herring, Ph.G.**  
*Thes.*, Sulphate of Manganese.  
*Ad.*, Wilson, N. C.
- Charles Ellsworth Hewitt, Ph.G.**  
*Thes.*, Lappa Officinals.
- William Hiecke, Ph.G.**  
*Thes.*, Analysis.  
*Ad.*, 11th and Wells Streets, Milwaukee, Wis.
- \*John Summy Hiestand, Ph.G.**  
*Thes.*, Aspidosperma Quebracho.
- \*James Hinkle, Ph.G.**  
*Thes.*, Coccus.  
Deceased, January 20, 1922.
- \*George Gustav Hinterleitner, Ph.G.**  
*Thes.*, On the Detannation of Cinchona Preparations.  
Retail pharmacist, Pottsville, Pa. Deceased, May 16, 1913.
- George William Jacoby Hoffman, Ph.G.**  
*Thes.*, Fraxinus Americana.  
Retail pharmacist.  
*Ad.*, 6th and Wabash Avenue, Terre Haute, Ind.
- Ferdinand Holberg, Ph.G.**  
*Thes.*, Nance Bark.
- Edgar Atwood Holland, Ph.G.**  
*Thes.*, Pharmacy.
- John Clayton Hulshizer, Ph.G.**  
*Thes.*, Cypridium Pubescens.  
In galvanizing business. Formerly retail pharmacist.  
*Ad.*, 9 Yale Road, Audubon, N. J.
- \*Seth Caleb Johnson, Ph.G.**  
*Thes.*, Potassii Bitartras.  
Deceased, October 1, 1887.
- Frank Elmer Johnston, Ph.G.**  
*Thes.*, Electricity.  
Physician.  
*Ad.*, Moores, Del. Co., Pa.
- \*Samuel Stephen Jones, Ph.G.**  
*Thes.*, Xanthorrhiza Apiifolia.  
Deceased, March 11, 1894.
- \*Moritz Kalteyer, Ph.G.**  
*Thes.*, Sophora Speciosa.  
Retail pharmacist, San Antonio, Tex. Deceased, April 30, 1892.
- William Daniel Kelly, Ph.G.**  
*Thes.*, Chloride of Cocaine.
- Francis Joseph Keogh, Ph.G.**  
*Thes.*, Celluloid.
- Frank Williamson Keyes, Ph.G.**  
*Thes.*, Vanilla.
- John Frederick Kiedisch, Jr., Ph.G.**  
*Thes.*, Myrrha.  
Retail pharmacist.  
*Ad.*, 1028 Main Street, Keokuk, Iowa.
- Walter Agan Kirkham, Ph.G.**  
*Thes.*, Useful Hints to the Pharmacist.
- \*Thomas Joseph Kizer, Ph.G.**  
*Thes.*, Eriodictyon Californicum.  
Deceased, 1915.
- John A. Klopfenstein, Ph.G.**  
*Thes.*, Coto.  
*Ad.*, Erie, Pa.
- Howard Knight, Ph.G.**  
*Thes.*, Pharmaceutical Appliances.  
Salesman, John Wyeth and Bro.  
*Ad.*, 1620 Mt. Vernon Street, Phila., Pa.
- Sidney Lackey Knisell, Ph.G.**  
*Thes.*, Our Profession.  
*Ad.*, Galen Hall, Atlantic City, N. J.
- \*Charles Herman Koch, Ph.G.**  
*Thes.*, Emulsions.
- Harry Kieffer Kroh, Ph.G.**  
*Thes.*, The Compatibility of Pepsin and Bismuth.  
*Ad.*, Brielle, N. J.
- David Haines Kurtz, Ph.G.**  
*Thes.*, Salix Alba.  
*Ad.*, Fort Scott, Kan.
- Edward Charles Lafean, Ph.G.**  
*Thes.*, Aromatic Syrup of Rhubarb.  
Pres. Beneficiary Degree and Funeral Benefit Dept. of Junior Order United Amer. Mechanics.  
Retail pharmacist until 1913.  
*Ad.*, Box 595, Pittsburgh, Pa.
- Francis Joseph Lammer, Jr., Ph.G.**  
*Thes.*, Extracts.  
*Ad.*, 2266 N. 19th Street, Phila., Pa.
- Samuel Comfort Lawrence, Ph.G.**  
*Thes.*, Permanganate of Potassium.  
Retired. Retail pharmacist until 1918.  
*Ad.*, Pensauken, N. J.
- William A. Loewenthal, Ph.G.**  
*Thes.*, Medicated Wools.

- Raymond Blythe Loughead, Ph.G.**  
*Thes.*, Percolation.  
 Physician. Graduated in medicine Medico-Chi. College, 1904. Mem. Med. Advisory Board. Retail pharmacist until 1905.  
*Ad.*, 2216 W. 3d Street, Chester, Pa.
- William Andrew McBath, Ph.G.**  
*Thes.*, Syrup of Lactucarium.  
*Ad.*, Care of Chambliss Drug Co., Knoxville, Tenn.
- Cornelius Joseph McCarthy, Ph.G.**  
*Thes.*, The Value of Pharmaceutical Associations.
- \*Charles Henry McConnell, Ph.G.**  
*Thes.*, Coke.  
 Retail pharmacist, Phila. Deceased, July 22, 1887.
- Clarence Herbert McCoy, Ph.G.**  
*Thes.*, An Assay of Cinchona Barks.  
*Ad.*, 24th and Hennepin Avenue, Minneapolis, Minn.
- Thaddeus Day McFarland, Ph.G.**  
*Thes.*, Fructus Lappæ.
- James Peter Mallon, Ph.G.**  
*Thes.*, Aniline as a Reagent for Alcohol in Essential Oils.  
 Retail pharmacist. Res. Pharmacist, Univ. of Penna. Hosp., 1886-1896. Mem. Penna. Academy of Fine Arts, and Old Colony Club.  
*Ad.*, 3d and Snyder Avenue, Phila., Pa.
- John George Marbourg, Ph.G.**  
*Thes.*, Pepo U. S. P.
- \*George Bright Maurer, Ph.G.**  
*Thes.*, Seeds.  
 Salesman, H. K. Wampole Co. Deceased, May 9, 1908.
- \*Samuel Robert Meana, Ph.G.**  
*Thes.*, Arsenic.  
 Physician. Graduated in medicine National Med. College. Asst. at Government Hosp. for Insane. Deceased, August 1, 1890.
- Henry Medd, Ph.G.**  
*Thes.*, Pharmacy in England.  
*Ad.*, 5th and Poplar Streets, Phila., Pa.
- \*William Henry Meek, Ph.G.**  
*Thes.*, Official Salts of Lithium.
- \*Irvin G. Melot, Ph.G.**  
*Thes.*, Iodoform.
- Philip Pierre Moeszinger, Ph.G.**  
*Thes.*, Cinnamomum Camphora.  
*Ad.*, 531 22d Street, Sacramento, Cal.
- Edward Thomas Moffitt, Ph.G.**  
*Thes.*, Xanthoxylum Fraxineum.
- John Demuth Moore, Ph.G.**  
*Thes.*, Guilandia Bonduc.  
 Physician.  
*Ad.*, 1940 N. Broad Street, Phila., Pa.
- William Henry Morrette, Ph.G.**  
*Thes.*, Trochisci Potassii Chloratis.  
 Retail pharmacist.  
*Ad.*, 2656 Bridge Street, Bridesburg, Phila., Pa.
- \*James Morrison, Ph.G.**  
*Thes.*, Suppositories.  
 Deceased, March 4, 1908.
- \*James Harry Munaon, Ph.G.**  
*Thes.*, Preparations of Yerba Santa.  
 Retail pharmacist, Phila. Deceased, May 21, 1894.
- William George Nehig, Ph.G.**  
*Thes.*, Menthol Pencils.  
 Retail pharmacist. Ex-pres. Alumni Assn. P. C. P. Mem. Phila. Assn. Retail Druggists; Nat'l Assn. Retail Druggists; A. Ph. A.; P. C. P. Masonic affiliation.  
*Ad.*, 2143 N. 18th Street, Phila., Pa.
- Charles Godfrey Neely, Ph.G.**  
*Thes.*, Trifolium Pratense.  
 Retail pharmacist.  
*Ad.*, 2326 N. 29th Street, Phila., Pa.
- William Edgar Neil, Ph.G.**  
*Thes.*, Sophora Speciosa.
- Albert Oetinger, Ph.G.**  
*Thes.*, Elixir Cinchona Calisaya.  
*Ad.*, Christ's Home, Warminster, Pa.
- \*William Ohl, Ph.G.**  
*Thes.*, The Action of Heat on Opium.
- \*F. Will. Pantzer, Ph.G.**  
*Thes.*, Damiana.  
 Retail pharmacist, Indianapolis, Ind. Deceased, February 7, 1895.
- Callistus Mitchell Parriah, Ph.G.**  
*Thes.*, Phytolacca Decandra.  
*Ad.*, Bellefonte, Pa.
- Edward Vogan Pechin, Ph.G.**  
*Thes.*, Vegetable Histology.
- \*George Joseph Pechin, Ph.G.**  
*Thes.*, Fibre.  
 Retail pharmacist, Phila. Deceased, October 27, 1913.
- Robert William Pfaefle, Ph.G.**  
*Thes.*, Spontaneous Change of Chemicals.
- Adolph Adam Poehner, Ph.G.**  
*Thes.*, Belæ Fructus.  
 Physician.  
*Ad.*, 1515 Golden Gate Avenue, San Francisco, Cal.
- Philip Van Riper Post, Ph.G.**  
*Thes.*, Cimicifuga Racemosa.  
 Retail pharmacist.  
*Ad.*, 628 Main Avenue, Passaic, N. J.
- Samuel Washington Prewett, Ph.G.**  
*Thes.*, Gelatin.
- Frank W. Prickett, Ph.G.**  
*Thes.*, Coccus.  
 Retail pharmacist.  
*Ad.*, Rosemont, Pa.
- \*Hartwell Harrison Pritchett, Ph.G.**  
*Thes.*, A Retrospect.  
 Deceased, February 18, 1888.
- Samuel Lee Rambo, Ph.G.**  
*Thes.*, Bismuthi Subnitras.
- Frank Clymer Reighter, Ph.G.**  
*Thes.*, Euphorbia Pilulifera.  
*Ad.*, 80 W. Washington Street, Chicago, Ill.
- Charles Rentschler, Jr., Ph.G.**  
*Thes.*, Tobacco.
- William Augustus Ridington, Ph.G.**  
*Thes.*, Conium Maculatum.  
*Ad.*, 2537 Shields Street, Phila., Pa.
- Harry Cook Risher, Ph.G.**  
*Thes.*, Castile Soap.  
 Wholesale druggist.  
*Ad.*, Waco, Texas.
- Joseph Von Culin Roberts, Ph.G.**  
*Thes.*, Chloral Hydrate.
- \*John Mackey Roseberry, Ph.G.**  
*Thes.*, Percolators.
- David Rosenbaum, Ph.G.**  
*Thes.*, Plantago Major.
- \*Thomas Albert Savage, Ph.G.**  
*Thes.*, Acidum Boricum.  
 Deceased, March 15, 1892.

## 526 First Century of the Philadelphia College of Pharmacy

- George W. Scarborough, Jr., Ph.G.**  
*Thes.*, Petrolatum vs. Lard.  
*Ad.*, Pennington, N. J.
- Andrew Stewart Scull, Ph.G.**  
*Thes.*, The Alkaloid Sanguinarine.
- George Washington Shoemaker, Ph.G.**  
*Thes.*, Glucose.  
 Wholesale and retail pharmacist. Mem. I. O. O. F.;  
 B. P. O. E.; K. of G. E.; Livingston Club;  
 Kiwanis Club; Chamber of Commerce; Treas.  
 Good Will Fire Co.  
*Ad.*, 804 Hamilton Street, Allentown, Pa.
- \***Frank F. Smith, Ph.G.**  
*Thes.*, Cacao Butter.  
 Deceased, December 8, 1893.
- Frank Luther Smith, Ph.G.**  
*Thes.*, Antipyrin.
- Charles Spalding, Ph.G.**  
*Thes.*, Starch.  
*Ad.*, 207 E. 12th Street, Austin, Texas.
- \***Edwin Wesley Stager, Ph.G.**  
*Thes.*, Alcohol and Its Origin.  
 Retail pharmacist, Palmyra, N. J. Deceased,  
 February 16, 1896.
- Harry Lincoln Stahler, Ph.G.**  
*Thes.*, Asclepias Tuberosa.  
 Retail pharmacist. Also Dist. Mgr. Aetna Ex-  
 plosives Co., Inc.  
*Ad.*, 2 E. Main Street, Norristown, Pa.
- Henry Sunderland, Ph.G.**  
*Thes.*, Fermentation.  
 Physician. Graduated in medicine, Univ. of  
 Penna., 1890. Masonic affiliation.  
*Ad.*, 4629 Oakland Street, Frankford, Phila., Pa.
- William Edward Supplee, Ph.G.**  
*Thes.*, Senna.  
 Probation Officer, Municipal Court, Phila. Retail  
 pharmacist 26 years. Spec. Agt. Dairy and Food  
 Div. State of Penna. 3 years. Sch. director 9  
 years. Masonic affiliation.  
*Ad.*, 5936 Ellsworth Street, Phila., Pa.
- Charles Adolphus Swanson, Ph.G.**  
*Thes.*, Gossypium.  
 Retail pharmacist. Mem. Board of Health 10  
 years; Municipal Civil Service Commission 9  
 years. Treas. Gustavus Adolphus Orphans' Home  
 28 years.  
*Ad.*, 100 E. 3d Street, Jamestown, N. Y.
- George Washington Thompson, Ph.G.**  
*Thes.*, Carboxylate of Cocaine.
- Harry Tidd, Ph.G.**  
*Thes.*, Cochineal and Carmine.
- Winfield Scott Trout, Ph.G.**  
*Thes.*, Syrupus Ferri Iodidi.
- \***Lorren Stiles Vincent, Ph.G.**  
*Thes.*, Musk.  
 Deceased, May 27, 1888.
- William Finley Wagner, Ph.G.**  
*Thes.*, Phytolacca Decandra.  
*Ad.*, 5th and New York Avenue, Washington, D. C.
- Christopher Columbus Ward, Ph.G.**  
*Thes.*, Hydrastis Canadensis.  
 Retail pharmacist. Graduate in medicine. County  
 Health Officer, 1920—. Pres. County Commis-  
 sioners, 1913-19.  
*Ad.*, Crisfield, Md.
- Joseph Poletus Ward, Ph.G.**  
*Thes.*, Iodum cum Petrolato.  
 Representative, Armour and Co.'s Biological Dept.  
*Ad.*, Care of Armour and Co., Fort Worth, Texas.
- John Martin Wayman, Ph.G.**  
*Thes.*, Aqua.
- Charles Erastus Weck, Ph.G.**  
*Thes.*, Chloral Hydrate.  
*Ad.*, Petaluna, Cal.
- Charles Ferdinand Wild, Ph.G.**  
*Thes.*, Glycerin.  
*Ad.*, 2135 N. Park Avenue, Phila., Pa.
- William John Wilkinson, Ph.G.**  
*Thes.*, Cane Sugar.
- Joseph Pearson Williams, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 630 W. 9th Street, Wilmington, Del.
- Wendell Phillips Wingender, Ph.G.**  
*Thes.*, Ergot.  
*Ad.*, 806 Market Street, Camden, N. J.
- James Frank Yealy, Ph.G.**  
*Thes.*, Memory in Pharmacy.  
 Retail pharmacist.  
*Ad.*, 9th and Filbert Streets, Phila., Pa.
- Frank John Young, Ph.G.**  
*Thes.*, Equisetum Hyemale.
- \***William Schrack Young, Ph.G.**  
*Thes.*, Hydrargyrum cum Creta.
- Paul Ziebler, Ph.G.**  
*Thes.*, Water as a Menstruum.  
 Accountant.  
*Ad.*, Hanover, Pa.

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- Paul Bucher Anspach, Ph.G.**  
*Thes.*, Acetate of Sodium.  
 Retail pharmacist.  
*Ad.*, 45 Centre Square, Easton, Pa.
- Charles Butterworth Ashton, Ph.G.**  
*Thes.*, Sublimation.  
*Ad.*, 41st and Lancaster Avenue, Phila., Pa.
- Jacob Michael Baer, Ph.G.**  
*Thes.*, Liquid Extracts of Malt.  
 Retail pharmacist. Mem. A. Ph. A.; Penna.  
 Pharm. Assn.; Board of Trustees, P. C. P.  
*Ad.*, 2000 Chestnut Street, Phila., Pa.
- William Louis Baum, Ph.G.**  
*Thes.*, The Use of the Polaroscope in Pharmacy.
- Addison Lloyd Beck, Ph.G.**  
*Thes.*, The Castor Oil Plant.  
*Ad.*, Sharon, Pa.
- Warren B. Beckler, Ph.G.**  
*Thes.*, Glycerinum.  
 Physician.  
*Ad.*, 283 Turner Street, Auburn, Me.
- \***Emile Seraphine Bernardy, Ph.G.**  
*Thes.*, Camphora.
- Ellsworth Smith Beshore, Ph.G.**  
*Thes.*, Cypripedium Parviflorum.  
*Ad.*, 244 S. 12th Street, Phila., Pa.
- \***Samuel Walter Bishop, Ph.G.**  
*Thes.*, Improvements in Pharmacy.  
 Deceased, April 12, 1891.
- \***George Davis Blomer, Jr., Ph.G.**  
*Thes.*, Glue.  
 Deceased, December 1, 1902.
- Charles Scott Bondurant, Ph.G.**  
*Thes.*, Tussilago Farfara.
- Charles Ducharme Boyd, Ph.G.**  
*Thes.*, Arsenic and Arsenical Poisoning.  
*Ad.*, 42 Watching Avenue, Montclair, N. J.
- Irvin Jacob Brandt, Ph.G.**  
*Thes.*, Syrupus Sarsaparilla Compositus.



- \*Edgar Brenelser, Ph.G.**  
*Thes.*, *Mitchella Repens*.  
 Deceased, November 19, 1921.
- \*Frederick Kendall Brown, Ph.G.**  
*Thes.*, *Catalpa Bignonioides*.  
 Deceased, May 31, 1919.
- \*William MacGilvray Buchholz, Ph.G.**  
*Thes.*, *Hydrastis Canadensis*.
- Alfred Gray Burk, Ph.G.**  
*Thes.*, Cocaine.  
 Mgr. Broad Street Station Pharmacy, Phila.  
*Ad.*, Broad Street Station, Phila., Pa.
- Robert Jump Burton, Ph.G.**  
*Thes.*, Syrup Wild Cherry.  
 Retail pharmacist.  
*Ad.*, 1306 Girard Avenue, Phila., Pa.
- Orlin Ulysses Cassaday, Ph.G.**  
*Thes.*, The Chromates of the Cinchona Alkaloids.  
 Retail pharmacist.  
*Ad.*, Youngstown, Ohio.
- Charles Wesley Christ, Ph.G.**  
*Thes.*, Plants and Their Uses.  
*Ad.*, 51st and Woodland Avenue, Phila., Pa.
- Harry Gerheart Comp, Ph.G.**  
*Thes.*, Erythroxylin Coca and Alkaloid.  
 Retail pharmacist.  
*Ad.*, 3126 Diamond Street, Phila., Pa.
- John Wesley Cotterel, Ph.G.**  
*Thes.*, Elixirs.  
 Retired. Retail pharmacist until 1920.  
*Ad.*, 1800 N. 6th Street, Harrisburg, Pa.
- William Monroe Clarkson Craine, Ph.G.**  
*Thes.*, Unguentum Hydrargyri.  
*Ad.*, 4th and Chestnut Avenue, Altoona, Pa.
- Orville Sharp Creighton, Ph.G.**  
*Thes.*, Ferrum Reductum.  
 Shoe business. Formerly salesman, Whitall Tatam and Co. Masonic affiliation.  
*Ad.*, Marietta, Ohio.
- Lewis Aylesworth Crull, Ph.G.**  
*Thes.*, *Digitalis Purpurea*.  
*Ad.*, Box 381, Boyertown, Pa.
- Oscar Fingal Dans, Jr., Ph.G.**  
*Thes.*, *Eupatorium Perfoliatum*.
- Eugene DeReeves, Ph.G.**  
*Thes.*, Fluidextract Wild Cherry Bark.
- Frank William Droelle, Ph.G.**  
*Thes.*, *Gaultheria Procumbens*.  
 Retail pharmacist. Masonic affiliation.  
*Ad.*, 271 Gratiot Avenue, Detroit, Mich.
- Howard Samuel Eckels, Ph.G.**  
*Thes.*, Sulphuric Acid.  
 Mfg. chemist. Mem. Amer. Chem. Soc.; Manufacturers Club; Poor Richard Club; N. Y. C. Club; Toxicologist Medico-Legal Soc. Director Gen. The Purple Cross.  
*Ad.*, Wyncote, Pa.
- \*William McKee Elden, Ph.G.**  
*Thes.*, Text Books of Pharmacy.  
 Physician. Graduated in medicine, Jeff. Med. College. Deceased, May 18, 1911.
- Henry Everett Emerson, Ph.G.**  
*Thes.*, Residue of Tincture of Myrrh.  
*Ad.*, Milford, Pa.
- \*Addison Henry English, Ph.G.**  
*Thes.*, Official Syrups by the Cold Percolation Process.  
 Retail pharmacist, Muskogee, Okla. Deceased, 1908.
- George A. Ennis, Ph.G.**  
*Thes.*, The Latin in Prescriptions.
- Edwin Reed Falloure, Ph.G.**  
*Thes.*, Pancreatic Ferments.  
*Ad.*, 715 Cumberland Street, Phila., Pa.
- John Kirk Faust, Ph.G.**  
*Thes.*, Tincture of Vanilla.  
 Chemist, Navy Yard, Wash., D. C. Retail pharmacist until 1893. Asst. chemist Phila. and Reading Railway, 1893-98; 1st Asst. chemist Carpenter Steel Co., 1898-1903. Asst. chemist U. S. Navy Yard, Wash., D. C., 1903-1918; Chemist, 1918—. *Ad.*, 1325 E. Capitol Street, Washington, D. C.
- James Adams Ferguson, Ph.G.**  
*Thes.*, *Aristolochia-Reticulata*.  
 Retail pharmacist.  
*Ad.*, Howard and Thompson Streets, Phila., Pa.
- Daniel Webster Fetterolf, Ph.G.**  
*Thes.*, The Degree of Adulteration of Commercial Arsenious Oxide.  
 Capt. Med. Corps, U. S. A. Graduated in medicine. Demonstrator of chem. Univ. of Penna., 1893-1911; Quizmaster, 1892-1902, Med. Inst. Phila. Chemist in charge U. S. A. Lab., N. Y., 1911—. Mem. Amer. Chem. Soc.; Amer. Med. Assn. Author of books on chemistry and medicine.  
*Ad.*, 25 Cleveland Terrace, East Orange, N. J.
- Irs Elmer Finrock, Ph.G.**  
*Thes.*, Incompatibilities.  
*Ad.*, 94 N. Main Street, Mansfield, Ohio.
- Robert Welles Fisher, Ph.G.**  
*Thes.*, Influence of Sun-Light on Iodine.  
 Physician and surgeon. Graduated in medicine Jeff. Med. College, 1890. Prof. Mat. Med. and Pharmacognosy, Univ. of Utah, 1899-1914. Mem. Salt Lake City Board of Health, 1892-1916. Pres. Utah State Med. Assn., 1912. Served in U. S. A. as Capt. Med. Dept. Commissioned major. With A. E. F. in France and England.  
*Ad.*, 273 East Street, Salt Lake City, Utah.
- Jones Hezekiah Garman, Ph.G.**  
*Thes.*, Constituents of Vegetable Substances.
- Amandus George Georges, Ph.G.**  
*Thes.*, Camphor and Chloral.
- Albert Frederick Graf, Ph.G.**  
*Thes.*, Goulard's Cerate with Lanolin as Base.
- John Lincoln Grayson, Ph.G.**  
*Thes.*, Something About Vanilla.
- William Grebe, Ph.G.**  
*Thes.*, Analysis of Urine.
- Frederick Hamilton Green, Ph.G.**  
*Thes.*, Alchemy.  
 Retail pharmacist.  
*Ad.*, Muscatine, Iowa.
- P. Nettleton Guise, Ph.G.**  
*Thes.*, *Helianthemum Canadensis*.
- Henry James Hackett, Ph.G.**  
*Thes.*, A Student's Digest of the Pharmacopœia.  
*Ad.*, 150 E. Chew Street, Germantown, Phila., Pa.
- Edward John Hadfield, Ph.G.**  
*Thes.*, Mercury and Its Preparations.
- Henry Haglin, Ph.G.**  
*Thes.*, Creasote.
- John Frederick Hamill, Ph.G.**  
*Thes.*, Pharmacy as a Profession.
- \*Thomas Wesley Harrison, Ph.G.**  
*Thes.*, Triturations.
- William Lincoln Hartzell, Ph.G.**  
*Thes.*, Oleum Morrhuæ.  
*Ad.*, 1009 Lehigh Avenue, Phila., Pa.

- William Finley Hassenplug, Ph.G.**  
*Thes.*, The "Opium" Adulterants.  
Physician and surgeon. Graduated in medicine,  
Jeff. Med. College, 1892. City phys., 1900-02.  
*Ad.*, Cripple Creek, Colo.
- Andrew Jackson Hesperling, Ph.G.**  
*Thes.*, Official Salicylates.  
*Ad.*, 250 Washington Street, Orange, N. J.
- Ralph Christian Hermann, Ph.G.**  
*Thes.*, Erythroxyton Coca.
- Howard Huyatt Hettinger, Ph.G.**  
*Thes.*, Rhubarb.
- Edmund Gilbert High, Ph.G.**  
*Thes.*, Plumbum.  
Mfg. wholesale and retail pharmacist. Served in  
Spanish-Amer. War in Philippine Islands.  
*Ad.*, Butte, Montana.
- \*John Franklin Hildebrand, Ph.G.**  
*Thes.*, Olive Oil and Its Adulterants.  
Retail pharmacist, York, Pa. Deceased, September  
27, 1888.
- Charles Benjamin Hildreth, Ph.G.**  
*Thes.*, Pepsinum.  
Supt. St. Luke's Hosp., Cleveland, Ohio. Formerly  
retail pharmacist.  
*Ad.*, 6606 Carnegie Avenue, Cleveland, Ohio.
- Arlington Grove Horins, Ph.G.**  
*Thes.*, Thea.  
Physician and pharmacist. Graduated in medicine,  
Jeff. Med. College, 1890. Surg. B. and O. R. R.,  
8 years. Health officer. Mayor of Brunswick, Md.  
Mem. Frederick Co. Med. Soc.; Med. and Chirurgi-  
cal Faculty of Md.  
*Ad.*, Brunswick, Md.
- Kaspar Hörner, Ph.G.**  
*Thes.*, Antimonii et Potassii Tartras.  
*Ad.*, 412 W. Fishers Avenue, Olney, Phila., Pa.
- William Henry Hosteley, Ph.G.**  
*Thes.*, Cimicifuga-Cimicifugin.  
Pharmaceutical chemist.  
*Ad.*, Collingdale, Pa.
- Tod Howard, Ph.G.**  
*Thes.*, Myrrha.
- \*Joseph Emil Huber, Ph.G.**  
*Thes.*, The Purification of Methylc Alcohol.  
Physician. Graduated in medicine, Northwestern  
Univ. Med. College, 1910. Deceased, February  
27, 1917.
- \*Howard D. Huntsman, Ph.G.**  
*Thes.*, Lanolin.  
Deceased, January, 1906.
- Henry Havelock Johnstone, Ph.G.**  
*Thes.*, Extemporaneous Chlorine Water.
- Frank Peter Keck, Ph.G.**  
*Thes.*, Volatile Oils.  
Farmer. Formerly representative for John Wyeth  
and Bro.  
*Ad.*, Laury's Station, Penna.
- John Kelfer, Ph.G.**  
*Thes.*, Hamamelis Virginica.  
*Ad.*, 621 High Street, Columbus, Ohio.
- Charles Franklin Kelchner, Ph.G.**  
*Thes.*, Zinc.
- Charles Emery Keller, Ph.G.**  
*Thes.*, Potassii Bicarbonas.
- Elmer Augustus Klapp, Ph.G.**  
*Thes.*, Constituents of Chlorophyll.
- \*Jacob Glaes Kooker, Ph.G.**  
*Thes.*, Belladonna.  
Deceased, May, 1906
- Charles Krebs, Ph.G.**  
*Thes.*, Spiritus Aetheris Ferratus.  
Retail pharmacist.  
*Ad.*, 3532 W. 41st Street, Cleveland, Ohio.
- Oscar Jullus Lache, Ph.G.**  
*Thes.*, Rhus Glabra.
- Richard Henry Lackey, Ph.G.**  
*Thes.*, Mercury.  
Retail pharmacist. Ex-pres. P. C. P. Alumni Assn.  
Pres. Penna. Pharm. Assn., 1913-14.  
*Ad.*, 2525 N. 5th Street, Phila., Pa.
- \*John Joseph Lantz, Ph.G.**  
*Thes.*, California Wines.
- Carl Daniel Laterner, Ph.G.**  
*Thes.*, Ulmus-Fulvæ.
- \*Joseph Frank Lehr, Ph.G.**  
*Thes.*, Extractum Carnis.  
Deceased, August 29, 1920.
- Paul Leuschner, Ph.G.**  
*Thes.*, The Linnæan System.
- John Nathan Grier Long, Ph.G.**  
*Thes.*, Medicinal Oleates.  
Retail pharmacist. Ex-pres. P. C. P. Alumni  
Assn.  
*Ad.*, 20th and Diamond Streets, Phila., Pa.
- John Ligget Longshore, Ph.G.**  
*Thes.*, Rhus Toxicodendron.
- \*Anna Lord, (Mrs. J. E. S. Bell,) Ph.G.**  
*Thes.*, Sulphuric Acid.  
Graduate of Millersville, Pa., State Normal Sch.  
Served as apothecary in Methodist Hosp. Phila.,  
11 years. Deceased, February 16, 1914.
- \*Samuel Steen Loughridge, Ph.G.**  
*Thes.*, Syrup of Hydriodic Acid.
- \*John Thomas McClanahan, Ph.G.**  
*Thes.*, Cotton.  
Retail pharmacist, Phila. Deceased, June 25, 1895.
- \*Henry McDavit, Ph.G.**  
*Thes.*, Reduced Iron Pills.  
Retail pharmacist, Irvington, N. J. Deceased,  
April 16, 1914.
- Charles William McKean, Ph.G.**  
*Thes.*, Mercuric Oxide.  
Accountant for Jas. Thompson, contracting steve-  
dore. Formerly salesman for Hall-Van Gorder  
Co.  
*Ad.*, Eric, Pa.
- Joseph McKee, Ph.G.**  
*Thes.*, Asclepias Curassavica.  
*Ad.*, St. Elizabeth's Hospital, Washington, D. C.
- Jesse Claude Marquardt, Ph.G.**  
*Thes.*, Official Alcohol.
- \*Charles Henry Martin, Ph.G.**  
*Thes.*, Stillingia Sylvatica.  
Deceased, November 21, 1890.
- Henry Snyder Mauger, Ph.G.**  
*Thes.*, Grapes.  
*Ad.*, 5033 Irving Street, Phila., Pa.
- Frank D. Mawhinney, Jr., Ph.G.**  
*Thes.*, Assay of Opium.  
Mfr. of tin cans.  
*Ad.*, 223 New Street, Phila., Pa.
- \*Albert Henry Mayer, Ph.G.**  
*Thes.*, Aluminium.  
Deceased, December 29, 1909.



**Caswell Armstrong Mayo, Ph.G.**

*Thes.*, The Recovery of Alcohol in the Manufacture of Galenical Preparations. With Wm. S. Merrell Co. as Editor of publications. Dean and Prof. of Pharmacy, Queen City Coll. of Pharmacy. Rec'd Ph.M., P. C. P., 1910; Ph.D. Cincinnati Coll. of Pharmacy, 1920. Course in *Analyt. Chem.*, 1888-90; *Pharmacist*, 1880-87; *Assoc. Ed. Druggists Circular*, 1887-91; *Assoc. Ed. Oil, Paint and Drug Reporter*, 1891-92; *Ed. Merck's Market Report*, 1892; *Ed. Amer. Druggist and Pharmaceutical Record*, 1892-1919; *Asst. Ed. N. Y. Med. Jour.*, 1902-19; *Ed. Therapeutic Digest and Merrell Messenger*, 1919—; Lecturer on chemistry Young Men's Inst., N. Y., 1891-92; Trustee N. Y. Coll. of Pharmacy, Columbia Univ., 1910—. Mem. numerous nat'l and state pharm. assns. Pres. A. Ph. A., 1914-15. Mem. A. Ph. A. Com. on Status of Pharmacists in U. S. A. *Ad.*, Care of Wm. S. Merrell Co., Cincinnati, Ohio.

**Samuel Stansbury Mell, Ph.G.**

*Thes.*, *Gymnocladus Canadensis*.

**Harry Edgar Mickey, Ph.G.**

*Thes.*, *Oleum Gaultheria* and *Betula Lenta*. *Ad.*, 107 S. Main Street, Fostoria, Ohio.

**James A. Miller, Ph.G.**

*Thes.*, *Unguentum Zinci Oxidi*. *Ad.*, 56 N. Queen Street, Lancaster, Pa.

**Thomas James Moffett, Ph.G.**

*Thes.*, *Pharmaceutical Manipulation*.

**William Ervin Moyer, Ph.G.**

*Thes.*, *Ferrum (Iron)*.

**Henry Kendall Mulford, Ph.G.**

*Thes.*, *Pepsin*. Mfg. chemist. Pres. Amer. Chem. Laboratories. Rec'd degree M.Sc. Lafayette College, 1918. Trustee P. C. P. *Ad.*, 1924 Pine Street, Phila., Pa.

**Levi Allen Neiman, Ph.G.**

*Thes.*, *Rhamnus Purshiana*.

**William Heisley Nelson, Ph.G.**

*Thes.*, *Fluid Extract of Ergot*. Wholesale druggist, with Smith, Kline and French Co. *Ad.*, 1410 Hunting Park Avenue, Phila., Pa.

**Otto Christian Neumeister, Ph.G.**

*Thes.*, *Mercurous Iodide*. Retail pharmacist. Director and Vice-pres. Farmers and Merchants Bank; Secy, and treas. 1st Mortgage Loan and Investment Co. Mem. Board of Education, 12 years. Mem. B. P. O. E. and K. of P. On County Board of Supervisors. *Ad.*, 1314 N. 7th Street, Sheboygan, Wis.

**Samuel Byron Onsey, Ph.G.**

*Thes.*, *Nicotiana Tabacum*. *Ad.*, 5352 Baltimore Avenue, Phila., Pa.

**Elmer Outten, Ph.G.**

*Thes.*, *Pharmacy*. Clothing merchant. Formerly cashier People's Guarantee and Trust Co., and retail pharmacist. *Ad.*, Dover, Del.

**William Arky Partee, Ph.G.**

*Thes.*, *Phytolacæ Radix*.

**John George Patton, Ph.G.**

*Thes.*, *Petrolatum*. *Ad.*, Cafe L'Aiglon, Phila., Pa.

**\*Edward Pennock, Ph.G.**

*Thes.*, *Scutellaria*. Deceased, May 27, 1920.

**\*David Augustus Peters, Ph.G.**

*Thes.*, *Ergota*.

**\*Pinckney Napoleon Pinchback, Ph.G.**

*Thes.*, *Chlorine*.

**\*William David Porter, Ph.G.**

*Thes.*, *Adonis Vernalis*. Deceased, July 27, 1887.

**Charles Rehffuss, Ph.G.**

*Thes.*, *Mentha Piperita* and Its Cultivation. Formerly retail pharmacist. Ex-pres. Nat'l Assn. Retail Druggists. Mem. A. Ph. A.; Penna. Pharm. Assn., etc. *Ad.*, 5823 N. Broad Street, Phila., Pa.

**\*Charles Wesley Rinedolier, Ph.G.**

*Thes.*, *Subiodide Bismuth*. Deceased, November 11, 1889.

**George Parson Ringler, Ph.G.**

*Thes.*, *Mucilage and Syrup Acacia*. Pharmacist, State Hosp. for the Insane, Danville, Pa. Formerly retail pharmacist. *Ad.*, Bloomsburg, Pa.

**\*Norman G. Ritter, Ph.G.**

*Thes.*, *Adeps*. Deceased, May 12, 1918.

**Livingaton Everett Rixstine, Ph.G.**

*Thes.*, *The Conduct of the Drug Business*. *Ad.*, 86 Dodd Stret, East Orange, N. J.

**\*John Patterson Ross, Ph.G.**

*Thes.*, *Infusions and Decoctions*. Deceased, April 17, 1896.

**Charles Selmar Rottner, Ph.G.**

*Thes.*, *Salicylic Acid* as an Antiseptic. *Ad.*, 4052 Chestnut Street, Phila., Pa.

**William Henry Saurer, Ph.G.**

*Thes.*, *Seratum Plumbi Subacetatis*. *Ad.*, Belgrade and Clearfield Streets, Phila., Pa.

**Edward Francis Schneider, Ph.G.**

*Thes.*, *Emulsions*. *Ad.*, 614 Garfield Bldg., Cleveland, Ohio.

**Thomas LaBlanc Schofield, Ph.G.**

*Thes.*, *Petrolatum*.

**William Notson Seary, Ph.G.**

*Thes.*, *Carbolic Acid*. *Ad.*, 318 Bainbridge Street, Phila., Pa.

**Edward Grant Seibert, Ph.G.**

*Thes.*, *Polygonatum Biflorum*. Physician. Graduated in medicine, Columbian Univ., Wash., D. C., 1893. Med. Examiner, U. S. Civil Service Com., 1894-99. Asst. Prof. Chem. Geo. Wash. Univ., 1895-1906; Laryngologist and Otologist. Disp. Geo. Wash. Univ. Treas. Med. Soc., D. C., 1919—. Served in U. S. A. Med. Dept. as Capt., Major, Lieut-Col. and Colonel. Officer in charge Med. Research Lab., Air Service, Hazelhurst Field, Mineola, L. I. *Ad.*, 1545 Eye Street, N.W., Washington, D. C.

**Charles Albert Seither, Ph.G.**

*Thes.*, *Potassii Permanganas*. Representative, General Chem. Co. *Ad.*, 1612 Ruscomb Street, Phila., Pa.

**Franklin Philip Shaak, Ph.G.**

*Thes.*, *Syrup of Cranberries*. *Ad.*, Kearney, N. J.

**Ellery Beat Shoemaker, Ph.G.**

*Thes.*, *Acidum Arseniosum* and *Liquor Potassii Arsenitis*.

**Robert E. Lee Simmons, Ph.G.**

*Thes.*, *Dyospyros Virginiana*. Retail pharmacist. *Ad.*, 128 Russell Street, Portland, Ore.

**John Virgil Slaughter, Ph.G.**

*Thes.*, *Abstracts*. Mfr. of Hosiery. Retail pharmacist until 1918. *Ad.*, Cricket and Lancaster Avenues, Ardmore, Pa.

**Pharia Edwin Smith, Ph.G.**

*Thes.*, *Syrupus Ipecacuanhæ*.



- Walter Adam Smith, Ph.G.**  
*Thes.*, Ilex Opaca.  
*Ad.*, Avalon, N. J.
- Walter Valentine Smith, Ph.G.**  
*Thes.*, The Medicinal Oleates and Their Manufacture.  
Pres. Valentine H. Smith and Co., Inc., Wholesale Druggists, Director Phila. Drug Exchange.  
Trustee P. C. P.  
*Ad.*, 2nd and Green Streets, Phila., Pa.
- Willard Eugene Smith, Ph.G.**  
*Thes.*, Lycopodium Claratum.  
Physician. Graduated in medicine, Jeff. Med. College, 1899. Mem. Delaware State Board of Pharmacy 5 years; Wilmington Board of Health 2 years.  
*Ad.*, 325 N. Harrison Street, Wilmington, Del.
- Oscar Alfred Sprissler, Ph.G.**  
*Thes.*, Polytrichum Juniperinum.  
Physician.  
*Ad.*, 454 Rhawn Street, Fox Chase, Phila., Pa.
- Gustave Steinmann, Ph.G.**  
*Thes.*, The Bitter Principle of Leptandra.
- Edward Rhodes Stitt, Ph.G.**  
*Thes.*, Caffeine.  
Surgeon-General, U. S. Navy. Author.  
*Ad.*, Naval Medical School, Washington, D. C.
- William Henry Sutton, Ph.G.**  
*Thes.*, Erythroxylon.  
Retail pharmacist.  
*Ad.*, Woodbury, N. J.
- John Derr Suydam, Ph.G.**  
*Thes.*, Pyrethrum.
- Bennett Lewis Taylor, Ph.G.**  
*Thes.*, Irritant Poisons.
- \*Jay Chester Van Scoter, Ph.G.**  
*Thes.*, Educated Pharmacists.  
Deceased, March 5, 1900.
- George Lewis Wagner, Ph.G.**  
*Thes.*, Menthol.
- Gustavus Adolphus Weckler, Ph.G.**  
*Thes.*, Lappa Officinalis.
- Robert F. Welliver, Ph.G.**  
*Thes.*, Eriodictyon Glutiniosum.
- Reinhold Charles Werner, Ph.G.**  
*Thes.*, Linseed Oil.  
*Ad.*, 508 6th Avenue, Milwaukee, Wis.
- Heston Whitney, Ph.G.**  
*Thes.*, Xanthoxylon Fraxineum.
- Fred William Wiedmayer, Ph.G.**  
*Thes.*, Hydrastis Canadensis.  
Retail pharmacist.  
*Ad.*, 234 Main Street, Lectoria, Ohio.
- George Henry Wilkinson, Ph.G.**  
*Thes.*, Barium.  
Physician and pharmacist. Graduated in medicine, Medico-Chi College, 1896.  
*Ad.*, 203 Chester Avenue, Moorestown, N. J.
- Benjamin A. Wisaler, Ph.G.**  
*Thes.*, Tobacco.  
*Ad.*, Collom and Wakefield Streets, Phila., Pa.
- \*George Washington Wolfersberger, Ph.G.**  
*Thes.*, Pills and Pill Excipients.  
Graduate of Ursinus College, 1882. Deceased, October 21, 1892.
- Robert Taylor Young, Ph.G.**  
*Thes.*, Scaled Salts of Iron.
- Albert Theodore Zeller, Ph.G.**  
*Thes.*, Stilligia.  
Physician. Graduated in medicine, Medico-Chi. College, 1889. Studied in Vienna, 1906-07. Mem. Staff McKeesport Hosp., 1898—. Sch. director, 1916-20.  
*Ad.*, 605 Locust Street, McKeesport, Pa.  
**Special Student.**  
**F. Steiner Clarkson.**  
Received Certificate of Proficiency in Chemistry.

1888

**\*Ella Amerman, Ph.G.**

*Thes.*, Anthemis Nobilis.  
Retail pharmacist, Scranton, Pa. Deceased, January 11, 1891.

**Joseph Sleifer Angeny, Jr., Ph.G.**

*Thes.*, Cascara Sagrada.  
*Ad.*, Ambler, Pa.

**Harvey Franklin Backenstoe, Ph.G.**

*Thes.*, Advantages of Pharmaceutical Manufacturing.  
*Ad.*, 12th and Callowhill Streets, Phila., Pa.

**Robert Baird, Ph.G.**

*Thes.*, Ichthyocolla.  
*Ad.*, Route 3, Box 147, Tampa, Fla.

**John H. Bear, Ph.G.**

*Thes.*, Syrupus Rhei Aromaticus.  
*Ad.*, Mt. Joy, Pa.

**James Webb Beckwith, Ph.G.**

*Thes.*, A Menstruum for Apocynum.  
*Ad.*, Port Jefferson, N. Y.

**James Edgar Stevenson Bell, Ph.G.**

*Thes.*, Analysis of Commercial Peppers.  
Principal of Schools, Allegheny Co., Pa. since 1914. Rec'd A.B. and A.M., Wash. and Jeff. College. M.D. Univ. of Pittsburgh, 1905. Supt. U. S. Indian Sch. Service, Okla. and Neb., 1889-1895. Sch. Principal, Butte, Mont., 1896-98. Prof. Physics and Chem., Butte High Sch. Prin. Schs. Marysville, Mont. 1899-1900. Physician, 1906-12. Fruit farmer, 1912-14.  
*Ad.*, 55 Harwood Street, Mt. Washington Station, Pittsburgh, Pa.

**Charles William Bippus, Ph.G.**

*Thes.*, Tabacum.

**Charles Edgar Black, Ph.G.**

*Thes.*, The Decoration of Drug Store Windows.

**\*Ira Linton Bond, Ph.G.**

*Thes.*, Calendula Officinalis.  
Retail pharmacist, Tamaqua, Pa. Deceased, 1915.

**\*Charles Alfred Bowen, Ph.G.**

*Thes.*, The Relation of the Pharmacist to the Physician.  
Deceased, September, 1917.

**Charles Henry Breidenbach, Ph.G.**

*Thes.*, Gum Kino.  
Physician. Graduated in medicine, Univ. of Cincinnati, 1898. Mem. staff Miami Valley Hosp. since 1902. Instr. Miami Valley Hosp. Training Sch. for Nurses. Surg. Dayton Street Railways. Pres. Med. Advisory Board, 10th Ohio Dist.  
*Ad.*, 910 Fidelity Med. Bldg., Dayton, Ohio.

**William Brewer, Ph.G.**

*Thes.*, Cimicifuga.  
Physician.  
*Ad.*, Woodbury, N. J.

**James Hicks Bunting, Ph.G.**

*Thes.*, Euphorbia Pilulifera.  
Wholesale and retail pharmacist. Pres. and Mgr. J. Hicks Bunting Drug Co. Pres. Wilmington Homestead and Loan Assn. Ex-pres. Wilmington Drug Assn. Jr. Warden St. John's P. E. Church.  
*Ad.*, 130 Princess Street, Wilmington, N. C.

- William Henry Campbell, Ph.G.**  
*Thes.*, Soap.
- Charles Walton Cannon, Ph.G.**  
*Thes.*, Bases for Unguentum Iodi.
- Sherman Lincoln Carroll, Ph.G.**  
*Thes.*, Salicylate of Cinchonidia.  
Retail pharmacist. Graduated in dentistry, Penna. Dental College, 1900.  
*Ad.*, 5th and Pine Streets, Camden, N. J.
- William Henry Clark, Ph.G.**  
*Thes.*, Grindelia Robusta and Grindelia Squarrosa.
- Albert Cliffe, Ph.G.**  
*Thes.*, Antiseptics.  
Retail pharmacist. Mem. Ridgway Board of Health.  
Vestryman Grace P. E. Church.  
*Ad.*, Ridgway, Pa.
- \*Frederick Frelinghuysen Coleman, Ph.G.**  
*Thes.*, Elegant Pharmacy, Introducing Elixirs.
- Martyn Paine Crawford, Ph.G.**  
*Thes.*, Disinfectants.  
*Ad.*, Millintown, Pa.
- \*William Crutcher, Ph.G.**  
*Thes.*, Helianthemum Canadense.  
Physician and surgeon, Pine Bluff, Ark. Graduated in medicine, Jeff. Med. College. Mem. Board of Med. Examiners, Ark.; Ark. Med. Soc. Delegate to U. S. P. Convention, 1910. Deceased, May 22, 1914.
- \*Walter Cullin, Ph.G.**  
*Thes.*, Solution and Tincture of Chloride of Iron.  
Physician. Graduated in medicine, Univ. of Penna. Practiced at Coquille, Ore. Deceased, August 8, 1916.
- \*George Altick Curriden, Ph.G.**  
*Thes.*, Iodide of Potash.  
Deceased, April 15, 1908.
- Clayton Erwin Davis, Ph.G.**  
*Thes.*, Silk.  
Retail pharmacist.  
*Ad.*, Florence, Mass.
- John S. V. Davis, Ph.G.**  
*Thes.*, The Most Important Element.
- Henry Ellas Dahler, Ph.G.**  
*Thes.*, Emplastrum Fuscum.
- Charles Ellsworth Dyer, Ph.G.**  
*Thes.*, Emplastra.
- Robert Issm Eads, Ph.G.**  
*Thes.*, The Iodides of Mercury.
- Charles Born Evans, Ph.G.**  
*Thes.*, Fluidextract of Blackberry.  
*Ad.*, Church Street, Richmond, L. I., N. Y.
- Oscar George Fegley, Ph.G.**  
*Thes.*, Qualitative Analysis.  
Physician. Graduated in medicine, Jeff. Med. College, 1890. Clinical Asst. Phila. Lying-In Hosp., 1890-92; Clinical Asst., Surgery, Jeff. Hosp., 1890-92; Polyclinic and Penna. Hosp., 1897-1901; Wills Eye Hosp., etc. Chief Surg. Eye Dept. Hog Island Shipyards, 1918-19.  
*Ad.*, 5111 Chester Avenue, Phila., Pa.
- Frederick William Franz, Ph.G.**  
*Thes.*, Oil of Pennyroyal.
- Charles Sumner Gallaher, Ph.G.**  
*Thes.*, Cassia Nictitans.  
*Ad.*, 306 Jackson Avenue, Joplin, Mo.
- Paul Hermann Gallaschick, Ph.G.**  
*Thes.*, Examination of Red Clover.  
Retail pharmacist.  
*Ad.*, 3900 Germantown Avenue, Phila., Pa.
- Edward Harry Gingrich, Ph.G.**  
*Thes.*, Terebene.  
Physician. Graduated in medicine, Univ. of Penna., 1895. City Health Officer since 1897. Phys. and surg. Phila. and Reading R. R. Co. and for Penna. R. R. Co.  
*Ad.*, 619 Cumberland Street, Lebanon, Pa.
- Charles Wellington Green, Ph.G.**  
*Thes.*, Erythroxylon Coca.
- \*Philip Henry Green, Ph.G.**  
*Thes.*, Apis Mellifica.  
Deceased, 1896.
- Lucian Alfred Gros, Ph.G.**  
*Thes.*, Cimicifuga Racemosa.  
*Ad.*, 778 Market Street, San Francisco, Cal.
- John Joseph Haley, Ph.G.**  
*Thes.*, Hyoscyamus.  
*Ad.*, 300 Mercer Street, Gloucester City, N. J.
- William Henry Hanson, Ph.G.**  
*Thes.*, The Sieve and Its Appliances.  
*Ad.*, Sands Street cor. Bridge, Brooklyn, N. Y.
- Thomas Harold Hazel, Ph.G.**  
*Thes.*, Sulphuris Iodidum.  
Retail pharmacist and physician. Graduated in medicine, Jeff. Med. College, 1894. Pres. of mining company. Masonic affiliation.  
*Ad.*, Salt Lake City, Utah.
- William Frederick Hebsacker, Ph.G.**  
*Thes.*, Oxide of Zinc.  
Physician. Graduated in medicine, Jeff. Med. College, 1899. Medico-Chi. College, 1909. Instr. and clinical asst. in Otology Medico-Chi. Hosp. Served in U. S. A. as Capt., Med. Dept., Base Hosp., Camp Dodge, Iowa.  
*Ad.*, 2151 E. Cumberland Street, Phila., Pa.
- Harry Baker Hefley, Ph.G.**  
*Thes.*, Grindelia Robusta.  
County commissioner. Retail pharmacist until 1916. Treas. Cambria Co., 1902-05.  
*Ad.*, 715 Napoleon Street, Johnstown, Pa.
- Sherman Francis Hennessy, Ph.G.**  
*Thes.*, Lycopus Virginicus, or Bugleweed.  
*Ad.*, 335 W. Pratt Street, Baltimore, Md.
- \*William C. Hepler, Ph.G.**  
*Thes.*, Amylum.
- August Rudolph Hesske, Ph.G.**  
*Thes.*, Solution of Citrate of Magnesium.  
Retail pharmacist.  
*Ad.*, 600 N. 11th Street, Phila., Pa.
- Thomas Hetherington, Ph.G.**  
*Thes.*, Pharmacy.  
*Ad.*, 11th and Indiana Avenue, Phila., Pa.
- Wesley Jackson Hibberd, Ph.G.**  
*Thes.*, Green Iodide of Mercury.
- Aquila Hoch, Ph.G.**  
*Thes.*, Theobroma Cacao.  
*Ad.*, 4938 N. 12th Street, Phila., Pa.
- Ludwig Holtzhauser, Ph.G.**  
*Thes.*, Suppositories.  
*Ad.*, York and Tulip Streets, Phila., Pa.
- Sidney Lee Hooper, Ph.G.**  
*Thes.*, Lactucarium.
- Henry Taylor Hoover, Ph.G.**  
*Thes.*, Donovan's Solution—Liquor Arseni et Hydrargyri Iodidi.
- Eugene Jacob Jacobs, Ph.G.**  
*Thes.*, Oleum Gossypii Seminis.  
Retail pharmacist. Graduate of Univ. of Ga., 1883, degree of Ph.B.  
*Ad.*, 1928 Avenue P., Birmingham, Ala.
- Claude Grant Johnson, Ph.G.**  
*Thes.*, Bromates of the Cinchona Alkaloids.



**\*Frederick Leighton Johnson, Ph.G.**

*Thes.*, A New Process for Manufacture of Sugar from Sorghum.  
Deceased, February 10, 1899.

**William Arthur Sterling Johnson, Ph.G.**

*Thes.*, Potato Starch.

**Lysander Mann Jones, Ph.G.**

*Thes.*, Analysis of Market Jellies.  
Physician.  
*Ad.*, Port Jervis, N. Y.

**William Carroll Jones, Ph.G.**

*Thes.*, *Podophyllum Peltatum*.  
Retail and mfg. pharmacist. Vice-pres. 1st Nat'l Bank, New Egypt. Treas. New Egypt Light, Heat and Power and Water Co.  
*Ad.*, New Egypt, N. J.

**William Charles Kalteyer, Ph.G.**

*Thes.*, *Dioscorca Villosa*.  
*Ad.*, Houston Street, San Antonio, Texas.

**\*Frederick Franklin Kappes, Ph.G.**

*Thes.*, *Pepsinum*.

**Charles DeWalt Keefer, Ph.G.**

*Thes.*, *Aspidium Marginale*, *Willdenow*.  
Pharmacist, McKeesport Hosp. Formerly retail pharmacist. With Penna. Health Dept. 4 years. Chief Burgess of Chambersburg, Pa., 4 years.  
*Ad.*, 643 Phila. Avenue, Chambersburg, Pa.

**Charles Elmer Keeler, Ph.G.**

*Thes.*, Scientific Pharmacy and the Proprietary Medicine Trade.  
*Ad.*, Wenonah, N. J.

**William George Kelr, Ph.G.**

*Thes.*, Glycerin in Pharmacy.

**William Kuder, Ph.G.**

*Thes.*, Caffeine Estimation.

**Louis John Lehmann, Ph.G.**

*Thes.*, Lanolin.  
Wholesale and retail pharmacist.  
*Ad.*, Creve Coeur, Mo.

**Oliver Franklin Lenhardt, Ph.G.**

*Thes.*, *Eriodictyon Californicum*.  
Insurance agt. Magistrate. Chm. Federal Labor Board, Montgomery Co., Pa.  
*Ad.*, 14 E. Penn Street, Norristown, Pa.

**Harry Lippen, Ph.G.**

*Thes.*, *Rhamnus Purshiana*.  
*Ad.*, 553 N. Western Avenue, Los Angeles, Cal.

**William Hall Ludlam, Ph.G.**

*Thes.*, Corrosive Sublimate.

**Albert James Lynch, Ph.G.**

*Thes.*, Analysis of Milk.

**George Lyons, Ph.G.**

*Thes.*, Hydrogen Peroxide.  
Retail pharmacist.  
*Ad.*, 801 W. Huntington Street, Phila., Pa.

**Leslie C. McClellan, Ph.G.**

*Thes.*, *Chimaphila Umbellata*.

**Berthier McClure, Ph.G.**

*Thes.*, *Corydalis*.  
*Ad.*, 1126 S. Paxson Street, Phila., Pa.

**Thomas Francis McCoy, Ph.G.**

*Thes.*, Acidum Hydrocyanicum Dilutum.  
*Ad.*, Conshohocken, Pa.

**Robert Wesley Madeira, Ph.G.**

*Thes.*, Ozone and Its Properties.  
*Ad.*, 344 S. 6th Street, Reading, Pa.

**John A. J. May, Ph.G.**

*Thes.*, Pharmacy and Pharmacists.  
*Ad.*, Manchester, Iowa.

**Frederick William Meissner, Jr., Ph.G.**

*Thes.*, Gallic Acid.  
Retail pharmacist. Mem. U. S. P. Board of Trustees. Formerly Pres. Indiana State Pharm. Assn. One of organizers of Nat'l Assn. Retail Druggists and mem. Exec. Com. Mem. Auxiliary Com. of National Formulary. Pres. LaPorte City School Board. Special recruiting agt., U. S. Merchant Marine.  
*Ad.*, 820 Lincoln Way, Laporte, Ind.

**Harry J. Meyers, Ph.G.**

*Thes.*, Emulsion Oil *Chenopodium*.  
Pres. Brown-Borhek Co., Lumber and Coal. Formerly retail pharmacist and reporter and city editor, Denver Republican and Rocky Mt. News. Trustee St. Luke's Hosp.; delegate Repub. Nat'l Con. 1908.  
*Ad.*, 223 E. Church Street, Bethlehem, Pa.

**Thomas Frank Moody, Ph.G.**

*Thes.*, Assay of Benzoin.  
Insurance agt. and mgr. of plantation. Masonic affiliation.  
*Ad.*, P. O. Box 1497, Atlanta, Ga.

**John Louis Dales Morison, Ph.G.**

*Thes.*, The Conversion of Calomel Into Corrosive Sublimate by Chlorides.  
Instr. in Microscopy and Pharmacognosy, P. C. P. (See page 432.)  
*Ad.*, Norristown, Pa.

**Frank Gereon Mumma, Ph.G.**

*Thes.*, *Calendula Officinalis*.  
Transcribing clerk, office of Recorder of Deeds, Phila. Retail pharmacist, 18 years. Pres. 29th Ward Exec. Com.; Sch. Director, 1st Dist. Mem. State Legislature two terms.  
*Ad.*, 2502 Jefferson Street, Phila., Pa.

**\*William Christian Muntzer, Ph.G.**

*Thes.*, Extract of Liguorice.  
Deceased, January 10, 1906.

**Frank Edward Murphy, Ph.G.**

*Thes.*, *Diospyros*.  
Physician. Graduated in medicine, Univ. of Penna., 1893. Studied in Germany at Univ. Gottingen, Univ. Berlin, Univ. Wien, and at Harvard Univ. and John Hopkins Univ. Prof. Clinical Medicine, Med. Dept., Univ. Kansas. Mem. Med. Advisory Board.  
*Ad.*, Kansas City, Mo.

**Charles Bodine Neal, Ph.G.**

*Thes.*, Pills and Excipients.  
Physician. Graduated in medicine, Univ. of Penna., 1890.  
*Ad.*, Millville, N. J.

**Henry Augustus Selle Nolte, Ph.G.**

*Thes.*, The New Pharmacy Law.  
Retail pharmacist.  
*Ad.*, Merion, Pa.

**\*Albert Eugene Oerter, Ph.G.**

*Thes.*, Liqueur Ferri Chloridi.  
Employed by H. K. Mulford Co. Deceased, April 25, 1909.

**Howard Thatcher Painter, Ph.G.**

*Thes.*, *Pycnanthemum Linifolium*.  
*Ad.*, Wayne, Pa.

**\*Joseph Alphonse Palen, Ph.G.**

*Thes.*, *Rhus Glabra*.  
Deceased, 1916.

**Edwin Montague Platt, Ph.G.**

*Thes.*, The Medicinal Plants of Franklin Co., Pa. In charge of prescription dept., Dale and Co., York, Pa. Formerly retail pharmacist, Phila.  
*Ad.*, 158 Lafayette Street, York, Pa.

**\*Henry August Charles Poppenhusen, Ph.G.**

*Thes.*, *Apocynum Cannabinum*.  
Deceased, March 14, 1910.

**James Maxwell Pringle, Ph.G.**

*Thes.*, Tobacco.



- \*Otto Prochaska, Ph.G.**  
*Thes.*, Weidemeyer's Catarrh Cure.  
 Deceased, March 30, 1908.
- John Herman Rabenau, Ph.G.**  
*Thes.*, Guaiac Resin.  
*Ad.*, Pottsville, Pa.
- Wilbur Fisk Rawlins, Ph.G.**  
*Thes.*, Magnolia.
- John H. Rea, Ph.G.**  
*Thes.*, Maydis Stigmata.  
 Retail pharmacist. Recruiting agt. for U. S. Merchant Marine.  
*Ad.*, 222 E. Broad Street, Chester, Pa.
- Albert Henry Roehrig, Ph.G.**  
*Thes.*, Elixirs.  
*Ad.*, 4930 N. 9th Street, Phila., Pa.
- \*Gustave Rosen, Ph.G.**  
*Thes.*, Hints on the Dispensing of Poisons.  
 Deceased, April 15, 1890.
- \*William Clymer Rowe, Ph.G.**  
*Thes.*, Iodine.  
 Received Certificate of Proficiency in Chemistry, P. C. P., 1898. Deceased, February, 1912.
- David Stephen Ryan, Ph.G.**  
*Thes.*, Arsenious Acid.  
*Ad.*, 213 Linden Street, Scranton, Pa.
- Charles Rinear Scattergood, Ph.G.**  
*Thes.*, Amylum.  
*Ad.*, 144 S. Arkansas Avenue, Atlantic City, N. J.
- Hermann John M. Schroeter, Ph.G.**  
*Thes.*, Cassia Marilandica.
- \*George Robert William Schuster, Ph.G.**  
*Thes.*, Official Troches.  
 Deceased, July 1, 1918.
- \*William James Scott, Ph.G.**  
*Thes.*, Saccharum Officinarum.
- Otto Seiffert, Ph.G.**  
*Thes.*, Plumbi Carbonas Venale.
- Frank Morris Siggins, Ph.G.**  
*Thes.*, Gingers and Their Comparative Values.  
 Retail pharmacist.  
*Ad.*, Oroville, Cal.
- Howard Melancthon Smith, Ph.G.**  
*Thes.*, Examination of Prepared Chocolates.  
 Retail pharmacist and postmaster. Pres. Board of Trade, 1 year.  
*Ad.*, North White Lake, N. Y.
- \*John Reiman Smyser, Ph.G.**  
*Thes.*, Syrup of Ferrous Bromide.  
 Retail pharmacist, Phila. Deceased, December 16, 1920.
- Bertram Snyder, Ph.G.**  
*Thes.*, Cantharis Vesicatoria.  
 Retail pharmacist.  
*Ad.*, 6102 Germantown Ave., Phila., Pa.
- \*Henry Niasley Snyder, Ph.G.**  
*Thes.*, Drosera Rotundifolia.  
 Deceased, January, 1905.
- William Lincoln Snyder, Ph.G.**  
*Thes.*, Hydrogen Peroxide.  
 Retail pharmacist.  
*Ad.*, Jacksonville, Fla.
- George Reed Souder, Ph.G.**  
*Thes.*, Materia Medica and Pharmacy.  
*Ad.*, Bryn Mawr, Pa.
- \*Owen Crow Spear, Ph.G.**  
*Thes.*, Hunter's Invisible Toilet Powder.  
 Physician and pharmacist, Wilmington, Del. Graduated in medicine, Jeff. Med. College. Deceased, June 3, 1913.
- Albert John Staudt, Ph.G.**  
*Thes.*, Moss Mucilages as Emulsifiers.  
 Phila. Representative. Parke, Davis and Co. Retail pharmacist 10 years.  
*Ad.*, 3520 Spring Garden Street, Phila., Pa.
- \*William Stengel, Ph.G.**  
*Thes.*, Unguentum Aquæ Rosæ.  
 Deceased, October 7, 1892.
- Mima Baker Stone, Ph.G.**  
*Thes.*, The Importance of Dietics.
- \*Charles Clark Stratton, Ph.G.**  
*Thes.*, Blue as an Adulterant in Sugar.  
 Retail pharmacist, Redwood, Cal. Deceased, September 25, 1914.
- Frank Park Streep, Ph.G.**  
*Thes.*, Extract of Pinus Canadensis.  
 Retail pharmacist. Trustee, P. C. P.  
*Ad.*, 8528 Germantown Avenue, Phila., Pa.
- Charles Michael Swartz, Ph.G.**  
*Thes.*, Cubebæ and Preparations.  
*Ad.*, Hepburn Street and Rural Avenue, Williamsport, Pa.
- Lulu Burt Switzer, Ph.G.**  
*Thes.*, Fluidextract Cascara Sagrada.  
 Retail pharmacist. Treas. Town of Fairfield. Mem. nat'l and state pharm. assns. Masonic affiliation.  
*Ad.*, Southport, Conn.
- \*Gove Saulsbury Taylor, Ph.G.**  
*Thes.*, Spigelia Marilandica.
- Thomas Clarkson Taylor, Ph.G.**  
*Thes.*, Celluverte.
- J. Walton Travis, Ph.G.**  
*Thes.*, Fluidextract of Stavesacre.  
*Ad.*, 1224 Spruce Street, Phila., Pa.
- Emil Joseph Uller, Ph.G.**  
*Thes.*, Pilocarpus Pennatifolius.
- Robert Sidney Wagner, Ph.G.**  
*Thes.*, Pills and Pill Excipients.  
 Physician.  
*Ad.*, Tulsa, Okla.
- \*Louis Waldenberger, Ph.G.**  
*Thes.*, Suppositoria.  
 Deceased, March 2, 1912.
- Edwin Corby Wallace, Ph.G.**  
*Thes.*, Fermentation.
- Frank Brisben Wallace, Ph.G.**  
*Thes.*, Benzoic Acid.  
*Ad.*, 1043 W. Tioga Street, Phila., Pa.
- Frank Walls, Ph.G.**  
*Thes.*, Nitroglycerine.
- Lucius L. Walton, Ph.G.**  
*Thes.*, The Natural System.  
 Retail pharmacist. Mem. and Secy. Penna. of Pharmacy. Pres. Penna. Pharm. Assn., 1909-10. Mem. Williamsport Sch. Board 1 term; A. Ph. A.  
*Ad.*, 50 W. 4th Street, Williamsport, Pa.
- Frederick George Wedemeyer, Ph.G.**  
*Thes.*, Petroleum.  
 Retail pharmacist. Director Farmers and Merchants Bank. Recruiting agt. U. S. Merchant Marine.  
*Ad.*, Hemet, Cal.
- Frank Ressler Weiser, Ph.G.**  
*Thes.*, Pilea Pumila.  
 Physician and surgeon. Graduated in medicine, Jeff. Med. College, 1891. Coroner, 1899-1912. County Local Health official. Mem. Minn. State Board med. examiners; sch. board. Examining surg. Cottonwood Co. Draft Board.  
*Ad.*, Windom, Minn.

- \*George Victor Wenner, Ph.G.**  
*Thes.*, Tartaric Acid.  
Deceased, July 19, 1904.
- William Jacob Weyand, Ph.G.**  
*Thes.*, The Process for the Detection of Arsenic, Antimony and Mercury in Organic Mixtures.  
*Ad.*, 432 N. 38th Street, Phila., Pa.
- \*William John Williams, Ph.G.**  
*Thes.*, Hydrargyrum Ammoniatum.
- John Thomas Wrigley, Ph.G.**  
*Thes.*, Tinctura.  
Retail pharmacist.  
*Ad.*, 1801 Orthodox Street, Phila., Pa.
- Maxwell Wyeth, Ph.G.**  
Retired. Mem. firm John Wyeth and Bro. Served as Lieut. U. S. N. during World War.  
*Ad.*, Rosemont, Pa.
- Wayland Philips Young, Ph.G.**  
*Thes.*, Calcite.  
Received Certificate of Proficiency in Chemistry.
- \*James Stewart Zane, Ph.G.**  
*Thes.*, Chemistry and as to How Chemical Analyses are Made.  
Deceased, 1912.
- 1889
- Henry Vin Army, Ph.G.**  
*Thes.*, Parthenium Hysteroporus.  
Prof. of Chemistry, N. Y. Coll. of Pharmacy. Studied chemistry in Germany 1892-96. Analyt. chemist, New Orleans, 1896-97. Prof. Pharmacy Cleveland Sch. of Pharmacy, 1897-1911. Prof. of Chemistry, N. Y. Coll. of Pharmacy since 1911. Editor Druggists Circular, 1914-15. Reporter on Progress of Pharmacy, A. Ph. A. since 1916. Rec'd degree Ph.D. Univ. of Goettingen, 1896; Ph.M. P. C. P., 1919. Mem. Revision Com. U. S. P. and N. F.  
*Ad.*, 115 W. 68th Street, New York City.
- Samuel Aubley, Ph.G.**  
*Thes.*, Emulsions.  
*Ad.*, 9825 Miles Avenue, Cleveland, Ohio.
- William Bishop Ayres, Ph.G.**  
*Thes.*, Pharmacy Laws.  
*Ad.*, 54 N. 53d Street, Phila., Pa.
- Francis Llewellyn Bacon, Ph.G.**  
*Thes.*, Collecting Plants for Specimens.  
With Girard Trust Co., Phila. Formerly with Robert Shoemaker and Co.  
*Ad.*, 236 Winona Avenue, Germantown, Phila., Pa.
- Julius Leopold Baldauf, Ph.G.**  
*Thes.*, Rad. Verbasci Thapsi.  
Retail pharmacist. Received Certificate of Proficiency in Chemistry, P. C. P., 1891.  
*Ad.*, Henderson, Ky.
- Lincoln Gray Barnitz, Ph.G.**  
*Thes.*, Advantages of Dilution and Solution.
- Charles Llewellyn Barrett, Ph.G.**  
*Thes.*, Sugar Coated Pills.  
*Ad.*, 40 Harvard Avenue, Collingswood, N. J.
- \*Henry James Batdorff, Ph.G.**  
*Thes.*, Syrups by "Cold" Percolation.  
Deceased, March 5, 1903.
- William Henry Stevens Bateman, Ph.G.**  
*Thes.*, Tinctura Opii Deodorata.  
Pres. W. H. S. Bateman and Co. Iron and Steel Products. Director Merchants and Drivers Nat'l Bank; Amer. Boiler Mfrs. Assn.; Railway Supply Mfrs. Assn.; Chm. Library and Hist. Com. Logan Improvement League. Mem. Engineers Club; Manufacturers Club; Old York Road Country Club; Machinery Club of N. Y.; Southern and Southwestern Ry. Club of Atlanta, Ga.; Pittsburgh Railway Club.  
*Ad.*, 5136 N. Broad Street, Phila., Pa.
- David Fuller Bentley, Ph.G.**  
*Thes.*, Drug Milling.  
*Ad.*, 8th and State Street, Camden, N. J.
- Harry Rees Birch, Ph.G.**  
*Thes.*, The Important Cereals.
- Robert Perry Blackburn, Ph.G.**  
*Thes.*, Guarana.  
Retail pharmacist. Masonic affiliation.  
*Ad.*, 1172 W. 4th Street, Williamsport, Pa.
- Charles Henry Blouch, Ph.G.**  
*Thes.*, White Snake-Root.  
*Ad.*, 521 Cumberland Street, Lebanon, Pa.
- Charles Everett Boger, Ph.G.**  
*Thes.*, Compressed Tablets.  
*Ad.*, 47 S. 8th Street, Lebanon, Pa.
- Charles Edward Bowers, Ph.G.**  
*Thes.*, Oil of Maize.
- \*Frank Bowker, Ph.G.**  
*Thes.*, Quick Process of Making Laudanum and Paregoric.  
Deceased, February 13, 1897.
- David Buchanan Bowman, Ph.G.**  
*Thes.*, Unguentum Hydrargyri.  
Mgr. J. G. Stroud's drug store.  
*Ad.*, Box 143, West Chester, Pa.
- Augustus Bradley, Ph.G.**  
*Thes.*, Psoralea Melilotoides.  
Narcotic Inspector under Harrison Act. Formerly with Parke, Davis and Co. Retail pharmacist until 1914.  
*Ad.*, Burlington, N. C.
- Walter Lee Brown, Ph.G.**  
*Thes.*, The Uses of the Microscope in Pharmacy.
- Harry Edward Burget, Ph.G.**  
*Thes.*, Erythroxyton Coca.
- Simon Mark Butt, Ph.G.**  
*Thes.*, Life of the Plant.  
Chemist for American Drug Co. Served in U. S. P. Hosp. Corps during Spanish-Amer. War.  
*Ad.*, 764 Washington Street, Dayton, Ohio.
- \*Frank Hamilton Carman, Ph.G.**  
*Thes.*, Pills and Excipients.  
Graduated in medicine, Univ. of Penna., 1892.  
Deceased, November 29, 1894.
- Frank Valorus Cassaday.**  
*Thes.*, Eonymus Atropurpureus.  
Secy. and Treas. Cassaday Drug Co. City Treas. 6 years. Masonic affiliation.  
*Ad.*, Alliance, Ohio.
- Charles E. Cawley, Ph.G.**  
*Thes.*, Hydrargyri Chloridum Mite.  
Investments. Pharmacist in Seattle, Wash., Honolulu, H. I., Nome, Alaska.  
*Ad.*, Manchester, Iowa.
- \*James Clavin, Ph.G.**  
*Thes.*, Algarobia Glandulosa.  
Deceased, March 9, 1897.
- William Lowther Codville, Ph.G.**  
*Thes.*, The Orange Tree and Products.  
*Ad.*, 184 W. Girard Avenue, Phila., Pa.
- Perival Valentine Cooper, Ph.G.**  
*Thes.*, Protection to Chemicals.  
Mem. of firm and business mgr. Thomas V. Cooper and Sons, Publishers and Job Printers. Course in chemistry, Univ. of Penna. Editor Delaware Co. American 10 years.  
*Ad.*, Media, Pa.
- Charles Marquis Cottam, Ph.G.**  
*Thes.*, Salix.

- Harry Stockton Courson, Ph.G.**  
*Thes.*, Sulphur, and Its Two Principal Oxy-acids.  
 Retail pharmacist.  
*Ad.*, Kennett Square, Pa.
- George Tindall Craig, Ph.G.**  
*Thes.*, Pepsin Preparations.
- John Henry Crass, Ph.G.**  
*Thes.*, Cardamomum.  
 Pharmacist for George B. Evans.  
*Ad.*, 6040 Latonia Avenue, Phila., Pa.
- \*Archie Darrah Crawford, Ph.G.**  
*Thes.*, *Asclepias Tuberosa*.
- \*Walter Beatty Crawford, Jr., Ph.G.**  
*Thes.*, Laudanum.  
 Deceased, March 11, 1903.
- \*George Joseph Crumble, Ph.G.**  
*Thes.*, Percolation.  
 Retail pharmacist, Phila. Director Nat'l Bank of North Phila., Deceased, February 21, 1921.
- William Joseph Daniels, Ph.G.**  
*Thes.*, Creasote and Its Adulterations.  
 Retail pharmacist.  
*Ad.*, Florence, Colo.
- \*William Owen Davies, Ph.G.**  
*Thes.*, *Eucalyptus Globulus*.  
 Deceased, May 26, 1903.
- Pierre Beaumont Davis, Ph.G.**  
*Thes.*, Coffee.
- George Arthur Deltz, Jr., Ph.G.**  
*Thes.*, *Fabiana Imbricata*.
- James Louis Demoville, Ph.G.**  
*Thes.*, Preservation of Oils and Fats.  
 With United Drug Co., Boston, Mass. Pres. Merchants Assn., Nashville, Tenn. Formerly retail pharmacist, Nashville.  
*Ad.*, Hotel Hemingway, Boston, Mass.
- Thomas Donaldson, Ph.G.**  
 Wholesale and retail pharmacist. Mem. Rotary Club.  
*Ad.*, Market and 2d Street, Wilmington, Del.
- William Albert Dorman, Ph.G.**  
*Thes.*, Pills and Excipients.  
 Retail pharmacist.  
*Ad.*, Phoenixville, Pa.
- \*Samuel Conler Dubois, Jr., Ph.G.**  
*Thes.*, *Emulum Olei Morrhuæ*.
- Clifford G. Dunn, Ph.G.**  
*Thes.*, *Podophyllum*.
- \*Charles Wesley Simons Edenborn, Ph.G.**  
*Thes.*, Importance of Assayed Drugs.  
 Deceased, August 24, 1891.
- Frederick Eft, Ph.G.**  
*Thes.*, *Iris Versicolor*.  
 Physician. Graduated in medicine, Univ. of Penna., 1892.  
*Ad.*, 1340 N. 13th Street, Phila., Pa.
- Clarence Selby Eldredge, Ph.G.**  
*Thes.*, Assays of Lime Water.  
 Physician—Eye Specialist. Chief eye surg. Italian Hosp. Formerly asst. disp. surg. Eye Dept., Univ. of Penna. Hosp. and Wills Eye Hosp. Mem. City Council.  
*Ad.*, 1115 Penna. Bldg., 15th and Chestnut Streets, Phila., Pa.
- William James Enders, Ph.G.**  
*Thes.*, *Apium*.  
*Ad.*, Chestnut Hill Sanatorium, Phila., Pa.
- \*Samuel Charles Deeg Ensminger, Ph.G.**  
*Thes.*, *Iodoformum*.  
 Deceased, April 13, 1921.
- William Evans, Ph.G.**  
*Thes.*, Bismuth and Its Preparations.
- George W. Fehr, Ph.G.**  
*Thes.*, Quiz.  
 Retail pharmacist. Treas. Phila. Assn. Retail Druggists since 1902. Mem. Board of Directors Phila. Wholesale Drug Co.  
*Ad.*, 1500 S. Broad Street, Phila., Pa.
- \*Claud Field, Ph.G.**  
*Thes.*, Percolation.
- Harvey James Flet, Ph.G.**  
*Thes.*, Nickel.  
 Physician. Graduated in medicine, Jeff. Med. College, 1891. Sch. Director 9 years.  
*Ad.*, 2152 N. 4th Street, Phila., Pa.
- Stephen Harvey Foulkes, Ph.G.**  
*Thes.*, Official Preparations of Tar.  
*Ad.*, 1114 Elm Street, Collingswood, N. J.
- Walter Scott Froelich, Ph.G.**  
*Thes.*, False and True Senega.  
*Ad.*, 5901 Germantown Avenue, Phila., Pa.
- Cromwell Pearce Gabell, Ph.G.**  
*Thes.*, *Apis Mellifica*.  
 Retail pharmacist.  
*Ad.*, 52d and Lancaster Avenue, Phila., Pa.
- William Foster Ganster, Ph.G.**  
*Thes.*, Pharmacy of the Nineteenth Century.
- \*Richard Clement Gelst, Ph.G.**  
*Thes.*, *Euonymus Atropurpureus*.  
 Deceased, August 29, 1894.
- \*Henry Robert Gillispie, Ph.G.**  
*Thes.*, *Nepeta Cataria*.
- \*Lewis Thompson Greenfield, Ph.G.**  
*Thes.*, *Manaca*.
- Howard Ezra Griffin, Ph.G.**  
*Thes.*, Fluid Extract of Stramonium Seed.  
 Retail pharmacist.  
*Ad.*, 1844 Main Avenue, Scranton, Pa.
- Gottlieb Matthew Grosse, Ph.G.**  
*Thes.*, *Ferrum Reductum*.  
*Ad.*, 613 Pearl Street, Cleveland, Ohio.
- DeWitt Clinton Guthrie, Ph.G.**  
*Thes.*, Syrup of Yerba Santa.  
 Physician. Mem. staff American Hosp. Specialist in gastro-enterology. Mem. Union League Club, Phila.  
*Ad.*, 722 N. 40th Street, Phila., Pa.
- Harry Capp Haak, Ph.G.**  
*Thes.*, *Azalea*.  
 Supervisor of salesmen, N. Y. and Penna., for Franklin Sugar Refining Co. Formerly mfg. chemist.  
*Ad.*, 325 Colfax Avenue, Scranton, Pa.
- Robert Anthony Hatcher, Ph.G.**  
*Thes.*, Tincture of Cantharides.  
 Prof. Pharmacology, Cornell Med. College.  
*Ad.*, 414 E. 26th Street, New York City.
- \*Samuel Light Hauck, Ph.G.**  
*Thes.*, *Astragalus Mollissimus*.  
 Physician and surgeon for Burlington Railway System. Graduated in medicine Rush Med. College. Deceased, January 22, 1919.
- Maximilian Hellmich, Ph.G.**  
*Thes.*, Citrine Ointment.  
 Salesman.  
*Ad.*, 1933 N. 21st Street, Phila., Pa.
- \*Frederick Gustave Hertel, Ph.G.**  
*Thes.*, *Marrubium* and Bitter Principle.  
 Deceased, March 14, 1897.
- \*Robert Crockett Hoffecker, Ph.G.**  
*Thes.*, Petroleum and Its Products.



**Erdman Hoffman, Ph.G.**

*Thes.*, Oleatum Hydrargyri.  
Retail pharmacist. Mem. Del. State Board of Pharmacy 13 years. Now Pres. of same. Mem. Wilmington Board of Public Education.  
*Ad.*, Maryland Avenue and Linden Street, Wilmington, Del.

**Andrew Greider Hostetter, Ph.G.**

*Thes.*, Potassii Tartras.  
*Ad.*, Millersville, Pa.

**Samuel Emerson Howall, Ph.G.**

*Thes.*, An Automatic Percolator.

**Ward Dutcher Hume, Ph.G.**

*Thes.*, Cocillana.  
*Ad.*, 1100 Mission Road, Los Angeles, Cal.

**Oliver Barron Jacobs, Ph.G.**

*Thes.*, Tinctura Gentianæ Composita.

**\*Henry Hugh James, Ph.G.**

*Thes.*, Aluminium.

**\*Peter Lawrence Jones, Ph.G.**

*Thes.*, Gelatin Coated Pills.  
Deceased, September, 1917.

**Harry Baker Kantner, Ph.G.**

*Thes.*, Sulphur.  
*Ad.*, 1230 11th Avenue, Altoona, Pa.

**John J. Kappes, Ph.G.**

*Thes.*, Nutmegs and Mace.

**John P. Kelly, Ph.G.**

*Thes.*, Blackberry Brandy.  
*Ad.*, Elmira, N. Y.

**Albert Dennis Kennedy, Ph.G.**

*Thes.*, Determination of Specific Gravity of Liquids.

**John Frank Kilgus, Ph.G.**

*Thes.*, Dobell's Solution.  
*Ad.*, 422 High Street, Williamsport, Pa.

**William Michael Kilgus, Ph.G.**

*Thes.*, Quinine Pills.  
Physician.  
*Ad.*, 45 DeLong Bldg., Phila., Pa.

**Charlie Davis Kingaton, Ph.G.**

*Thes.*, Official Liquors.  
Retail pharmacist. Recruiting Agt. U. S. Merchant Marine.  
*Ad.*, Denison, Texas.

**Henry Lienbach Klopp, Ph.G.**

*Thes.*, Observation in Pharmacy.  
*Ad.*, 3421 Spring Garden Street, Phila., Pa.

**Peter Paul Klopp, Ph.G.**

*Thes.*, Koumiss.  
Physician. Graduated in medicine, Jeff. Med. College, 1890. Local Draft Board Examiner.  
*Ad.*, 618 W. Lehigh Avenue, Phila., Pa.

**Henry Krasmer, Ph.G.**

*Thes.*, Quercus Alba.  
Prof. of Botany and Pharmacognosy, P. C. P.  
(See page 415.)  
*Ad.*, Box 128, Mt. Clemens, Mich.

**Guatav Adolf Krause, Ph.G.**

*Thes.*, Rubus Villosus.

**Fraderick William Krollpfeffer, Ph.G.**

*Thes.*, Assay of Opium.

**Adolph Latin, Ph.G.**

*Thes.*, Verbascum Thapsus.  
*Ad.*, 110 Yale Avenue, Dayton, Ohio.

**Arthur Morris Leina, Ph.G.**

*Thes.*, Landanum.  
Retail pharmacist.  
*Ad.*, Honesdale, Pa.

**John Becker Leaher, Ph.G.**

*Thes.*, Importance of Attention in Pharmacy.  
*Ad.*, Williamstown, Pa.

**Griffith Robert Lewis, Ph.G.**

*Thes.*, Tincture Chloride of Iron.  
Retail pharmacist and gen. mgr. Copeland Ore Sampling Co.; Supt. United Gold Mines Co. Mem. Advisory Board Colo. State Univ. Formerly Postmaster. Food Administrator, Teller Co., Colo.  
*Ad.*, Cripple Creek, Colo.

**\*Samuel Wesley Lippincott, Ph.G.**

*Thes.*, "Adeps Benzoinatus" by Percolation.  
Deceased, September 22, 1906.

**\*Joseph Lowenberg, Ph.G.**

*Thes.*, Commercial Sulphate and Acetate of Morphine.  
Deceased, 1910.

**Charles Edward Reese McCloskey, Ph.G.**

*Thes.*, Assay of Belladonna Root and Leaves.

**\*John Wanamaker McCouch, Ph.G.**

*Thes.*, Syrups in General Use.

**Charles Hunt McDowell, Ph.G.**

*Thes.*, Cocaine.

**Robert McFadden, Ph.G.**

*Thes.*, The Future of the Retail Drug Business in Philadelphia.  
Hospital pharmacist.  
*Ad.*, 1637 Francis Street, Phila., Pa.

**\*Joseph Allen McKee, Ph.G.**

*Thes.*, The Official Salicylates.

**Charles Baynor McKeel, Ph.G.**

*Thes.*, Sunflower Seed.  
*Ad.*, Columbia, N. C.

**J. Irwin McKnight, Ph.G.**

*Thes.*, Potassii Nitras.  
*Ad.*, 7215 Finance Street, Pittsburgh, Pa.

**\*William Benjamin McMecheu, Ph.G.**

*Thes.*, Gum Arabic.  
Retail pharmacist, Phila. Deceased, February 9, 1915.

**Robert Carson McNeil, Ph.G.**

*Thes.*, Suppositories.

**\*John Charles MacMillan, Ph.G.**

*Thes.*, The Advantages of a Pharmaceutical Education.

**Edward Dudley MacNair, Ph.G.**

*Thes.*, Psoralea.

**\*Gldeon Hunt Macon, Ph.G.**

*Thes.*, Pills of Permanganate of Potassium.

**Frank Street MacPherson, Ph.G.**

*Thes.*, Oleum Gossypii Seminis.  
Real estate operator since 1909. Retail pharmacist until 1904; mfg. pharmacist until 1909.  
*Ad.*, 708 Kings Highway, Haddon Heights, N. J.

**\*Robert Wood Maria, Ph.G.**

*Thes.*, Liquor Ferri Chloridi.

**Henry John Mayers, Ph.G.**

*Thes.*, Geranium Maculatum.

**Charles Clyde Meredith, Ph.G.**

*Thes.*, Antipyrine.  
*Ad.*, Fairmont P. O., West Va.

**Charles John Anatin Miles, Ph.G.**

*Thes.*, Boro-Benzozate of Sodium.  
Mgr. for Hall-Mack Co.  
*Ad.*, 2047 Arch Street, Phila., Pa.

**Louis Augustus Minner, Ph.G.**

*Thes.*, Oleum Peponis.  
Physician. Graduated in medicine, St. Louis College of Phys. and Surgeons, 1898, also Jeff. Med. College, 1900. Examining surg. U. S. Pension Bureau, 1899-1906. Mem. Med. Advisory Board Dist. No. 23. Mem. Council Nat'l Defense.  
*Ad.*, Murphysboro, Ill.

**\*Henry Mittelbach, Ph.G.**

*Thes.*, Arum—Triphyllum.  
Retail pharmacist, Boonville, Mo. Deceased, October 20, 1915.

**\*John Moffet, Ph.G.**

*Thes.*, The Formulæ of the New Pharmacopœia.  
Physician. Graduated in medicine, Jeff. Med. College. Practiced in Phila. Deceased, May 30, 1920.

**John Ellsworth Mohr, Ph.G.**

*Thes.*, Suppositories.  
Retail pharmacist.  
*Ad.*, Jersey Shore, Pa.

**\*John Daniel Möller, Ph.G.**

*Thes.*, Urinum.

**William Bossieux Moody, Ph.G.**

*Thes.*, Infusions.

**Joseph Garrison Morris, Ph.G.**

*Thes.*, The Medicinal Plants of Cape May Co., New Jersey.  
Retail pharmacist.  
*Ad.*, Vineland, N. J.

**William Moss, Ph.G.**

*Thes.*, Carbolic Acid as a Disinfectant.

**Reuben Emanuel Moyer, Ph.G.**

*Thes.*, Hydrastis Canadensis.

**James Joseph Murray, Ph.G.**

*Thes.*, Fluid Extract Senega.

**Aaron Wallace Musgrave, Ph.G.**

*Thes.*, Commercial Mustard.  
*Ad.*, Scranton, Pa.

**Carvesso Oursler Myers, Ph.G.**

*Thes.*, Scutellaria Lateriflora.

**\*Emma Bour Nardyz, Ph.G.**

*Thes.*, Opium.  
Deceased, November 30, 1890.

**Milton Mackey Osmun, Ph.G.**

*Thes.*, A Well Regulated Pharmacy.  
Physician.  
*Ad.*, 611 Broadway, Camden, N. J.

**\*Harold Duche Owens, Ph.G.**

*Thes.*, Emulsions.  
Deceased, October 20, 1890.

**Osmund Young Owings, Ph.G.**

*Thes.*, Carbonates of Sodim.  
Agriculture. Formerly Prof. of Pharmacy, Univ. of S. C. Pres. Retail Druggists Assn. Mem. Board of Examiners 12 years. Chm. Legislative Com. 11 years.  
*Ad.*, Columbia, S. C.

**\*Charles W. Palmer, Ph.G.**

*Thes.*, Camphora.  
Physician. Graduated in medicine, Jeff. Med. College, 1902. Deceased, March 9, 1903.

**William Ahner Pierce, Ph.G.**

*Thes.*, Petrolatum.  
*Ad.*, West Chester, Pa.

**M. Arthur Porter, Ph.G.**

*Thes.*, Law in Relation to Pharmacy in Pennsylvania.  
Traveling salesman and mgr. Robert McNeil Co.  
*Ad.*, 3727 N. Bouvier Street, Phila., Pa.

**\*John Franklin Potts, Ph.G.**

*Thes.*, Fermentation.  
Deceased, June 20, 1895.

**\*Fred Briggs Quackenbush, Ph.G.**

*Thes.*, The Official Tinctures.  
Deceased, 1917.

**\*Charles Carroll Ramsay, Ph.G.**

*Thes.*, Amylum.  
Deceased, 1908.

**George Herbert Ray, Ph.G.**

*Thes.*, Eupatorium Purpureum.  
Retail pharmacist.  
*Ad.*, 401 3rd Street, Portland, Ore.

**\*Howard Lincoln Rayner, Ph.G.**

*Thes.*, Phosphorus.

**Joel Salter Reading, Ph.G.**

*Thes.*, Syrups by Cold Percolation.  
Traveling salesman, Albany Chem. Co.  
*Ad.*, 937 S. 55th Street, Phila., Pa.

**\*Thaddeus Rowland Redner, Ph.G.**

*Thes.*, Fluidextracts.  
Deceased, October 1, 1917.

**Howard Reed, Ph.G.**

*Thes.*, Mercuric Chloride as a Germicide.  
Physician. Graduated in medicine, Univ. of Penna., 1891. Served in Univ. of Penna., Polyclinic, Samaritan and Garretson Hosp. Served in U. S. A. as 1st Lieut. Med. Dept.  
*Ad.*, 1829 Diamond Street, Phila., Pa.

**Edwin Stanton Reider, Ph.G.**

*Thes.*, Medicinal Catechu.  
*Ad.*, 411 First Avenue, Williamsport, Pa.

**Eugene George Relg, Ph.G.**

*Thes.*, Japanese Aconite.  
Retail pharmacist.  
*Ad.*, Warren, Pa.

**\*Howard Newton Richards, Ph.G.**

*Thes.*, Mortars and Pestles.

**\*Frederic Philip Riedenauer, Ph.G.**

*Thes.*, Pills and Their Coatings.  
Retail pharmacist, Phila. Deceased, March 6, 1912.

**John Dauberman Rishell, Ph.G.**

*Thes.*, Honey.

**Leon Stewart Risley, Ph.G.**

*Thes.*, Quebracho Blanco.  
Retail pharmacist.  
*Ad.*, 385 Capitol Avenue, Hartford, Conn.

**Cyrill Depue Rosenkrans, Ph.G.**

*Thes.*, The Egg in Pharmacy.

**William McOwen Ross, Ph.G.**

*Thes.*, Pressure Percolators.

**\*Michael Joseph Rourke, Ph.G.**

*Thes.*, Fluid Extract of Wild Cherry.  
Deceased, August 28, 1896.

**August James Schlaepfer, Ph.G.**

*Thes.*, Benzoated Lard.  
*Ad.*, 2d and Main Streets, Evansville, Ind.

**Henry John Schulte, Ph.G.**

*Thes.*, Simaruba Officialis.  
Retail pharmacist.  
*Ad.*, 1501 E. 55th Street, Chicago, Ill.

**Augustus A. Schutzenbach, Ph.G.**

*Thes.*, Physostigma.  
Exec. Clerk, Audit and Account Control Division, Knights of Columbus Educational and Welfare Activities. Retail pharmacist until 1917. During war chief investigator U. S. Food Administration. Also with N. Y. State Food Administration.  
*Ad.*, 1201 Chapel Street, New Haven, Conn.

- Leslie Watts Schwab, Ph.G.**  
*Thes.*, Ambrosia Artemesiaefolia.  
Physician and surgeon. Graduated in medicine,  
Univ. of Ill., 1896.  
*Ad.*, 4315 Grand Boulevard, Chicago, Ill.
- Charles Albert Schwacke, Ph.G.**  
*Thes.*, Household Ammonia.
- William Henry Schwenk, Ph.G.**  
*Thes.*, Putrefaction and Its Causes.
- John Henry Seiffert, Ph.G.**  
*Thes.*, Thymol.
- \*Joseph Bennett Sherman, Ph.G.**  
*Thes.*, Antiseptics.  
Retail pharmacist, Belmar, N. J.  
Deceased, July 7, 1922.
- \*Robert Simons, Ph.G.**  
*Thes.*, Black Pepper.  
Deceased, February 17, 1909.
- John Hamilton Small, Jr., Ph.G.**  
*Thes.*, Thea Sinensis.  
Asst. Prof. Bact., Univ. of Penna. Graduated in  
medicine. Res. phys. Phila. Gen. Hosp.; Instr.  
Clinical and Physical Diagnosis, and later Prof. of  
Bact. Medico-Chi. College.  
*Ad.*, 1831 Chestnut Street, Phila., Pa.
- Frank H. Smith, Ph.G.**  
*Thes.*, Eupatorium.
- John Stewart Smith, Ph.G.**  
*Thes.*, Bark of Prinos Verticillatus.
- Edward Stanhope Smythe, Ph.G.**  
*Thes.*, Gnaphalium Polycephalum.
- Charles Morton Southall, Ph.G.**  
*Thes.*, Tobacco.  
Retail pharmacist. Received Certificate of Pro-  
ficiency in Chemistry, P. C. P., 1889.  
*Ad.*, Florence, Ala.
- Willie Leisse Stephen, Ph.G.**  
*Thes.*, The Bromides of the K, Na, Li, and NH<sub>4</sub>.  
Pharmacist. Served in Med. Dept. U. S. A., Van-  
couver Barracks.  
*Ad.*, Bend, Ore.
- Fred Madison Stevens, Ph.G.**  
*Thes.*, Tea Analysis.
- Aaron Walter Stewart, Ph.G.**  
*Thes.*, The Pharmaceutical Physician.
- \*Isaac Morris Supples, Ph.G.**  
*Thes.*, Lac.  
Deceased, January 12, 1903.
- \*David Falls Swisher, Ph.G.**  
*Thes.*, The Natural Order of Coniferae.  
Physician and surgeon. Graduated in medicine,  
Jeff. Med. College. Practiced at Darby, Pa. De-  
ceased, March 1, 1915.
- W. Herbert Moodie Thompson, Ph.G.**  
*Thes.*, Coal Tar, Its Origin and Products.
- Edward Quin Thornton, Ph.G.**  
*Thes.*, Preparation of Antiseptic Animal Ligatures.  
Physician.  
*Ad.*, 1331 Pine Street, Phila., Pa.
- Samuel W. Upham, Ph.G.**  
*Thes.*, Kaolin, from Bedford Co., Virginia.  
Traveling representative, Bristol-Myers Co.  
*Ad.*, Caledonia, N. Y.
- William Clinton Van Dyke, Ph.G.**  
*Thes.*, Sodium Silico Fluoride.  
Insurance Broker.  
*Ad.*, 331 High Street, Germantown, Phila., Pa.
- Samuel Edwarsd Wagaman, Ph.G.**  
*Thes.*, Sulphate of Morphia Granules.  
Retail pharmacist.  
*Ad.*, Chambersburg, Pa.
- James Francis Wallis, Ph.G.**  
*Thes.*, Picrotoxin.
- Percy Hall Ward, Ph.G.**  
*Thes.*, Fluidextracts.  
*Ad.*, Crisfield, Md.
- Edmund Howell Watkins, Ph.G.**  
*Thes.*, Tincture of Nux Vomica.  
Banker. Served as Y. M. C. A. Secy. during  
World War.  
*Ad.*, Kane, Pa.
- \*Maurice Watson, Ph.G.**  
*Thes.*, Rhenum.  
Retail pharmacist, Bristol, Pa. Deceased, October  
12, 1918.
- Charles Henry Weber, Ph.G.**  
*Thes.*, Pills and Excipients.  
Retail pharmacist.  
*Ad.*, Poplar Bluff, Mo.
- William Weber, Ph.G.**  
*Thes.*, Liquor Plumbi Subacetatis.  
*Ad.*, Poplar Bluff, Mo.
- Joseph L. Weil, Ph.G.**  
*Thes.*, Lycopus Virginicus.
- Edward Riall White, Ph.G.**  
*Thes.*, Incompatibility of Unguentum Belladonna  
with Acidum Tannicum.  
Retail pharmacist.  
*Ad.*, Salisbury, Md.
- \*Robert Walter White, Ph.G.**  
*Thes.*, Sugar.  
Retail pharmacist, Phila. Deceased, February 19,  
1917.
- Joseph Washington Wischman, Ph.G.**  
*Thes.*, Acetic Acid.  
*Ad.*, 723 N. 5th Street, Phila., Pa.
- \*John Howard Witherow, Ph.G.**  
*Thes.*, Pill Making in Pharmacies.
- \*Harry Sudduth Wood, Ph.G.**  
*Thes.*, Glacial Acetic Acid.
- John Stewart Woodruff, Ph.G.**  
*Thes.*, Pepsins.  
Physician and pharmacist. Graduated in medicine,  
Medico-Chi. College, 1895. Chm. Local Draft  
Board No. 14.  
*Ad.*, Roxborough and Pechin Streets, Phila., Pa.
- Charles Young, Ph.G.**  
*Thes.*, Prescriptions and Dispensing Thereof.  
*Ad.*, Franklin Street, Johnstown, Pa.
- William C. Zinnsel, Ph.G.**  
*Thes.*, Oleum Tiglii.

1890

**Franklin Irving Adams, Ph.G.**  
*Thes.*, Liquor Plumbi Subacetatis Dilutus.  
Retail pharmacist.  
*Ad.*, 12 E. Main Street, Amsterdam, N. Y.

**\*John Maskell Allen, Ph.G.**  
*Thes.*, Solvents of Opium.  
Deceased, March 5, 1891.

**\*William Cummings Amsden, Ph.G.**  
*Thes.*, Absentminded Pharmacists.  
Deceased, July 5, 1920.



**Ferdinand Geisler Angeny, Ph.G.**

*Thes.*, Saccharin.  
Physician. Res. phys. Polyclinic, and Episcopal Hosps., Phila. Visiting chief to Samaritan, Episcopal and St. Christopher's Hosp., Phila. Councilman and pres. of Council Avon-by-the-Sea. Commissioner and chm. Finance and Revenue, Avon-by-the-Sea. Served in U. S. A. as Major, Med. Corps. Post-surgeon at Mineola, L. I., also surgeon, Park Field, Tenn.  
*Ad.*, Avon-by-the-Sea, N. J.

**\*Franklin Muhlenberg Apple, Ph.G.**

*Thes.*, Glycerita.  
Lecturer on staff of Pharmacy Dept., Medico-Chi. College. Mem. A. Ph. A.; Penna. Pharm. Assn. Deceased, July 9, 1919.

**\*William Appman, Ph.G.**

*Thes.*, Syrups by Cold Percolation.  
Retail pharmacist, San Antonio, Texas. Deceased, 1920.

**\*William Dwight Barnard, Ph.G.**

*Thes.*, An investigation of Ground Cloves.  
Deceased, December 30, 1910.

**Gustavus Adolphus Barwig, Ph.G.**

*Thes.*, Bone Black.

**William Christopher Baur, Jr., Ph.G.**

*Thes.*, Barbascio.  
*Ad.*, Norwalk, Conn.

**Charles Henry Bennum, Ph.G.**

*Thes.*, Petroleum.  
Physician.  
*Ad.*, Georgetown, Del.

**Abraham Lincoln Besore, Ph.G.**

*Thes.*, Estimation of Lycopodium.  
*Ad.*, 638 Linwood Avenue, Collingswood, N. J.

**Harry Lee Bickel, Ph.G.**

*Thes.*, Potassii Bitartras.

**\*John Jessiah Bilheimer, Ph.G.**

*Thes.*, Sympus Cubebæ.

**\*Guido Carl Boecking, Ph.G.**

*Thes.*, Pharmaceutical Economy.

**\*Alexander Carhart Bonnell, Ph.G.**

*Thes.*, Psoralea Melilotus.

**John M. Bowman, Jr., Ph.G.**

*Thes.*, Appurtenances to the Modern Pharmacy. Dairy feed business. Retail pharmacist until 1907. Engaged in newspaper work.  
*Ad.*, 4527 Pulaski Avenue, Phila., Pa.

**William Augustus Bright, Ph.G.**

*Thes.*, Syrupus Ferri Iodidi.  
Retail pharmacist.  
*Ad.*, 4600 Baltimore Avenue, Phila., Pa.

**Edward Herman Buehl, Ph.G.**

*Thes.*, Official Preparations of Cubebes. Secy. and Gen. Mgr., Alhrecht Barber Supply and Drug Co.  
*Ad.*, 623 E. Buchtel Avenue, Akron, Ohio.

**\*Zack W. Bugg, Ph.G.**

*Thes.*, Production of Tobacco.  
Retail pharmacist, Wickliffe, Ky. Deceased, January 9, 1917.

**Frank Eugene Burgess, Ph.G.**

*Thes.*, Glycerin Suppositories.  
*Ad.*, Jefferson, Ohio.

**Charles Hayes Butters, Ph.G.**

*Thes.*, Syrup of Ipecac.

**Florence Moore Caldwell, Ph.G.**

*Thes.*, Elixir of Iron, Quinine and Strychnine.

**Clarence Henry Campbell, Ph.G.**

*Thes.*, Tinctura Cinchona Composita "Improved." Essential Oils and Chemicals. Formerly Res. Mgr. for Antoine Chiris Co. Mem. Sons Amer. Revolution.  
*Ad.*, Springfield, Pa., R. D. No. 3.

**Clarence Edgar Carritte, Ph.G.**

*Thes.*, Inexhaustion in Percolation.

**Benjamin Franklin Cartwright, Ph.G.**

*Thes.*, Eupatorium.  
Retail pharmacist.  
*Ad.*, 810 West Side Avenue, Jersey City, N. J.

**John Francis Cassidy, Ph.G.**

*Thes.*, Liquids by Weight.

**James Truss Challenger, Ph.G.**

*Thes.*, Cannabis Indica.  
Retail pharmacist.  
*Ad.*, New Castle, Del.

**Jerome P. Churchill, Ph.G.**

*Thes.*, Adulteration of Potassium Nitrate. Banker and stock raiser. Retail pharmacist until 1902. Vice-pres. Siskiyou Co. Bank. Pres. Yreka Chamber of Commerce. Treas. City of Yreka. Director Siskiyou Co. Bank and 1st Savings Bank of Siskiyou Co. Director and Pres. Churchill Co. and director and pres. Wheeler Est. Co., Stockton, Cal. One of the founders of Cal.-Ore. Power Co.  
*Ad.*, Yreka, Siskiyou Co., Cal.

**Samuel Coleman, Ph.G.**

*Thes.*, Strophanthus.  
*Ad.*, 203-7th Avenue, Brooklyn, N. Y.

**Lemuel Belah Coley, Ph.G.**

*Thes.*, Extract of Pinus Canadensis.  
Retail pharmacist.  
*Ad.*, Alexander City, Ala.

**Francis Wade Cook, Ph.G.**

*Thes.*, Tinctura Gentiana Composita.  
Retail pharmacist.  
*Ad.*, Spring City, Pa.

**George Hogan Copeland, Ph.G.**

*Thes.*, Erythroxylylon Coca. With L. H. Stuebaker, mfr. of pharmaceuticals. Formerly pharmacist Danville State Hosp. Retail pharmacist, chemist, etc.  
*Ad.*, Erie, Pa.

**\*Frank Wilbert Cotton, Ph.G.**

*Thes.*, Preliminary Education of the Pharmacist.  
Deceased, November 7, 1919.

**William Howard Crane, Ph.G.**

*Thes.*, Our Noble Profession.  
*Ad.*, 2435 Germantown Avenue, Phila., Pa.

**James Lawson Crothers, Ph.G.**

*Thes.*, Piper Methysticum.  
*Ad.*, Zion, Md.

**James Kimmey Cullen, Ph.G.**

*Thes.*, Hypodermic Tablets.  
*Ad.*, Catonsville, Md.

**Dwight Kellum Darling, Ph.G.**

*Thes.*, Art in Pharmacy.  
Retail pharmacist.  
*Ad.*, 2115 Rucker Avenue, Everett, Wash.

**Frederick Samuel Day, Ph.G.**

*Thes.*, Camphora.  
*Ad.*, 4544 Wayne Avenue, Phila., Pa.

**Charles James Deitz, Ph.G.**

*Thes.*, Celastrus Scandens.

**Peter Nicholas Duff, Ph.G.**

*Thes.*, Extractum Humuli Fluidum.

**\*Frederick Dunning, Ph.G.**

*Thes.*, The Oleo-Saccharures. Physician. Graduated in medicine, Jeff. Med. College, 1892. Deceased, May 8, 1896.

- Richard Gaillard Dunwoody, Ph.G.**  
*Thes.*, Turpentine.  
 Received Certificate of Proficiency in Chemistry,  
 P. C. P., 1891.  
*Ad.*, Peachtree and Houston Streets, Atlanta, Ga.
- Ernest Godlove Eberhardt, Ph.G.**  
*Thes.*, Prickly Ash Bark.  
 Chemist, Eli Lilly and Co.  
*Ad.*, 63 Ridgeview Drive, Indianapolis, Ind.
- William Fred Eberhardt, Ph.G.**  
*Thes.*, Hoang-Nan.
- Edwin Kemmerer Eisenhart, Ph.G.**  
*Thes.*, Iodum.  
 Retail pharmacist.  
*Ad.*, 53 Market Street, Bangor, Pa.
- Henry Shaffer Engelman, Ph.G.**  
*Thes.*, Chloroform as an Antifungoid.
- Harvey Bowman Eyer, Ph.G.**  
*Thes.*, Manufacture of Illuminating Gas and By-  
 Products.  
*Ad.*, Everett, Pa.
- \*Joseph Benjamin Farlea, Ph.G.**  
*Thes.*, Rhamnus Purshiana.  
 Representative, H. K. Mulford Co. Deceased,  
 December 1, 1916.
- George David Feidt, Ph.G.**  
*Thes.*, Commercial Rhubarb.  
 Mfr. Chemicals and laboratory supplies and drug-  
 gist's paper boxes. Formerly retail pharmacist.  
*Ad.*, 242 N. 5th Street, Phila., Pa.
- Benjamin Kennard Fletcher, Ph.G.**  
*Thes.*, The Examination of Some Acids.  
 Physician. Assoc. Prof. of Pediatrics, Hahnemann  
 Med. College, Phila.  
*Ad.*, 344 S. 16th Street, Phila., Pa.
- Edward Elmer Frontz, Ph.G.**  
*Thes.*, Quillaia.  
 Publisher. Secy-Treas. Lycoming Co. Fair Assn.  
 and Treas. Lycoming Furniture Co. Retail phar-  
 macist until 1907.  
*Ad.*, Hughesville, Pa.
- Harry Jacob Gearhart, Ph.G.**  
*Thes.*, Cydonium.
- William Joseph Napoleon Gervais, Ph.G.**  
*Thes.*, Unofficial Syrups.
- \*Elmer Ellsworth Gible, Ph.G.**  
*Thes.*, Antipyrine.  
 Deceased, April 6, 1920.
- Charles A. Gill, Ph.G.**  
*Thes.*, Morphology of Flowers.  
 Supt. Germantown Hosp., Phila., Pa.  
*Ad.*, Germantown Hosp., Germantown, Phila., Pa.
- Philip Goll, Ph.G.**  
*Thes.*, The U. S. Pharmacopœia.  
 Temporarily retired. Formerly retail pharmacist.  
 Mem. Phila. Assn. Retail Druggists and Penna.  
 Pharm. Assn.  
*Ad.*, 3523 N. 16th Street, Phila., Pa.
- Samuel Horace Gotwalt, Ph.G.**  
*Thes.*, Tinctura Strophanthi.  
 Retail confectioner. Formerly retail pharmacist.  
 Financial Secy. of local organizations. Common  
 Council mem., 1905-06; Select Council mem.,  
 1908-12.  
*Ad.*, 334 E. King Street, York, Pa.
- Archibald Alexander Gracey, Ph.G.**  
*Thes.*, Sarothamnus Scoparius.  
*Ad.*, Broad and Erie Avenue, Phila., Pa.
- \*Joseph Thomas Griffith, Ph.G.**  
*Thes.*, Decolorized Tincture of Iodine.
- Marlborough Hall, Ph.G.**  
*Thes.*, Erythroxylon Coca.  
 Retail pharmacist.  
*Ad.*, 648 6th Avenue, New York City.
- Samuel Tilden Hamberg, Ph.G.**  
*Thes.*, Nitroglycerin.
- William Handler, Ph.G.**  
*Thes.*, Syrnus.  
*Ad.*, Care of Pompeian Co., Cleveland, Ohio.
- Luther Grant Harpel, Ph.G.**  
*Thes.*, Assay of Gum Benzoin.  
 Stationery, art goods and photograph supplies. Re-  
 tail pharmacist until 1898. Director Lebanon  
 Chamber of Commerce. Past Pres. Lebanon Busi-  
 ness Men's Assn.  
*Ad.*, Lebanon, Pa.
- William Grant Haupt, Ph.G.**  
*Thes.*, Diastase and Pepsin.
- Frederick William Haussmann, Ph.G.**  
*Thes.*, Orange and Turpentine Groups.  
 Retail pharmacist. Pres. United Singers of Phila.  
 Secy. of Federation of Singers of Northeastern  
 States of America. Treas. of Soc. for Relief of  
 War Sufferers of Central Europe.  
*Ad.*, 6th and Girard Avenue, Phila., Pa.
- \*Charles P. Hendrickson, Ph.G.**  
*Thes.*, Tincture of Vanilla.  
 Deceased, February 12, 1915.
- Frank Augustine Henneasy, Ph.G.**  
*Thes.*, Lupulin.
- George Wintera Herbein, Ph.G.**  
*Thes.*, Percolation.
- Daniel Henry Hills, Ph.G.**  
*Thes.*, Elixir Adjuvans.  
 Retail pharmacist. Mem. N. J. Board of Pharmacy.  
 Recruiting Agt., U. S. Merchant Marine.  
*Ad.*, Spring Lake Beach, N. J.
- William Elwood Hinkson, Ph.G.**  
*Thes.*, Piscidia Erythrina.
- John Almer Houghton, Ph.G.**  
*Thes.*, The Growing Evils of Pharmacy.
- \*(Mrs.) Carrie Emily Howard.**  
*Thes.*, Women as Pharmacists.
- Frank Stacker Hughes, Ph.G.**  
*Thes.*, Salicylic Acid.  
*Ad.*, 15th and Oxford Streets, Phila., Pa.
- Henry John Humma, Ph.G.**  
*Thes.*, Honey.  
 Retail pharmacist. Mem. City Council; Sch.  
 Board. Director 1st Nat'l Bank. Now Vice-pres.  
 of same.  
*Ad.*, Metropolis, Ill.
- H. Lewis Hurxthal, Ph.G.**  
*Thes.*, Codeine.
- \*Charles Pim Jacob, Ph.G.**  
*Thes.*, Extractum Digitalis Fluidum.
- Charles Mathias Jager, Ph.G.**  
*Thes.*, Panax Quinquifolium.
- \*Edwin Leonard Janson, Ph.G.**  
*Thes.*, Verbasci Flores.  
 Salesman, Berger Mfg. Co., Sheet Steel Products.  
 Retail pharmacist for 20 years. Deceased, Janu-  
 ary 6, 1922.
- William Anthony Johnson, Ph.G.**  
*Thes.*, The Hypophosphites.  
 Retail pharmacist. Mem. Phila. and Nat'l Assn.  
 Retail Druggists; Penna. Pharm. Assn.  
*Ad.*, Northfield, N. J.

**Henry Draper Jump, Ph.G.**

*Thes.*, Citrate of Iron and Quinine with Cinnamon Water.  
Physician. Johns Hopkins Univ. 2 years. Graduated in medicine, Univ. of Penna., 1893. Served in U. S. A. as Major Med. Dept. Promoted to Lieut.-Col.  
*Ad.*, 2019 Walnut Street, Phila., Pa.

**Augustus Herman Keller, Ph.G.**

*Thes.*, Syrupus Hypophosphitum Cum Ferro.  
Physician.  
*Ad.*, 2551 E. Clearfield Street, Phila., Pa.

**\*Benjamin C. Keller, Ph.G.**

*Thes.*, Extractum Dulcamaræ Fluidum.  
Deceased, April 17, 1903.

**\*Allen Jesse Kendig, Ph.G.**

*Thes.*, The Detection of Paraffin in Beeswax.

**\*Harry Milton Kennedy, Ph.G.**

*Thes.*, Coal Tar and Its Products.

**Franklin Kern, Ph.G.**

*Thes.*, Chloral Hydrate.  
*Ad.*, 3875 Aspen Street, Phila., Pa.

**Frank Kurtz Kitzmiller, Ph.G.**

*Thes.*, Adiantum Pedatum.  
*Ad.*, 1325 ½ Derry Street, Harrisburg, Pa.

**Milton Henry Koons, Ph.G.**

*Thes.*, Organic Fermentation.

**Richard C. Krlder, Ph.G.**

*Thes.*, Medicated Wines by Fermentation.  
*Ad.*, 26 S. Massachusetts Avenue, Atlantic City, New Jersey.

**William Henry Kunkle, Ph.G.**

*Thes.*, Extractum Grindeliæ Fluidum.  
Pharmacist. Pres. West End Civic League, Williamsport, Pa.  
*Ad.*, 601 Arch Street, Newberry, Pa.

**Charles Lehmann, Ph.G.**

*Thes.*, Oleate of Mercury.  
*Ad.*, 4300 Manchester Avenue, St. Louis, Mo.

**\*Charles Neal Leigh, Ph.G.**

*Thes.*, The Model Drug Clerk.  
Retail pharmacist, New York City. Deceased, April 10, 1916.

**\*Albert John Livingood, Ph.G.**

*Thes.*, Transverse Sections.  
Deceased, September 24, 1895.

**William Loesch, Jr., Ph.G.**

*Thes.*, Syrupus Acidi Hydriodici.

**Sydney Allen Lowry, Ph.G.**

*Thes.*, Gossypium Herbaceum, Its Culture and Products.

**Madison Lovett McCullough, Ph.G.**

*Thes.*, Glycyrrhiza Lepidota.  
Retail pharmacist.  
*Ad.*, Oxford, Pa.

**John E. McIntosh, Ph.G.**

*Thes.*, Phosphorus and Compounds.  
Secy. D. F. Shull and Co., Inc. since 1890.  
*Ad.*, 3928 Market Street, Phila., Pa.

**\*John Sanford Mack, Ph.G.**

*Thes.*, Collodium Stypticum.  
Deceased, May 31, 1915.

**William Frederick Martin, Ph.G.**

*Thes.*, The Successful Pharmacist of To-day.

**Charles Borden Miller, Ph.G.**

*Thes.*, Oleum Olive.  
Retail pharmacist. Pres. Goldsboro Drug Co. Ex-mem. N. C. Board of Pharmacy. Mem. Com. on Papers and Queries N. C. Pharm. Assn. Mem. Board of Stewards St. Paul M. E. Church. Pres. Local Retail Druggists Assn.  
*Ad.*, Goldsboro, N. C.

**Solomon M. Miller, Ph.G.**

*Thes.*, Calomel.  
Physician. Graduated in medicine, Jeff. Med. College, 1902. Psychiatrist Norristown State Hosp. Chief Res. since 1905. Pres. Montgomery Co. Med. Soc.  
*Ad.*, State Hospital, Norristown, Pa.

**(Mrs.) Mary O. Miner, Ph.G.**

*Thes.*, Professional Pharmacy.

**Edward Moor, Jr., Ph.G.**

*Thes.*, Extractum Buchu Fluidum.  
Advertising. Formerly retail and mfg. pharmacist.  
*Ad.*, 1124 Jefferson Avenue, Brooklyn, N. Y.

**\*William David Moore, Ph.G.**

*Thes.*, Potassii Bitartras.  
Graduate of Univ. of Penna. Deceased, September 16, 1916.

**John William Morrison, Ph.G.**

*Thes.*, Marrubium Vulgare.  
With R. C. Fuller and Co., wholesale and retail druggists. Mem. Board of examiners, Nova Scotia Pharm. Soc. Trustee Maritime College of Pharmacy.  
*Ad.*, Amherst, Nova Scotia.

**John Dunaway Mulheron, Ph.G.**

*Thes.*, Strophanthus.

**Emmett Leroy Murray, Ph.G.**

*Thes.*, Turpentine.  
Retail pharmacist.  
*Ad.*, Americus, Ga.

**William Moseby Nolln, Ph.G.**

*Thes.*, Pills.

**\*Emile Alphonse Perrenot, Ph.G.**

*Thes.*, Elixirs and Syrup of Yerba Santa.  
Retail pharmacist, Riegelsville, Pa. Served one term as Councilman. Deceased, December, 1921.

**\*Charles Alfred Pfeiffer, Ph.G.**

*Thes.*, Antifebrin.  
Physician. Graduated in medicine College of Physicians and Surgeons, Balt., 1893. Deceased, January 22, 1896.

**George Clinton Potts, Ph.G.**

*Thes.*, Hydrastis Canadensis.  
Retail pharmacist. Pres. Farmers Market Co. Director W. Harrisburg Market Co. Director Safe Deposit Bldg. and Loan Assn. Pres. Harrisburg Natural Hist. Soc. Mem. Penna. Alpine Club, Colonial Club, Board of Trade, Harrisburg Athletic Assn., Kiwanis Club.  
*Ad.*, 1100 N. 3d Street, Harrisburg, Pa.

**\*John Nicholas Prasa, Ph.G.**

*Thes.*, Benzoin and Its Uses in Pharmacy.  
Deceased, July 14, 1917.

**\*Edwin Alfred Prior, Ph.G.**

*Thes.*, Adulteration of Glycerin.  
Deceased, February 3, 1903.

**Ralph Maynard Read, Ph.G.**

*Thes.*, Analysis of Citrullus.

**David John Reese, Ph.G.**

*Thes.*, Crocus.  
Retail pharmacist. Mem. A. Ph. A.; Penna. Pharm. Assn.; Nat'l Assn. Retail Druggists. Past Pres. Phila. Assn. Retail Druggists. Mem. Phila. Wholesale Drug Co.; Board of Directors P. C. P. Alumni Assn.  
*Ad.*, 17th and Huntingdon Streets, Phila., Pa.

**Emil Reith, Ph.G.**

*Thes.*, Unguentum Hydrargyri Nitratis.  
Physician.  
*Ad.*, Central Trust Co., Altoona, Pa.



**Charles Reynolds Rhodes, Ph.G.**

*Thes.*, Drug Mills.  
Retail pharmacist. Pres. Penna. Pharm. Assn., 1918-1919. Mem. A. Ph. A.; Nat'l Assn. Retail Druggists. Served as Sch. director and borough auditor. Trustee M. E. Church.  
*Ad.*, Hyndman, Bedford Co., Pa.

**Gustave Adolph Richter, Ph.G.**

*Thes.*, Erythroxyton Coca.  
*Ad.*, Westville, N. J.

**Howard Rohrer, Ph.G.**

*Thes.*, Mentha Piperita.  
*Ad.*, 336 N. Duke Street, Lancaster, Pa.

**Eben Jackson Ross, Ph.G.**

*Thes.*, Eriodictyon Glutiniosum.  
*Ad.*, Oxford, Pa.

**H. Frank Ross, Ph.G.**

*Thes.*, Glycyrrhiza Glabra.

**Samuel George Jeremiah Roth, Ph.G.**

*Thes.*, Abstracts.  
*Ad.*, 267 S. 4th Street, Phila., Pa.

**Jacob Albert Rudy, Ph.G.**

*Thes.*, Unguentum Bismuthi Oleati.  
*Ad.*, 5143 Arch Street, Phila., Pa.

**William Ruoff, Ph.G.**

*Thes.*, Official Tests of Lithium Salts.  
Physician. Graduated in medicine, Univ. of Penna., 1892. On staff Penna. Northern Disp., Wills Eye, German, and Kensington Hosps. Served in U. S. A. Med. Dept. as 1st Lieut., Capt. and Major.  
*Ad.*, 1301 N. 13th Street, Phila., Pa.

**Frank Parke Rutherford, Ph.G.**

*Thes.*, Hamamelis.  
Dentist. Graduated in dentistry, Penna. College Dental Surgery, 1896. Teacher of Bact. in Penna. College of Dental Surgery 14 years. Mem. Union League Club; Psi Omega Frat. Masonic affiliation.  
*Ad.*, 707 Real Estate Trust Bldg., Phila., Pa.

**Joseph Frank Sample, Ph.G.**

*Thes.*, Assay of Drugs.  
*Ad.*, Mechanicsburg, Pa.

**Frederick Martin Schick, Ph.G.**

*Thes.*, Extractum Cubebæ Fluidum.

**Harry Ellsworth Schindel, Ph.G.**

*Thes.*, Chemical Force.  
*Ad.*, Hagerstown, Md.

**William Schleif, Jr., Ph.G.**

*Thes.*, The Crystalline Principle of Persimmon Bark.  
Physician. Graduated in medicine, Univ. of Penna. Res. phys. Univ. Hosp. Instr. and demonstrator Pharmacy and Mat. Med., Univ. of Penna., 1890-1910. Physical director P. C. P., 1910-13. Author Lab. Manual on Pharmacy; Textbook Mat. Med. and Therapeutics. City Dist. Phys., Phila. (See page 457.)  
*Ad.*, 1809 Chestnut Street, Phila., Pa.

**J. John Schoff, Ph.G.**

*Thes.*, Fermentation.

**Leonard A. Schoppe, Ph.G.**

*Thes.*, Artificial Gum.  
*Ad.*, Davao, Mindanao, P. I.

**Frederick Abraham Schraedley, Ph.G.**

*Thes.*, Oleostearate of Mercury.  
*Ad.*, 106 6th Avenue, New York City.

**Albert Schultz, Ph.G.**

*Thes.*, Podophyllum.  
*Ad.*, 166 S. Penna. Avenue, Atlantic City, N. J.

**\*Theodore William Scott, Ph.G.**

*Thes.*, Ipecacuanha.  
Deceased, August 4, 1917.

**Edward Parke Sheaffer, Ph.G.**

*Thes.*, Yerba Santa.

**John Peter Sheehan, Ph.G.**

*Thes.*, Explosions and Explosives.  
*Ad.*, 21 Rutgers Street, Utica, N. Y.

**Albert Frederick Shomberg, Ph.G.**

*Thes.*, Simple Elixir.  
Retail pharmacist.  
*Ad.*, Cor. 12th Avenue and 12th Street, Altoona, Penna.

**Joseph Frith Shreve, Ph.G.**

*Thes.*, Erythroxyton.  
Wholesale and retail druggist. Mem. Illinois Pharmacy Board over 10 years.  
*Ad.*, Jacksonville, Ill.

**William Grant Shugar, Ph.G.**

*Thes.*, Fluid Extract of Buchu.

**\*George Walter Sipe, Ph.G.**

*Thes.*, Pills.  
Deceased, 1902.

**\*Albert Webster Smedley, Ph.G.**

*Thes.*, Pepsinum.

**Charles Oscar Smith, Ph.G.**

*Thes.*, Gossypium Herbaceum.

**Fred Harlow Smith, Ph.G.**

*Thes.*, Fabiana Imbricata.  
*Ad.*, 62 Randolph Street, Springfield, Mass.

**\*Frederick William Smith, Ph.G.**

*Thes.*, Facts Concerning Pharmacy.

**Stephen Gregory Snuggs, Ph.G.**

*Thes.*, The Art of Making Suppositories.  
Retail pharmacist.  
*Ad.*, 1005 Vermont Avenue., Los Angeles, Cal.

**\*Howard Grant Snyder, Ph.G.**

*Thes.*, Assayed Fluid Extracts.  
Deceased, 1917.

**\*Joseph Louis Sombart, Ph.G.**

*Thes.*, Astragalus Mollissimus.

**Maximilian Sonntag, Ph.G.**

*Thes.*, Tincture of Nux Vomica.  
Retail pharmacist.  
*Ad.*, 6630 Germantown Avenue, Phila., Pa.

**George Lewis Sontag, Ph.G.**

*Thes.*, Hedeoma.  
Retail pharmacist.  
*Ad.*, Neillsville, Clark Co., Wis.

**Thomas Raibe Southerland, Ph.G.**

*Thes.*, Starch.

**John Stuart Stevenson, Ph.G.**

*Thes.*, Syrupus Acidi Hydriodici.

**Harry Van Hoff Stoeber, Ph.G.**

*Thes.*, Hydrastis Canadensis—Its Derivatives and Uses.  
*Ad.*, Broad Street Station Pharmacy, Phila., Pa.

**Samuel Martin Strohecker, Ph.G.**

*Thes.*, Elixir Quiniæ Ferri et Strychninæ.  
Physician. Graduated in medicine, Chicago College of Phys. and Surgeons, 1899. Industrial surg. Swift Packing Co. Masonic affiliation.  
*Ad.*, Kenton Bank Bldg., Portland, Ore.

**Harry Harlan Swainbank, Ph.G.**

*Thes.*, Compound Syrup of Benzoin.  
Retail pharmacist.  
*Ad.*, 72 S. Main Street, Wilkesbarre, Pa.

**Ebenezer Francis Thompson, Ph.G.**

*Thes.*, Bitartrate of Potassium.  
*Ad.*, Titusville, Pa.

- William Franklin Thompson, Ph.G.**  
*Thes.*, Compound Elixir of Taraxacum.  
*Ad.*, 6th and Maclay Sts., Harrisburg, Pa.
- \*Frank Frazier Thomson, Ph.G.**  
*Thes.*, Ichthyol.  
 Deceased, September 21, 1913.
- \*Charles Cowdrick Trauck, Ph.G.**  
*Thes.*, Extracta Fluida.  
 With Smith, Kline, French and Co., 30 years.  
 Deceased, March 14, 1921.
- Herbert Wilkinaon Turner, Ph.G.**  
*Thes.*, Antipyrine.  
 Real Est. and Gen. Insurance. Formerly retail pharmacist. City Treas. of Altoona 2 years.  
*Ad.*, 909 25th Street, Altoona, Pa.
- George Cone Tyler, Ph.G.**  
*Thes.*, Arsenic.  
 Insurance and Surety Bonds. Formerly retail pharmacist.  
*Ad.*, 869 N. 23d Street, Phila., Pa.
- \*Thomas Van Dyke Tyler, Ph.G.**  
*Thes.*, Illuminating Gas.  
 Deceased, June 20, 1921.
- Samuel Elliott Uhler, Ph.G.**  
*Thes.*, Advantages of Manufacturing.  
 Mgr. laboratory for George B. Evans.  
*Ad.*, 219 N. 10th Street, Phila., Pa.
- John Adams Van Valzah, Ph.G.**  
*Thes.*, United States Pharmacopœia.  
 Physician.  
*Ad.*, 702 State Street, Erie, Pa.
- \*Harlan Lewis Wallace, Ph.G.**  
*Thes.*, Oleite.
- Hite Watson, Ph.G.**  
*Thes.*, Antipyrine.  
*Ad.*, P. O. Box 636, Oklahoma City, Okla.
- \*Frederick Andrew Weiss, Ph.G.**  
*Thes.*, Sierra Salvia.  
 Deceased, July 10, 1896.
- Frederick Barton Wells, Ph.G.**  
*Thes.*, Pharmaceutical Etiquette.  
 Retail pharmacist.  
*Ad.*, 25th and Federal Street, Camden, N. J.
- Oscar Connor Welsh, Ph.G.**  
*Thes.*, Ointment of Oleate of Copper.  
*Ad.*, 8th and Newton Streets, Camden, N. J.
- William Carter Wescott, Ph.G.**  
*Thes.*, Unfermented Grape Juice.  
 Physician. Graduated in medicine, Univ of Penna., 1908. Mem. and Roentgenologist to Advisory Board, Cape May Co., N. J.  
*Ad.*, Pacific and Delaware Aves., Atlantic City, New Jersey.
- Hermann Westphal, Ph.G.**  
*Thes.*, Native Wyoming Soap.  
 Physician.  
*Ad.*, Summit, N. J.
- \*Martin Inventius Wilbert, Ph.G.**  
*Thes.*, Aluminii Acetas.  
 Pharmacist, German Hosp., Phila., 1891-1908.  
 Asst. pharmacologist, U. S. Public Health Service, Hygienic Lab., Washington, D. C. Mem. U. S. P. and N. F. Rev. Com.; Franklin Inst.; A. Ph. A.; Penna. Pharm. Assn.; Council of Pharmacy and Chemistry, Amer. Med. Assn. Author. Deceased, November 25, 1916.
- Daniel Albert Williams, Ph.G.**  
*Thes.*, Erythroxyton Coca.  
 Chemist. Graduated in chemistry, Cooper Union Inst.  
*Ad.*, 364 N. Maple Avenue, East Orange, N. J.
- \*John Elmer Wishart, Ph.G.**  
*Thes.*, Extractum Jalapæ Alcoholicum.
- Albert Elam Ferree Witmer, Ph.G.**  
*Thes.*, Neutral Ground Between Botany and Zoology.
- Frederick Joseph Wolf, Ph.G.**  
*Thes.*, The Effect of Heat and Light on Plants.
- \*Junius Pascal Woodall, Ph.G.**  
*Thes.*, Gossypium Herbaceum.  
 Retail pharmacist, Charlotte, N. C. Deceased, 1910.
- Harry Worrall, Ph.G.**  
*Thes.*, Betula Lenta.  
 Retail pharmacist.  
*Ad.*, East Downingtown, Pa.
- Frank Gerald Yohn, Ph.G.**  
*Thes.*, Pharmaceutical Education and the Advantages.
- Robert William Ziegler, Ph.G.**  
*Thes.*, The Pharmacist.  
 Retail pharmacist.  
*Ad.*, 400 W. Market Street, York, Pa.

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- \*Charles Frederick Alaentzer, Ph.G.**  
*Thes.*, Proprietary Medicines Prescribed by Physicians.  
 Deceased, February 16, 1904.
- Thomas Jennings Baker, Ph.G.**  
*Thes.*, Koumys.  
*Ad.*, 3000 Market Street, Wilmington, Del.
- Mortimer H. Baskin, Ph.G.**  
*Thes.*, Syrupus Benzoini.  
*Ad.*, 1215 Callowhill Street, Phila., Pa.
- Robert Wilbert Beck, Ph.G.**  
*Thes.*, Salix Lucida.
- James Ferria Belt, Ph.G.**  
*Thes.*, Glycerin.  
*Ad.*, 1216 A, Park Avenue, Richmond, Va.
- Edward Augustus Bender, Ph.G.**  
*Thes.*, Solution of Citrate of Magnesia.  
*Ad.*, 1611 Foster Avenue, Brooklyn, N. Y.
- John J. Bender, Ph.G.**  
*Thes.*, Peroxide of Hydrogen.  
 Retail pharmacist.  
*Ad.*, 56th and Greenway Avenue, Phila., Pa.
- Alexander Stewart Besore, Ph.G.**  
*Thes.*, Acidum Sulphuricum Dilutum.  
 Salesman, Eli Lilly and Co.  
*Ad.*, 5419 Walnut Street, Phila., Pa.
- Joseph Brown Bilderback, Ph.G.**  
*Thes.*, Syrupus Benzoini Compositus.  
*Ad.*, Portland, Ore.
- Harry Bidler, Ph.G.**  
*Thes.*, Dilute Hydrobromic Acid.  
 Retail pharmacist.  
*Ad.*, S. E. Cor. 5th and Spring Street, Reading, Pa.
- Russell Thorn Blackwood, Ph.G.**  
*Thes.*, Progress in Pharmacy.  
 Retail pharmacist. Mem. State and Nat'l Pharmaceutical Assns.  
*Ad.*, 52nd and Girard Avenue, Phila., Pa.
- Albert Lewis Boush, Ph.G.**  
*Thes.*, Spirit of Camphor.  
 Retail pharmacist.  
*Ad.*, 12 State Street, Oil City, Pa.
- George McLeod Bowman, Ph.G.**  
*Thes.*, Natural Order of Rubiaceæ.  
 Retail pharmacist.  
*Ad.*, 3000 Federal Boulevard, Denver, Colo.

- Allen Webster Boyer, Ph.G.**  
*Thes.*, Phenacetine.  
*Ad.*, Allentown, Pa.
- Franklin Nagle Boyer, Ph.G.**  
*Thes.*, Grindelia Robusta.  
*Ad.*, 1001 N. 10th Street, Reading, Pa.
- Col. James Clarkson Boyles, Ph.G.**  
*Thes.*, Lignor Plumbi Subaceticis.  
*Ad.*, Du Bois, Pa.
- William H. Breisch, Ph.G.**  
*Thes.*, The Production of Oil of Birch in Luzerne County, Pa.  
*Ad.*, 223 Northampton Street, Wilkesbarre, Pa.
- Otto Carl Bresser, Ph.G.**  
*Thes.*, Preparation of Syrups.
- William Oscar Brice, Ph.G.**  
*Thes.*, Tendencies in Pharmacy.
- William George Bridgman, Ph.G.**  
*Thes.*, An Old Page of Medical History.  
Pres. England and McCaffrey, Inc.  
*Ad.*, 439 Main Street, Utica, N. Y.
- \*Harry H. Bright, Ph.G.**  
*Thes.*, Sabbath Observance.  
Deceased, August 19, 1892.
- Frank Luther Brown, Ph.G.**  
*Thes.*, Mercuric Oxides.  
Retail pharmacist and State Health Officer. Mem. Board Anti-Tuberculosis Soc. of Schuylkill Co.  
*Ad.*, 210 Market Street, Auburn, Pa.
- John Armstrong Buckner, Ph.G.**  
*Thes.*, Ceanothus Americanus.
- William Beatty Bunker, Ph.G.**  
*Thes.*, Hydrastis Canadensis.  
Retail pharmacist.  
*Ad.*, 2201 S. Salina Street, Syracuse, N. Y.
- Arch Webster Burdick, Ph.G.**  
*Thes.*, Unguentum Aquæ Rosæ.  
Drugs and barber supplies.  
*Ad.*, 125 Penn Avenue, Scranton, Pa.
- Francis James Butterworth, Ph.G.**  
*Thes.*, Syrups.  
Physician.  
*Ad.*, 5410 Pine Street, Phila., Pa.
- Alfred Sylvester Butz, Ph.G.**  
*Thes.*, Observation in Pharmacy.  
Physician.  
*Ad.*, 735 N. 41st Street, Phila., Pa.
- \*William James Carey, Ph.G.**  
*Thes.*, Alcohol.  
Deceased, September 18, 1896.
- \*William Asbury Carpenter, Ph.G.**  
*Thes.*, Benzoic Acid.  
Deceased, July 6, 1917.
- Benson Grant Clapham, Ph.G.**  
*Thes.*, Acetic Acid.  
*Ad.*, 339 E. Haines Street, Germantown, Phila., Pa.
- John Halliday Cline, Ph.G.**  
*Thes.*, Cimicifuga.  
Pres. Cline Pharmacy Co. and Cline Ice Cream Company.  
*Ad.*, Athens, Ohio.
- \*William Arthur Clingan, Ph.G.**  
*Thes.*, Tinctura Ferri Chloridi.
- Levi Bennett Cochran, Ph.G.**  
*Thes.*, Pharmacy: Its Relations to Society.  
Physician. Graduated in medicine, Univ. of Penna., 1893. Visiting phys. Hartford Hosp.  
*Ad.*, 157 Oxford Street, Hartford, Conn.
- Herbert Cooper, Ph.G.**  
*Thes.*, Preparation of Tinctures.
- Frank Henry Cope, Ph.G.**  
*Thes.*, Petrolatum vs. Lard as a Base for Cerates.  
*Ad.*, Dauphin and Lawrence Streets, Phila., Pa.
- \*John Richard Costin, Ph.G.**  
*Thes.*, Amylum Iodatum.
- \*Thomas Starks McNealley Cunningham, Ph.G.**  
*Thes.*, Tannic Acid.  
Deceased, April 15, 1893.
- David Dalton, Ph.G.**  
*Thes.*, Oleates.  
Physician. Graduated in medicine, Medico-Chi. College, 1908. Surgical staff Taylor Hosp. since 1910. Mem. Draft Board. Pres. Sch. Board 7 years. Vice-pres. Home Bldg. and Loan Assn. Surgeon Phila. and West Chester Trolley Co.  
*Ad.*, Sharon Hill, Pa.
- Edward Davis, Ph.G.**  
*Thes.*, Stramonium.
- Jacob Highley Dewees, Ph.G.**  
*Thes.*, Cardamomum.
- Charles B. Dierolf, Ph.G.**  
*Thes.*, To Prepare Emulsions.  
Retail pharmacist.  
*Ad.*, Elizabethtown, Pa.
- Thomas Henry Dillon, Jr., Ph.G.**  
*Thes.*, Cocaine and Its Salts.
- Robert Lovine Dubbs, Ph.G.**  
*Thes.*, Parasites of the Vegetable Kingdom.  
Physician. Graduated in medicine Jeff. Med. College, 1901. Secy-treas. Phila. Rifle Assn. Mem. Volunteer Med. Service Corps.  
*Ad.*, 1622 S. 18th Street, Phila., Pa.
- Edwin Stanton Eby, Ph.G.**  
*Thes.*, Emulsions.  
*Ad.*, Lewistown, Pa.
- Charles Alfred Eckels, Ph.G.**  
*Thes.*, The Antipyretics.  
Retail pharmacist.  
*Ad.*, 1511 Poplar Street, Phila., Pa.
- Walter Roland Elliott, Ph.G.**  
*Thes.*, Menthol.  
Physician. Graduated in medicine, College of Phys. and Surgeons, Baltimore, Md., 1903. Formerly retail pharmacist.  
*Ad.*, 725 Collings Avenue, West Collingswood, N. J.
- Jacob Mauger Faust, Ph.G.**  
*Thes.*, Petrolatum.  
Contractor and builder since 1909. Formerly retail pharmacist.  
*Ad.*, 4611 N. Broad Street, Phila., Pa.
- Edward Shoener Fernsler, Ph.G.**  
*Thes.*, Standardization.  
*Ad.*, 109 E. Arch Street, Pottsville, Pa.
- \*John Henry Fies, Ph.G.**  
*Thes.*, Carbon.  
Retail pharmacist, Lancaster, Pa.
- Thomas Milton Fletcher, Ph.G.**  
*Thes.*, Asimina Triloba.
- \*Richard Dolly Frannfelder, Ph.G.**  
*Thes.*, Ipecacuanha.
- \*Adelbert Porter French, Ph.G.**  
*Thes.*, Potassii Bitartras.  
Retail pharmacist, Detroit, Mich.
- Francis Freas French, Ph.G.**  
*Thes.*, Syrup of Benzoin.  
*Ad.*, 163 Montgomery Avenue, Cynwyd, Pa.
- Harry Edmund Fry, Ph.G.**  
*Thes.*, Antipyrin and Antifebrin.  
Retail pharmacist.  
*Ad.*, 231 Market Street, Williamsport, Pa.



**Alfred Ball Garges, Ph.G.**

*Thes.*, Indian Hemp.

**John Kistler Garland, Ph.G.**

*Thes.*, Tinctura Cinchonæ Composita.  
Retail pharmacist.  
*Ad.*, 6th and Muench Streets, Harrisburg, Pa.

**Frank Christian Garlach, Ph.G.**

*Thes.*, Ceanothus Americanus.  
Postmaster, Wooster, Ohio. Formerly Supt. Boys' Industrial Sch., Lancaster, Ohio. Served in U. S. A. as Colonel, 145th and 146th Inf.  
*Ad.*, Wooster, Ohio.

**\*David Clarence Gibbony, Ph.G.**

*Thes.*, Natural Salicylic Acid.  
Attorney at Law, Phila. Deceased, December 27, 1920.

**Robert Glenk, Ph.G.**

*Thes.*, Cicuta Maculata L.  
Director, Louisiana State Museum. Graduate Louisiana State Univ.; Audubon Sugar Sch., B.S., 1899. State Commissioner for La. in various expositions. Secy. Board of Curators, La. State Museum. Secy. La. Historical Soc. Supt. Agricultural Dept., La. State Fair. Editor, Nat. Hist. Survey Bull., La. State Museum. Mem. Round Table Club; A. A. A. S.; Amer. Chem. Soc.; Amer. Assn. of Museums; Miss. Valley Hist. Soc.; Wis. Archaeological Soc., etc.  
*Ad.*, Louisiana State Museum, New Orleans, La.

**Benjamin M. Good, Ph.G.**

*Thes.*, Glucose.  
*Ad.*, 235 Grove Street, Jersey City, N. J.

**Jean Gordon, Ph.G.**

*Thes.*, Pharmaceutical Uses of Extract of Malt.  
*Ad.*, Grant Hospital, Chicago, Ill.

**Benjamin Harvey Gorrell, Jr., Ph.G.**

*Thes.*, Polygonatum Biflorum.  
*Ad.*, Lexington, Va.

**William Edgar Gosh, Ph.G.**

*Thes.*, Syrupus Benzoini.

**Christian Gruhler, Ph.G.**

*Thes.*, Glycerin Suppositories.  
Physician. Graduated in medicine Medico-Chi. College, 1899. Pres. Board of Health. Phys. in charge State Tuberculosis Disp. County Treas.  
*Ad.*, Shenandoah, Pa.

**\*William Henry Haake, Ph.G.**

*Thes.*, Cotula.  
Prof. of Mat. Med. and Botany, Cleveland Sch. of Pharmacy. Retail pharmacist, Cleveland, Ohio. Deceased, October 18, 1910.

**George Washington Hackenberger, Jr., Ph.G.**

*Thes.*, Glycerine Suppositories.  
Mfr. toilet goods. Formerly retail pharmacist. One of the founders of American Druggists Syndicate; Pres. 1912. Mem. Board of Directors. Masonic affiliation.  
*Ad.*, 203 Bowery, N. Y.

**\*George Wily Hackney, Ph.G.**

*Thes.*, Thoughts on Pharmacy.

**\*William Henry Hague, Ph.G.**

*Thes.*, Hedecoma.

**Charles E. Hammerquist, Ph.G.**

*Thes.*, Fluid Extract of Turkey Corn.

**William Tabor Hankey, Ph.G.**

*Thes.*, Sabbatia Angularis.  
Vice-pres. Hall-Van Gorder Co., wholesale druggists; Secy. Cleveland Fruit Juice Co.  
*Ad.*, 1382 W. 9th Street, Cleveland, Ohio.

**Arthur Edward Hanson, Ph.G.**

*Thes.*, Manihots.  
*Ad.*, Rua de Rozarios, 16, San Paulo, Brazil.

**Frank Gast Hartman, Ph.G.**

*Thes.*, The Adulteration of Volatile Oils.  
Physician. Graduated in medicine, Univ. of Penna., 1893.  
*Ad.*, 136 N. Duke Street, Lancaster, Pa.

**\*Harry D. Hasson, Ph.G.**

*Thes.*, Opium.

**William Smith Helges, Ph.G.**

*Thes.*, Avena Sativa.  
*Ad.*, 101 W. Market Street, York, Pa.

**Luther Samuel Henkel, Ph.G.**

*Thes.*, Erythroxylon Coca.  
Retail pharmacist. Received B. S. degree, Roanoke College, Va., 1886.  
*Ad.*, Hunting Park Avenue and 8th Street, Phila., Penna.

**Conrad John A. S. Herber, Ph.G.**

*Thes.*, Phosphoric Acid.  
Retail pharmacist. Mem. Terre Haute Council.  
*Ad.*, 7th and Wabash Avenue, Terre Haute, Ind.

**\*Jacob Hoch, Ph.G.**

*Thes.*, Celastrus Scandens.  
Deceased, September 22, 1894.

**Theodore Albert Hohman, Ph.G.**

*Thes.*, Compressed Tablets.  
*Ad.*, 3375 Parkview Avenue, Pittsburgh, Pa.

**Edgar Austin Horn, Ph.G.**

*Thes.*, Manaca.  
*Ad.*, 5016 Jackson Street, Phila., Pa.

**John Wallace Hough, Ph.G.**

*Thes.*, Aqua Ammonia.

**Charles Marcus Hudson, Ph.G.**

*Thes.*, Standardization.

**Adam Rankin Johnson, Ph.G.**

*Thes.*, Mistura Chloral et Potassii Bromidi Composita.

**William Hewitt Jones, Ph.G.**

*Thes.*, Pilocarpus Pennatifolius.  
Phila. representative for Burroughs, Wellcome and Company.  
*Ad.*, 39 N. 50th Street, Phila., Pa.

**Edward Francis Kessler, Ph.G.**

*Thes.*, Eupatorium.  
Retail pharmacist. Special course in urinalysis at P. C. P.  
*Ad.*, 26th and Brown Streets, Phila., Pa.

**James Ellhu Keyes, Ph.G.**

*Thes.*, Spongia.  
*Ad.*, Petaluma, Cal.

**Grantham Arthur Kinsal, Ph.G.**

*Thes.*, Natural Gas.  
Supt. Pharmaceutical Lab. Harvey Co., Mfg. Pharmacists. Mem. Board of Directors, Y. M. C. A.  
*Ad.*, 179 Church Street, Saratoga Springs, N. Y.

**Charles E. Kitchen, Ph.G.**

*Thes.*, Fabiana Imbricata.

**William George Kleinsteuer, Ph.G.**

*Thes.*, Calx and Potassa Sulphurata.  
Physician. Graduated in medicine, Jeff. Med. College, 1893. Res. phys. Phila. Gen. Hosp., 1893-94.  
*Ad.*, 5841 Catharine Street, Phila., Pa.

**George Alexander Knowles, Ph.G.**

*Thes.*, Carica Papaya.  
Physician. Graduated in medicine, Univ. of Penna., 1894. Gov. Med. Club, Phila.; Director Phila. Co. Med. Soc.; Mem. Med. Soc. of Penna.; Amer. Med. Assn. Trustee State Hosp., Norristown, Pa. Med. Mem. Draft Board; Mem. Penna. Council of Nat'l Defense.  
*Ad.*, 4812 Baltimore Avenue, Phila., Pa.

**Louis Homer Koch, Ph.G.**

*Thes.*, Taraxacum Officinale.

- Paul H. Krebs, Ph.G.**  
*Thes.*, Polygonum Bistorta.  
Physician. Graduated in medicine, Wooster Med. College, 1894. Mem. staff Lutheran Hosp., Cleveland. Served in U. S. A. as 1st Lieut. Med. Dept. at Camp Jackson, S. C.  
*Ad.*, 3532 W. 41st Street, Cleveland, Ohio.
- William Austin Kulp, Ph.G.**  
*Thes.*, The Pharmacist and the Physician.  
Retail pharmacist. Director Braddock Trust Co. and 1st Nat'l Bank.  
*Ad.*, 828 Braddock Avenue, Braddock, Pa.
- Edgar Ransom Laplace, Ph.G.**  
*Thes.*, Cantharides.  
*Ad.*, Deep River, Conn.
- Edward Lehman, Ph.G.**  
*Thes.*, Poison and Poisoning.  
*Ad.*, 185 Union Avenue, Memphis, Tenn.
- Frank Irwin Leinbach, Ph.G.**  
*Thes.*, Piscidia Erythrina.  
Retail pharmacist.  
*Ad.*, Jersey Shore, Pa.
- Jonathan Knight Lippen, Ph.G.**  
*Thes.*, Rubus Villosus.
- \*Alexander George Loelkes, Ph.G.**  
*Thes.*, Ceanothus Americanus.
- Christian Leitner Long, Ph.G.**  
*Thes.*, Analysis of Mace.  
*Ad.*, Front and Kelker Streets, Harrisburg, Pa.
- Herman Ernst Lupus, Ph.G.**  
*Thes.*, Commercial Teas.  
Mfr. Drug Specialties. Retail pharmacist until 1897.  
*Ad.*, 5738 Chestnut Street, Phila., Pa.
- Irwin Breneman Lutz, Ph.G.**  
*Thes.*, Castanea.  
Retail pharmacist.  
*Ad.*, Denver, Pa.
- William Dellett Lutz, Ph.G.**  
*Thes.*, Coccus.
- Frank Lloyd Lyons, Ph.G.**  
*Thes.*, Sambucus Canadensis.  
*Ad.*, 26 Holmes Street, Youngstown, Ohio.
- Linwood Dunham McClure, Ph.G.**  
*Thes.*, The Requisites of a Successful Pharmacist.
- Philip Celestine McLaughlin, Ph.G.**  
*Thes.*, Petroleum.  
*Ad.*, 1000 N. 26th Street, Camden, N. J.
- \*Henry Steely McNabb, Ph.G.**  
*Thes.*, Cola Nuts.  
Deceased, November 8, 1906.
- W. Felnour MacLennan, Ph.G.**  
*Thes.*, Cola Acuminata.  
*Ad.*, Gloucester City, N. J.
- Clinton Eugene Main, Ph.G.**  
*Thes.*, Acidum Sulphurosum.  
*Ad.*, Frederick, Md.
- Fred Augustus Manter, Ph.G.**  
*Thes.*, So-Called Borate of Cocaine.  
*Ad.*, Anson, Me.
- William Arnold Markley, Ph.G.**  
*Thes.*, Salicylic Acid.  
*Ad.*, 209 Market Street, Harrisburg, Pa.
- \*Joseph Howard Marvill, Ph.G.**  
*Thes.*, Milk Analysis.  
Associated with John Wyeth and Bro. Deceased, November 15, 1913.
- Harry Carleton Mendenhall, Ph.G.**  
*Thes.*, Acidum Nitricum, C. P.  
Retail pharmacist.  
*Ad.*, Bloomsburg, Pa.
- Quillas Alfred Meyers, Ph.G.**  
*Thes.*, Concerning Syrups.
- \*Frank Miller, Ph.G.**  
*Thes.*, Dilute Acetic Acid.
- William Edwin Miller, Ph.G.**  
*Thes.*, Pepo.  
*Ad.*, 8th and Mt. Vernon Streets, Camden, N. J.
- William H. Miller, Ph.G.**  
*Thes.*, A Few of the Official Drugs.
- James Johnson Moore, Ph.G.**  
*Thes.*, Aristol.  
Retail pharmacist.  
*Ad.*, 5331 Catherine Street, Phila., Pa.
- Guadalupe Morales, Ph.G.**  
*Thes.*, Dialysis by Means of Sulphate of Calcium.  
Ex-Pharmacist and hardware merchant. Elected Mayor of Granada, 1918.  
*Ad.*, Granada, Nicaragua, C. A.
- Ellwood George Nickum, Ph.G.**  
*Thes.*, Lanolin as a Base for Ointments.  
*Ad.*, 625 N. 20th Street, Phila., Pa.
- \*Charles Sheppard Ogden, Ph.G.**  
*Thes.*, Amylum Iodatum.  
For many years connected with Parke, Davis and Co. and William R. Warner and Co. Deceased, December 15, 1915.
- Josiah Comegys Peacock, Ph.G.**  
*Thes.*, Volatile Oil of Aristolochia Reticulata, Nuttall.  
Chemist. Instr. Chem. Lab. P. C. P., 1891-99. (See page 424.)  
*Ad.*, 3701 Germantown Avenue, Phila., Pa.
- John Fleming Pentz, Ph.G.**  
*Thes.*, Pepsinum Pulvis.  
*Ad.*, 723 S. Broad Street, Trenton, N. J.
- \*James Conrad Perry, Ph.G.**  
*Thes.*, Chian Turpentine.  
Retail pharmacist, Phila. Deceased, March 25, 1914.
- Alexander Bain Petrie, Jr., Ph.G.**  
*Thes.*, Hydrochloric Acid.
- \*William Pfeuffer, Ph.G.**  
*Thes.*, Chemical Analysis of Balmomy.
- Lehman Blew Phillips, Ph.G.**  
*Thes.*, Physostigma.  
*Ad.*, 506 S. 49th Street, Phila., Pa.
- Charles Torbert Pickett, Ph.G.**  
*Thes.*, Olive Oil.  
Retail pharmacist.  
*Ad.*, 1543 Morris Street, Phila., Pa.
- George Fisk Platt, Ph.G.**  
*Thes.*, Areca.  
*Ad.*, Rutherford, N. J.
- William Henry Pratt, Ph.G.**  
*Thes.*, The Life of a Druggist.  
Physician. Graduated in medicine. Medico-Chi. College, 1893. District phys. since 1893. Coroner, Camden Co., 1916-19.  
*Ad.*, 516 Cooper Street, Camden, N. J.
- E. Alfred Randolph, Ph.G.**  
*Thes.*, Magnolia Grandiflora.  
Chemist, Magnolia Dairy Products Co. Pres. Sch. Board. Pres. Houston Amateur Orchestra. Pres. Houston Quartette Soc. District Chm. War Work. Charter Mem. and officer Rotary Club, etc.  
*Ad.*, Houston, Texas.
- Frederick Miller Dickson Raub, Ph.G.**  
*Thes.*, Esthetics in Preparations.  
*Ad.*, W. 145th and St. Nicholas Streets, New York City.

**\*Charles Hunter Raudenbush, Ph.G.**

*Thes.*, Liquor Ferri Chloridi.  
Retail pharmacist, Reading, Pa. Deceased, June 11, 1916.

**Albert George Reizenstein, Ph.G.**

*Thes.*, Extractum Glycyrrhizæ Fluidum.

**\*Davis Bruce Richards.**

*Thes.*, Evolution.

**Harry Richardson.**

*Thes.*, Liquor Plumbi Subacetatis.  
*Ad.*, 349 Grand Street, Paterson, N. J.

**\*Charles Alexander Ridgway, Ph.G.**

*Thes.*, Glechoma.  
Served as Hosp. Steward during Spanish-Amer. War. Retail pharmacist, Titusville, Pa. Deceased, December 26, 1916.

**Samuel Jacob Riegel, Ph.G.**

*Thes.*, Zingiber.  
Asst. to Director of Music, Phila. Public Schools. Chief pharmacist Episcopal Hosp., Phila., 1891-1905. Retail pharmacist, 1905-14. Graduated in music, Univ. of Penna., 1901. Degree Bachelor of Music, 1910. Organist and choir-master Memorial Church of the Advocate.  
*Ad.*, 763 N. 20th Street, Phila., Pa.

**Arthur Raymond Rolleston, Ph.G.**

*Thes.*, Grindelia Robusta.

**Harry Fry Ruhl, Ph.G.**

*Thes.*, Repercolation.  
Retail pharmacist and fruit grower. Recruiting agt. for U. S. Merchant Marine.  
*Ad.*, Manheim, Pa.

**Milton Franklin Schaak, Ph.G.**

*Thes.*, Populus.  
*Ad.*, Lebanon, Pa.

**Franklin Benjamin Schelrer, Ph.G.**

*Thes.*, Zinc.  
Physician. Graduated in medicine, Univ. of Penna., 1895. Coroner, Lehigh Co. 3 years.  
*Ad.*, 402 N. 6th Street, Allentown, Pa.

**Lawrence Oliphant Schetky, Ph.G.**

*Thes.*, Spiritus Ammoniz Aromaticus.  
Served as pharmacist, U. S. N. Stationed at U. S. Naval Hosp., New London, Conn., and at Newport, R. I.  
*Ad.*, U. S. Naval Hospital, Brooklyn, N. Y.

**Justus Schmidt, Ph.G.**

*Thes.*, Medicated Waters.

**Allen Beecher Schminky, Ph.G.**

*Thes.*, Syrupus Guaiaci.  
Formerly retail pharmacist, Philadelphia.

**Robert Burns Scott, Ph.G.**

*Thes.*, Analysis of Rock Candy Syrup.  
Physician.  
*Ad.*, 12th and Poplar Streets, Phila., Pa.

**Charles Jacob Seltzer, Ph.G.**

*Thes.*, Hydrogen Peroxide.  
*Ad.*, Frankford Avenue and Unity Street, Phila., Penna.

**Carl Whittaker Shull, Ph.G.**

*Thes.*, Triturations.  
Retail pharmacist.  
*Ad.*, Columbia and Girard Avenues, Phila., Pa.

**\*Calvin Bruce Shuman, Ph.G.**

*Thes.*, Cetaceum.  
Pres. A. H. Lyman Co., Manistee, Mich. Deceased, March 20, 1916.

**Wesley Cline Sitgreaves, Ph.G.**

*Thes.*, Precipitated Chalk.  
With Westinghouse Elec. and Mfg. Co., Gas Dept.  
*Ad.*, 75 Union Avenue, Nutley, N. J.

**Benjamin Franklin Smith, Ph.G.**

*Thes.*, Estimation of Morphine in Opium.  
Physician and pharmacist. Graduated in medicine, Jeff. Med. College, 1896. Treas. Dauphin Co. Progressive League, 1912-13. Volunteer Med. Service Corps.  
*Ad.*, 1801 Market Street, Harrisburg, Pa.

**Charles Adam Smith, Ph.G.**

*Thes.*, Latent Heat.  
Traveling salesman, John Wyeth and Bro. Retail pharmacist 10 years. Mem. Boyertown Sch. Board 8 years.  
*Ad.*, Rialto Apts., Greensburg, Pa.

**Harry Allen Smith, Ph.G.**

*Thes.*, Mistura Ferri et Ammonii Acetatis.

**Herbert Johnson Smith, Ph.G.**

*Thes.*, Tinctura Opii.  
Physician.  
*Ad.*, 3303 N. 17th Street, Phila., Pa.

**Edward Thomas Spencer, Ph.G.**

*Thes.*, Tablet Triturates.  
*Ad.*, 1433 Arch Street, Phila., Pa.

**Elmer Spragle, Ph.G.**

*Thes.*, Oleum Theobromæ.

**\*James Harvey Spruance, Ph.G.**

*Thes.*, Opium.  
Deceased, May 15, 1917.

**Lee Steinau, Ph.G.**

*Thes.*, Phlox Subulata.

**Ephraim Henry Steiner, Ph.G.**

*Thes.*, Pharmaceutical Success.  
Retail pharmacist.  
*Ad.*, 810 Spring Garden Street, Easton, Pa.

**Walter Stimmel, Ph.G.**

*Thes.*, Salts of Dioxihydropalaphic Acid and Oxyhydropalaphic Acid.  
*Ad.*, Care of Utah-Idaho Sugar Co., Salt Lake City, Utah.

**Louis Franklin Stoffregen, Ph.G.**

*Thes.*, Balsamum Tolutanum.  
*Ad.*, Spangler, Pa.

**Oliver Stout, Ph.G.**

*Thes.*, Emulsio Olei Morrhuæ.  
Physician. In general practice since 1894.  
*Ad.*, 3351 N. 5th Street, Phila., Pa.

**\*William Alvah Strode, Ph.G.**

*Thes.*, Scientific Pharmacy Applied.

**John Geary Stroud, Ph.G.**

*Thes.*, Pharmacy as a Profession.  
Retail pharmacist.  
*Ad.*, 9 N. Church Street, West Chester, Pa.

**\*Theodore Herman Strouse, Ph.G.**

*Thes.*, Ferula Sumbul.

**Harry C. Swartley, Ph.G.**

*Thes.*, Ointments.  
Prop. of the Llewellyn Pharmacy, 20 years. Mem. Rotary Club.  
*Ad.*, 1518 Chestnut Street, Phila., Pa.

**\*Joseph Henry Sweeney, Ph.G.**

*Thes.*, Doctors as Pharmacists.

**\*Charles Leonard Thompson, Ph.G.**

*Thes.*, Pilular Consistency of Extracts.  
Retail pharmacist, Wilmington, Del. Deceased, December 31, 1917.

**Maxwell Gustav Tielke, Ph.G.**

*Thes.*, Calendula Officinalis.  
Steel mfr. Formerly retail pharmacist.  
*Ad.*, 1952 W. 100th Street, Cleveland, Ohio.

**John Fine Tinsman, Ph.G.**

*Thes.*, Erythroxylon.  
*Ad.*, 223 W. Main Street, Denison, Tex.



**Joseph Harry Venn, Ph.G.**

*Thes.*, The Analysis of Comptonia.  
Physician. Prof. Chemistry and Physics, Memphis  
Hosp. Med. College.  
*Ad.*, Memphis, Tenn.

**Samuel Albert Visanska, Ph.G.**

*Thes.*, Substitution in Dispensing.  
Physician. Graduated in medicine, S. C. Med.  
College. Post grad. work, New York. Chm. Milk  
Commission Atlanta Chamber Commerce. Formerly  
Prof. Theory and Practice of Pharmacy and Dean  
S. C. College Pharmacy. Specialist in diseases of  
children. Author of "Better Babies," etc.  
*Ad.*, Atlanta, Ga.

**Robert Toomer Ward, Ph.G.**

*Thes.*, Tincture of Iodine.  
Retail pharmacist.  
*Ad.*, Dadeville, Ala.

**Frank Charles Weber, Ph.G.**

*Thes.*, Principles for a Successful Pharmacy.  
Mgr. Mt. Joy Magnesia Co. Formerly with  
Keasbey and Mattison Co. Secy. of Ambler Public  
Schools, 12 years and Treas. Ambler Bldg. and  
Loan Assn., 14 years.  
*Ad.*, Ambler, Pa.

**Geary Augustus Weston, Ph.G.**

*Thes.*, Acidum Nitricum Dilutum.  
Retail pharmacist.  
*Ad.*, Millersville, Pa.

**Oscar Kellogg Whipple, Ph.G.**

*Thes.*, Ferri Oxidum Hydratum.  
Retail pharmacist. City councilman 6 years. Re-  
cruiting agt. for U. S. Merchant Marine.  
*Ad.*, 65 Broad Street, Bridgeton, N. J.

**George Nixon Whitaker, Ph.G.**

*Thes.*, Pharmacists.  
*Ad.*, Glenside, Pa.

**Frank Willett White, Ph.G.**

*Thes.*, Gillenia Trifoliata.  
Pres. and Mgr., A. H. Lyman Co., wholesale and  
retail druggists.  
*Ad.*, Manistee, Mich.

**\*John Henry Williams, Ph.G.**

*Thes.*, Neatness in Compounding Prescriptions.  
Physician. Practiced in Phila.

**Harry Wisler Zeamer, Ph.G.**

*Thes.*, Estimation of Chlorine in Liquor Sode  
Chlorate.  
Retail pharmacist. Served 3 years as chief burges,  
Columbia, Pa. Served in U. S. A. as 1st Lieut.  
Co. C, 4th Reg., N. G. P., Mexican Border Service.  
*Ad.*, Columbia, Pa.

**John Paul Zeller, Ph.G.**

*Thes.*, Opium.  
*Ad.*, 27th and Oxford Sts., Phila., Pa.

**Albert Augustus Zulick, Ph.G.**

*Thes.*, Rhamnus Purshiana.  
Register Clerk, P. & R. Relief Assn. Sch. Di-  
rector 2 terms. Mem. Chester Ave., Improvement  
Assn. Masonic affiliation.  
*Ad.*, 2026 Chestnut Street, Phila., Pa.

**Special Students.****Louis Michael Carriat.**

Received Certificate of Proficiency in Chemistry.  
*Ad.*, 896 Belmont Ave., Phila., Pa.

**Charles Albert Waterall.**

Received Certificate of Proficiency in Chemistry.

**1892****Frank Leamer Akers, Ph.G.**

*Thes.*, Cantharidis.  
Retail pharmacist.  
*Ad.*, N. W. Cor. 13th and Morris Sts., Phila., Pa.

**Clarence George Anderson, Ph.G.**

*Thes.*, Fluid Extracts.  
Retail pharmacist.  
*Ad.*, East Liverpool, Ohio.

**Granville Louis Angeny, Ph.G.**

*Thes.*, Petrolatum.  
Served in U. S. A. as Captain.

**Jay Warren Angle, Ph.G.**

*Thes.*, The Metric System.  
Retail pharmacist. Vice-pres. and director Ar-  
kansas Trust Co.  
*Ad.*, Hot Springs, Ark.

**Harry Augustus Bacon, Ph.G.**

*Thes.*, Physostigma.  
Physician. Graduated in medicine Medico-Chi Coll.  
Post grad. course Univ. of Penna. Adjunct Prof.  
of Clinical Surgery, Temple Univ.  
*Ad.*, 1527 Girard Ave., Phila., Pa.

**Arthur Hamilton Bailey, Ph.G.**

*Thes.*, Liatris Graminifolia.  
*Ad.*, 618 North St., Harrisburg, Pa.

**Hugh Augustus Barkhuff, Ph.G.**

*Thes.*, Solution of Chloride of Zinc.  
*Ad.*, Amsterdam, N. Y.

**William Jacob Baumgartner, Ph.G.**

*Thes.*, Natural Mineral Waters.  
Physician.  
*Ad.*, Broad and Seltzer Sts., Phila., Pa.

**Samuel Beaver, Ph.G.**

*Thes.*, Chlorine Water.  
Retail pharmacist 25 years. Left drug business to  
attend to estate. Treas. Annville Township 1912-  
15.  
*Ad.*, Annville, Pa.

**Benjamin Franklin Beers, Ph.G.**

*Thes.*, Pyrethrum as an Insecticide.  
Grocer. Retail pharmacist until 1908.  
*Ad.*, 142 Stanton St., Wilkesbarre, Pa.

**William Beidler, Ph.G.**

*Thes.*, Ether.

**Leroy Berg, Ph.G.**

*Thes.*, Gillenia Trifoliata.  
Temporarily out of business. Formerly retail  
pharmacist. Charter Mem. Wilkesbarre Rotary  
Club.  
*Ad.*, 122 Academy Street, Wilkesbarre, Pa.

**George Edward Bietach, Ph.G.**

*Thes.*, Polygonum Hydropiper.

**William Martin Birk, Ph.G.**

*Thes.*, Benzoinated Lard.

**\*Augustus Smith Blackman, Ph.G.**

*Thes.*, Cicuta Maculata.

**Henry Cowan Blair, 3rd, Ph.G.**

*Thes.*, Cornus Florida.  
*Ad.*, Edgewater Park, N. J.

**Adam John Blauth, Ph.G.**

*Thes.*, Anilin.

**Harry Leslie Boggs, Ph.G.**

*Thes.*, Tinctures, Solid and Fluid Extracts.  
*Ad.*, Charleston, West Virginia.

**Joseph Pecky Bolton, Ph.G.**

*Thes.*, Compound Syrup of Benzoin.  
Retail pharmacist.  
*Ad.*, 4 Euclid Avenue, Binghamton, N. Y.

**Elias Kline Boltz, Ph.G.**

*Thes.*, Ergota.  
Physician. Graduated in medicine Jeff. Med. Coll.,  
1896.  
*Ad.*, 701 Maple Street, Lebanon, Pa.

**John Thomas Brennan, Ph.G.**

*Thes.*, The Preservation and Sterilization of Cow's  
Milk.  
*Ad.*, 2656 Martha Street, Phila., Pa.

**Harry Walter Brick, Ph.G.**

*Thes.*, Cortex Cocillana.  
*Ad.*, 95 S. Fitzhugh Street, Rochester, N. Y.

- Charles Brown, Ph.G.**  
*Thes.*, Nux Vomica.  
*Ad.*, 4112 Baltimore Avenue, Phila., Pa.
- James Howard Burnett, Ph.G.**  
*Thes.*, Glycerinum.
- Alfred Brooks Cadmus, Ph.G.**  
*Thes.*, Ammonii Carbonas.
- \*Elmer Lindsay Cameron, Ph.G.**  
*Thes.*, Petroleum.
- Harry Caspar Carey, Ph.G.**  
*Thes.*, The Olive Tree and Its Fruit.  
Retail pharmacist.  
*Ad.*, 32 S. Pearl Street, Albany, N. Y.
- Harry English Casey, Ph.G.**  
*Thes.*, Medicated Waters.
- \*Albert Samuel Christman, Ph.G.**  
*Thes.*, The Duties of a Pharmacist.  
Deceased, January, 1921.
- Thomas Philip Collins, Ph.G.**  
*Thes.*, Pill Coating.  
*Ad.*, Detroit and Pearl Streets, Cleveland, Ohio.
- Newton C. Comfort, Ph.G.**  
*Thes.*, Salol, Its Characteristics.  
*Ad.*, Box 424, Custom House, Manila, P. I.
- \*George McClellan Conard, Ph.G.**  
*Thes.*, Granular Effervescent Salts.  
Deceased, 1912.
- Zeh. Vance Conyers, Ph.G.**  
*Thes.*, Liquor Hydrargyri Nitratis.  
*Ad.*, Greensboro, N. C.
- \*Wharton Landis Cornell, Ph.G.**  
*Thes.*, Salix.
- \*Charles Franklin Craig, Ph.G.**  
*Thes.*, Oleum Gaultheriae.
- \*William Kinnard Croft, Ph.G.**  
*Thes.*, Benzin Test for Beeswax.  
Deceased, December 19, 1906.
- George Edmund Daniels, Ph.G.**  
*Thes.*, Adeps and Its Adulterations.  
*Ad.*, Durango, Colorado.
- \*Alvah Molony Davis, Ph.G.**  
*Thes.*, Galangal Rhizome.
- Harry Morgan Davis, Ph.G.**  
*Thes.*, Fluid Extract of Wild Cherry.  
*Ad.*, Morton, Pa.
- Joseph Carl De LaCour, Ph.G.**  
*Thes.*, Estimation of Eugenol in Oil of Cloves.  
Vice-pres. Wm. S. Scull Co., wholesale coffee, tea, rice. Formerly vice-pres. J. Ellwood Lee Co. Vice-pres. Riverton Free Library. Mem. Union League Club, Philadelphia.  
*Ad.*, Riverton, N. J.
- William John Dickel, Ph.G.**  
*Thes.*, Spigelia.  
*Ad.*, 1302 E. Columbia Avenue, Phila., Pa.
- Edwin Alfred Donecker, Ph.G.**  
*Thes.*, Syrupus Toltnanus.  
Dealer in oils and mill supplies. Interested in Knerr Printing Co. Commissioner of Lehigh Co., 1916-20. Mem. City of Allentown Planning Com.  
*Ad.*, 1501 Linden Street, Allentown, Pa.
- Robert Ligorius Donoghue, Ph.G.**  
*Thes.*, Precipitation of Fluid Extracts.  
Physician. Graduated in medicine Univ. of Penna., 1895. At present medical examiner Ford Motor Co. Mem. Amer. Assn. Industrial Physicians and Surgeons; Phila. Assn. Industrial Medicine.  
*Ad.*, 2700 N. Broad Street, Phila., Pa.
- Andrew William Dowd, Ph.G.**  
*Thes.*, Andromeda Mariana.  
Physician and surgeon. Graduated in medicine Rush Med. Coll., Chicago, 1899. Contract surg. for Coal Mines and R. R. 1900-20. Bank director. Mem. Carbon Co., (Utah) Board of Education, 15 years; Volunteer Med. Service Corps of U. S.; Med. Advisory Board.  
*Ad.*, Sunnyside, Utah.
- \*Schuyler Colfax Eckhard, Ph.G.**  
*Thes.*, Fructus Xanthoxyli.
- Arthur Hugh Elliott, Ph.G.**  
*Thes.*, Preservation of Lard.
- Clarence William Elston, Ph.G.**  
*Thes.*, Tincture of Gelsemium.  
General salesman for Belding Bros. and Co., Silk mfrs. Masonic affiliation.  
*Ad.*, 3731 N. Carlisle Street, Phila., Pa.
- William Taws England, Ph.G.**  
*Thes.*, Pharmaceutical Preparations.  
Analytical and pharmaceutical chemist, National Drug Co., Wayne Junc. Phila. Formerly pharmacist at Phila. Gen. Hosp., and retail pharmacist. Mem. Phila. Choral Soc., etc.  
*Ad.*, 4046 Baring Street, Phila., Pa.
- John Hake Eppley, Ph.G.**  
*Thes.*, Solidago Virgaurea.  
Foreman, Mixing Dept., Upjohn Co., mfrs. of pharmaceuticals. Retail pharmacist, 15 years.  
*Ad.*, 817 West Street, Kalamazoo, Mich.
- Jacob Eppstein, Ph.G.**  
*Thes.*, Myrica Asplenifolia.  
Retail pharmacist.  
*Ad.*, St. Wendel (Saar) Germany.
- John Peter Failing, Ph.G.**  
*Thes.*, Phlox Drummondii.  
Real estate and insurance. Mem. Exec. Com. Real Est. Board, State of New York, and appraiser for state lands.  
*Ad.*, 276 State St., Albany, N. Y.
- Enoch Pennock Ferguson, Ph.G.**  
*Thes.*, Drug Exhaustion as Influenced by Communion.
- Martin Luther Finkbiner, Ph.G.**  
*Thes.*, Eupatorium Leucolepis.  
Physician and pharmacist. Graduated in medicine, Medico-Chi. College, 1906.  
*Ad.*, 2nd and Diamond Streets, Phila., Pa.
- John Joseph Finney, Ph.G.**  
*Thes.*, The Formation of Saline Mineral Waters.  
Director Health and Sanitation, Pusey-Jones Shipyards, Gloucester, N. J. Course in Optometry, Phila. Optical College, and in Chiro-practice, Am. Univ.  
*Ad.*, 3409 Ridge Avenue, Phila., Pa.
- Thomas Leroy Fisher, Ph.G.**  
*Thes.*, Acidum Lacticum.
- James Floyd Fox, Ph.G.**  
*Thes.*, Glycyrrhiza.
- Allen J. Frankeberger, Ph.G.**  
*Thes.*, Pepsin.  
Sec. and Treas. Myers Mfg. Co., mfrs. tin boxes. Formerly retail pharmacist.  
*Ad.*, 5417 Cedar Avenue, Phila., Pa.
- Nelson Becker Fry, Ph.G.**  
*Thes.*, Glyceritum Vitelli.  
Retail pharmacist.  
*Ad.*, 1901 Arch Street, Phila., Pa.
- Frank Smith Githens, Ph.G.**  
*Thes.*, Damiana.  
Retail pharmacist.  
*Ad.*, Pacific and New York Avenues, Atlantic City, N. J.



- Jamea Goodman, Ph.G.**  
*Thes.*, Crystallization.
- \*John Frederick Gradwohl, Ph.G.**  
*Thes.*, Tinctura Opii.  
Deceased, August 12, 1918.
- William Valentine Green, Ph.G.**  
*Thes.*, Mercury.  
Retail pharmacist. Prop. of a strictly ethical pharmacy. Mem. Penna. Pharm. Assn.  
*Ad.*, 411 S. Franklin Street, Wilkesbarre, Pa.
- \*William Robert Greasley, Ph.G.**  
*Thes.*, Aqua Acidi Carbonici.
- Joseph Alexander Guerlin, Ph.G.**  
*Thes.*, Liqueur Ferri Ter sulphatis.  
*Ad.*, Summerville, S. C.
- Harry Gueat, Ph.G.**  
*Thes.*, Glycerin Suppositories.  
*Ad.*, Pennsgrove, N. J.
- Herman Frederick Hahn, Ph.G.**  
*Thes.*, Liqueur Potassæ.  
Retail pharmacist, until 1898. With Bell Telephone Co., 1898-1908. Attending to personal affairs since.  
*Ad.*, 2221 N. 3rd Street, Harrisburg, Pa.
- Joseph Rldgway Haines, Ph.G.**  
*Thes.*, Aluminium.  
*Ad.*, Mt. Holly, N. J.
- Oliver Benjamin Jacob Haines, Ph.G.**  
*Thes.*, Liqueur Calcis.  
Retail pharmacist.  
*Ad.*, 412 N. 9th Street, Allentown, Pa.
- Bruce Clyde Hallowell, Ph.G.**  
*Thes.*, Aqua.  
*Ad.*, 27th and Westfield Avenue, Camden, N. J.
- Harry Cobb Hand, Ph.G.**  
*Thes.*, Stillingia Sylvania.  
*Ad.*, State Hospital, Trenton, N. J.
- Curtia Alexander Harbold, Ph.G.**  
*Thes.*, Extractum Eunyomi Fluidum.  
Retail pharmacist. Mem. A. Ph. A.; Penna. Pharm. Assn.; Phila. Assn. Retail Druggists.  
*Ad.*, 1820 Columbia Avenue, Phila., Pa.
- Raymond C. Head, Ph.G.**  
*Thes.*, Sympus Scillæ.
- \*Edward Henry Hechler, Ph.G.**  
*Thes.*, Monsel's Solution.
- William Frederick Henry, Ph.G.**  
*Thes.*, Liatris Spiculata.  
Manager Rau's drug store.  
*Ad.*, 100 15th Street, Wheeling, West Va.
- Harry Reed Hess, Ph.G.**  
*Thes.*, Preservation of Syrups.  
Chemist. Vice-pres. of S. Twitchell Co., mfrs. flavoring extracts and carbonating machinery.  
*Ad.*, 5530 Girard Avenue, Phila., Pa.
- \*William H. Hobson, Ph.G.**  
*Thes.*, The Sponge.
- Waite Melvin Hornby, Ph.G.**  
*Thes.*, Modes of Assaying Belladonna.  
Physician.  
*Ad.*, 6134 Ridge Avenue, Roxboro, Phila., Pa.
- Burt Taylor Hutchison, Ph.G.**  
*Thes.*, Assay of Powdered Guarana.  
*Ad.*, Pen Argyl, Pa.
- Walter William Jacob, Ph.G.**  
*Thes.*, Granular Effervescent Salts.  
Retail pharmacist. Served with Friends' Reconstruction Corps in Europe.  
*Ad.*, 1024 Chestnut Street, Phila., Pa.
- Harry Joseph John, Ph.G.**  
*Thes.*, Nickel Steel.
- Edward Franklin Johnson, Ph.G.**  
*Thes.*, Liqueur Ferri Acetatis.
- Howard Marlon Jordan, Ph.G.**  
*Thes.*, Beet Sugar.  
Salesman for Fuller Morrisson Co., Chicago.  
*Ad.*, 419 S. Park Street, Kalamazoo, Mich.
- Henry Featus Kaercher, Ph.G.**  
*Thes.*, Eupatorium Perfoliatum.
- James Daniel Karcher, Ph.G.**  
*Thes.*, The Preliminary Education of the Pharmacist.  
Pharmacist.  
*Ad.*, 105 Bethlehem Pike, Chestnut Hill, Phila., Pa.
- \*Harvey Lafayette Keiper, Ph.G.**  
*Thes.*, Ipomea Purgans.  
Retail pharmacist, Allentown, Pa. Deceased, March 15, 1913.
- \*Charles Lewia Keppeler, Ph.G.**  
*Thes.*, Sanguinaria Canadensis.  
Retail pharmacist, New Orleans, La. Deceased, January 26, 1909.
- Alvin B. Kline, Ph.G.**  
*Thes.*, Sophistications in Pharmacy.
- George Heyde Krall, Ph.G.**  
*Thes.*, Mangifera Indica.  
*Ad.*, Firestone Bldg., Kansas City, Mo.
- John Thomas Krall, Ph.G.**  
*Thes.*, Our Debt to Science.  
Physician. Graduated in medicine, Univ. of Penna. 1894. Ophthalmic surg. Presbyterian Hosp. and Wills Eye Hosp., 13 years. Specialist in diseases of the eye.  
*Ad.*, 1421 Chestnut Street, Phila., Pa.
- Frederick Krausa, Ph.G.**  
*Thes.*, Tinctura Nucis Vomicae.  
Physician. Graduated in medicine Univ. of Penna., 1893. Eye surg. to Episcopal Hosp. Throat and Ear surg. Abington Hosp. Eye, Ear, Nose and Throat surg. St. Christopher's Hosp. Med. Advisor Selective Service System.  
*Ad.*, 1701 Chestnut Street, Phila., Pa.
- Harry Jacob Kreba, Ph.G.**  
*Thes.*, Emulsions.  
Retail pharmacist.  
*Ad.*, 111 W. Centre Street, Mahanoy City, Pa.
- \*Willia George Kunkle, Ph.G.**  
*Thes.*, Extract of Beef.
- \*Addington LaDow, Ph.G.**  
*Thes.*, Drug Business of the Future.  
Deceased, March 13, 1909.
- \*Jacob S. Lammer, Ph.G.**  
*Thes.*, Stillingia Sylvania.
- \*Charles Paul Landis, Ph.G.**  
*Thes.*, Borax.  
Deceased, November, 1906.
- Francis Patterson Landon, Ph.G.**  
*Thes.*, Lanolin.  
Retail pharmacist. Formerly councilman and recorder of Keystone, West Va. Mem. Board of Pharmacy, West Va.; 2nd Vice-pres. West Va. State Board of Trade; Pharm. Assn. of West Va.; Nat'l Assn. Boards of Pharmacy, 2nd Vice-pres., 1910; I. O. O. F.; K. of P.; DuPont Club of Va.; Masonic affiliation.  
*Ad.*, Hopewell, Va.
- Charles Thomas Larkins, Ph.G.**  
*Thes.*, Cantharis.  
Retail pharmacist. Enrolling Agt. for U. S. Shipping Board during World War.  
*Ad.*, East Liverpool, Ohio.



**Henry Tomlinson Lefferts, Ph.G.**

*Thes.*, Nitroglycerin.  
Retired. Formerly retail pharmacist. Director Bank of Nutley; Mem. Com. Revenue and Finance, Nutley, N. J.  
*Ad.*, 165 Coeyman Avenue, Nutley, N.J.

\***Lawton Carlisle Lipscomb, Ph.G.**

*Thes.*, Medicine and Pharmacy.  
Deceased, July 5, 1921.

**William Henry Long, Jr., Ph.G.**

*Thes.*, Oleates.  
Physician.  
*Ad.*, 116 S. 40th Street, Phila., Pa.

**James Reber Lorah, Ph.G.**

*Thes.*, Olive Oil and its Adulterants.  
Retail pharmacist.  
*Ad.*, 139 Bellevue Avenue, Newport, R. I.

\***Leater Irwin Lorah, Ph.G.**

*Thes.*, Lugol's Solution.  
Retail pharmacist, Pittsburgh, Pa. Deceased, October 26, 1910.

**Emanuel Lupin, Ph.G.**

*Thes.*, Erythroxyton Coca.  
Physician.  
*Ad.*, 2221 N. 33rd Street, Phila., Pa.

**Edward Sloan McCandless, Ph.G.**

*Thes.*, Chemistry of the Atmosphere.

**Frank Stewart McCartney, Ph.G.**

*Thes.*, Solution of Caustic Soda.  
*Ad.*, 1060 Hancock Street, Brooklyn, N. Y.

**James McClintock, Ph.G.**

*Thes.*, Improved Blaud's Pills.

\***William McCorkle, Ph.G.**

*Thes.*, Preparations of the Hypophosphites.  
Retail pharmacist, Phila. Deceased, October 13, 1912.

**Robert Rogers McCormick, Ph.G.**

*Thes.*, A Problem.

\***Charles Pencilatus McDonnell, Ph.G.**

*Thes.*, Lactuca.  
Deceased, January 29, 1903.

**Robert Montford McFarland, Ph.G.**

*Thes.*, Verbena Urticifolia.  
Retail pharmacist. Pres. Ky. Pharm. Assn., 1897.  
*Ad.*, 191 West Peachtree Street, Atlanta, Ga.

**Eugene Charles McGregor, Ph.G.**

*Thes.*, Phytolacca Radix.  
*Ad.*, Columbia, S. C.

**Samuel McWilliams, Ph.G.**

*Thes.*, Cinchona.

**Edward Scudder Mackey, Ph.G.**

*Thes.*, The Soda Fountain in Pharmacy.  
Retail pharmacist.  
*Ad.*, Elizabeth, N. J.

**George Clarence Mackey, Ph.G.**

*Thes.*, The Aconites of North America.  
*Ad.*, Elizabeth, N. J.

**Charles LaForge Manning, Ph.G.**

*Thes.*, Oleum Gaultheria.  
Physician.  
*Ad.*, 1834 Tioga Street, Phila., Pa.

**James Henderson Martin, Ph.G.**

*Thes.*, Gymnocladus Canadensis.  
Martin Chemical Co. With E. R. Squibb and Sons, 1915-1920. Formerly retail pharmacist. State Drug Inspector, Ky., 1909-10. Mem. Ky. Board of Pharmacy, 1907-12-13-18.  
*Ad.*, 244 E. Broadway, Winchester, Ky.

**Edgar Morton Mathewa, Ph.G.**

*Thes.*, Gum Myrrh.  
*Ad.*, Florence, S. C.

**Charles Edward Mengel, Ph.G.**

*Thes.*, Iodoform.

**Levi Walter Mengel, Ph.G.**

*Thes.*, North American Meloidæ.  
Director Reading Public Museum and Art Gallery. Mem. 1st Peary Expedition to N. and W. Greenland, 1891. Teacher of chemistry and physics High Sch. for Boys, 1895-1915. Director Reading Museum since 1904.  
*Ad.*, Reading Public Museum and Art Gallery, Reading, Pa.

**John Harvey Miller, Ph.G.**

*Thes.*, Medicamentariæ Literæ.  
Physician and surgeon. Graduated in medicine. Jeff. Med. College, 1896. Res. Phys. Harrisburg Hosp., 1896-97. Surg. Staff Dayton (Ohio) Soldiers' Home. Mem. Staff Harrisburg Hosp. Coroner's Phys., Dauphin Co., Pa. Life Ins. Examiner.  
*Ad.*, 19 N. 4th Street, Harrisburg, Pa.

**William Houston Milliken, Ph.G.**

*Thes.*, Rhamnus Purshiana.

\***Henry Mitchell, Ph.G.**

*Thes.*, Alcohol.  
Pharmacist, Jefferson Hosp., Phila., Deceased, February 21, 1919.

**Alexander Harrison Murrell, Ph.G.**

*Thes.*, Strawberries.

**William Tice Myers, Ph.G.**

*Thes.*, Theine and Caffeine.  
Sales manager, Phila. Pharmacal Co. Formerly retail pharmacist.  
*Ad.*, 60 W. Pomona Street, Germantown, Phila., Penna.

**Samuel Oliver Netherton, Ph.G.**

*Thes.*, The Analysis of Phlox Pilosa.

**Frederick John Nye, Ph.G.**

*Thes.*, Tartaric Acid.  
*Ad.*, Syracuse, N. Y.

**William Phillip Oberhauser, Ph.G.**

*Thes.*, Solidago Rugosa.

**William Joseph O'Brien, Ph.G.**

*Thes.*, Yerba Santa.

**Gurdon Ellia Pellett, Ph.G.**

*Thes.*, Hydrochlorate of Cocaine.  
*Ad.*, 107 Park Avenue, Paterson, N. J.

**Rewellian Cornelius Peters, Ph.G.**

*Thes.*, Oleum Gaultheriæ.  
*Ad.*, 813 Hamilton Street, Allentown, Pa.

**George Washington Pfromm, Ph.G.**

*Thes.*, Acidum Boricum.  
Physician. Graduated in medicine, Medico-Chi. College, 1894. Formerly Prof. of Applied Therapeutics Medico-Chi. College and Asst. Visiting Phys. Formerly Chm. Med. Civil Service Board of Phila. Consulting phys. to German-Protestant Home and to Sons of Veterans Home.  
*Ad.*, 1431 N. 15th Street, Phila., Pa.

**Francis Elmer Post, Ph.G.**

*Thes.*, Sterculia Acuminata.  
*Ad.*, Lancaster, Pa.

**Silas Oscar Putnam, Ph.G.**

*Thes.*, Triticum Repens.  
*Ad.*, 5th and Spruce Streets, Leavenworth, Kansas.

**Harry Lee Randal, Ph.G.**

*Thes.*, Cascara Sagrada.  
Physician. Graduated in medicine, 1901. Post grad. course, 1907. Opened private sanatorium, 1910.  
*Ad.*, Germantown Avenue and City Line, Chestnut Hill, Phila., Pa.

**Edwin Cole Ranney, Ph.G.**

*Thes.*, Tri-Iodomethane.

**Elmer Augustus Reidenbach, Ph.G.**

*Thes.*, Mentha Piperita and Preparations.  
Pharmacist, Phila. Gen. Hosp.  
*Ad.*, Phila. Gen. Hosp., 34th and Pine Streets,  
Phila., Pa.

**\*Samuel Jacobs Remington, Ph.G.**

*Thes.*, Strophanthus.  
Deceased, March 2, 1905.

**May Reynolds, Ph.G.**

*Thes.*, Pills.  
Formerly Pharmacist, Howard Hosp., Phila.  
*Ad.*, 3365 W. 1st Street, Los Angeles, Cal.

**John H. W. Rhein, Ph.G.**

*Thes.*, Pepsin.  
Physician. Specialist in neurology. Connected  
with Orthopaedic Hosp., St. Agnes Hosp. and  
Howard Hosp., as neurologist. Prof. of diseases of  
Nervous System, Grad. sch., Univ. of Penna.;  
Bacteriologist to Penna. Training Sch. for Feeble-  
minded. Mem. Amer. Neurological Assn.; Amer.  
Medico-psychological Assn.; Neurological Soc.  
Phila.; Psychiatric Soc.; Pathological Soc.; Pedia-  
tric Soc.; Fellow College Phys., Phila., Pa., etc.  
Served in U. S. A. as neurologist two years.  
*Ad.*, 1732 Pine Street, Phila., Pa.

**James Harry Richardson, Ph.G.**

*Thes.*, Syrupus Ferri Iodidi.  
Retail Pharmacist.  
*Ad.*, 58th and Florence Avenue, Phila., Pa.

**Robert Grant Rinedollar, Ph.G.**

*Thes.*, Erythroxylo-n Coca.

**Francis Rinker, Ph.G.**

*Thes.*, Irish Moss for Emulsions.  
*Ad.*, 7205 Germantown Avenue, Phila., Pa.

**William Sloan Rishton, Ph.G.**

*Thes.*, Ptelia Trifoliata.  
Retail pharmacist. Mem. City Council, Blooms-  
burg, Pa.; Rotary Club. Masonic affiliation.  
*Ad.*, Bloomsburg, Pa.

**Theodore William Roth, Ph.G.**

*Thes.*, Strychnine and Brucine.

**John Palmer Rothermel, Ph.G.**

*Thes.*, Koumiss.  
Retail pharmacist. Treas. Lewistown Concert  
Band.  
*Ad.*, Lewistown, Pa.

**\*Charles Warren Rynard, Ph.G.**

*Thes.*, Malt.  
Deceased, January 1, 1911.

**Louis Napoleon Sahn, Ph.G.**

*Thes.*, Should Physicians Dispense Their Own  
Medicines.  
*Ad.*, 259 W. 130th Street, New York City.

**Charles Albert Schloer, Ph.G.**

*Thes.*, Citrate of Iron.  
Physician. Graduated in medicine, 1913.  
*Ad.*, 2801 13th Street, N. W., Washington, D. C.

**Irvin S. Schmehl, Ph.G.**

*Thes.*, Crocus.  
*Ad.*, 4827 A Street, Phila., Pa.

**Charles Schneider, Ph.G.**

*Thes.*, Senna.  
Physician.  
*Ad.*, 1930 N. 7th Street, Phila., Pa.

**George C. Scott, Ph.G.**

*Thes.*, Oleoresins with Benzin as a Menstruum.

**\*Charles Augustus Seler, Ph.G.**

*Thes.*, Percentage of Ash in Ammoniacum.  
Deceased, March 18, 1902.

**Erwin Clement Shafer, Ph.G.**

*Thes.*, Panax Quinquifolium.  
*Ad.*, 6200 Chew Street, Phila., Pa.

**Frederick Charles Shaw, Ph.G.**

*Thes.*, Eupatorium Rotundifolium.  
Editor and mgr. Rocky Mountain Druggist.  
Formerly retail pharmacist; Pres. Denver Pharm.  
Assn.; Pres. Col. Pharm. Assn., 1908-09; Secy.  
Denver Assn. Retail Druggists, 1917-18; Secy.  
Denver Branch A. Ph. A., 1918.  
*Ad.*, Care of Rocky Mountain Druggist, Denver,  
Colorado.

**Edward Joseph Sheehan, Ph.G.**

*Thes.*, Petrolatum.

**Thomas Walter Shore, Ph.G.**

*Thes.*, Peppermint.

**Charles M. Shumaker, Ph.G.**

*Thes.*, Glycerinum.

**William Allen Sickel, Ph.G.**

*Thes.*, Should Physicians Dispense Their Own  
Medicines.  
*Ad.*, Snow Shoe, Pa.

**George Arthur Simmons, Ph.G.**

*Thes.*, Our Own vs. Patent Preparations.  
*Ad.*, 22 E. Mowry Street, Chester, Pa.

**Robert Lamberton Singer, Ph.G.**

*Thes.*, Phosphoric Acid.

**Rosa Merryman Slick, Ph.G.**

*Thes.*, Scopola Carniolic.  
*Ad.*, 5236 Chancellor Street, Phila., Pa.

**Albert Smith, Ph.G.**

*Thes.*, Acidum Hydrocyanicum Dilutum.  
*Ad.*, Parsons, Kansas.

**Allen Henry Smith, Ph.G.**

*Thes.*, Rhamnus Purshiana.  
Mgr. Adam Pfromm Co., Wholesale Druggists.  
Mem. I. O. O. F. Masonic affiliation.  
*Ad.*, 3516 N. 16th Street, Phila., Pa.

**George Anselm Smith, Ph.G.**

*Thes.*, Antipyrine.

**\*George Lewis Smith, Ph.G.**

*Thes.*, Tincture of Iron.  
Physician. Graduated in medicine, Hahnemann  
Med. College. Practiced in Germantown, Phila.  
Deceased, October 10, 1918.

**Milton Clyde Smucker, Ph.G.**

*Thes.*, Pepsin.  
Retail pharmacist.  
*Ad.*, 2259 Madison Street, Chicago, Ill.

**Edgar R. Sparks, Ph.G.**

*Thes.*, The Apprentice.  
Retail pharmacist. Secy. N. J. State Board of  
Pharmacy.  
*Ad.*, 239 High Street, Burlington, N. J.

**Edgar Lacy Speer, Ph.G.**

*Thes.*, Sulphur Precipitatum.

**Edward Theodore North Stein, Ph.G.**

*Thes.*, Syrup of Hydriodic Acid.  
Retail pharmacist.  
*Ad.*, 90 Walnut Street, Montclair, N. J.

**Harvey Nevin Stem, Ph.G.**

*Thes.*, Iron.

**Harry Miller Sultzach, Ph.G.**

*Thes.*, Nicotiana Tabacum.  
Physician and surgeon. Graduated in medicine,  
1894. Laryngologist to St. Joseph's Hosp., 7 years  
*Ad.*, 231 E. King Street, Lancaster, Pa.

**Samuel Sutton, Ph.G.**

*Thes.*, Ipecacuanha.

**\*Howard M. Taggart, Ph.G.**

*Thes.*, Acidum Nitrohydrochloricum.

**\*Merle Hampton Taylor, Ph.G.**

*Thes.*, Syrup of Yerba Santa.  
Deceased, August 27, 1916.

- \*Gan Joshua Thompson, Ph.G.**  
*Thes.*, Fluid Extracts.  
 Physician. Graduated in medicine, Jeff. Med. College, 1895. Mem. Berks Co. Pension Board, 1905-13. Deceased, 1922.
- Edward Charles Tragger, Ph.G.**  
*Thes.*, Citrate of Iron.
- George Franklin Troutman, Ph.G.**  
*Thes.*, Oleum Morrhuæ.  
 Retail pharmacist. Mem. Sch. Board, 12 years.  
*Ad.*, Philipburg, Pa.
- Thaddeus Thomas Trump, Ph.G.**  
*Thes.*, Gossypium.
- Philip Percy Turner, Ph.G.**  
*Thes.*, Mercurial Ointment.  
 Physician. Graduated in medicine, Jeff. Med. College, 1897. Mem. Board of Health and Vaccine Phys., 1898-1902. Mem. Sch. Board 39th Ward, 1900-1903.  
*Ad.*, 5921 N. Broad Street, Phila., Pa.
- Alfred Nelson Van Dyke, Ph.G.**  
*Thes.*, Glycerin Suppositories.  
 Dental surgeon. Graduated in dentistry, Phila. Dental College, 1898. Mem. Phila. Assn. of Dental Surgeons; Penna. State Dental Soc.; Nat'l Dental Soc. Masonic Affiliation.  
*Ad.*, 1518 Tioga Street, Phila., Pa.
- Frederick John Voss, Ph.G.**  
*Thes.*, Poison.  
 Physician. Graduated in medicine, Jeff. Med. College. Formerly Sch. Director. Volunteer Med. Service Corps.  
*Ad.*, 2935 Richmond Street, Phila., Pa.
- \*Edwin Wahle, Ph.G.**  
*Thes.*, Magnolia Glauca.
- John Henry Walls, Ph.G.**  
*Thes.*, Sericum.
- Andrew Wendel Walter, Ph.G.**  
*Thes.*, Resin of Cotton Root Bark.  
 Retail pharmacist.  
*Ad.*, 1261 N. 15th Street, Phila., Pa.
- James Winter Wamsley, Ph.G.**  
*Thes.*, Eucalyptus Globulus.
- John Wilson Weller, Ph.G.**  
*Thes.*, Medicated Waters.  
 Supt. of agencies, Curtis Publishing Co.  
*Ad.*, 851 N. 24th Street, Phila., Pa.
- Walter Rupert Weiser, Ph.G.**  
*Thes.*, Naphthalin.  
 Surgeon. Graduated in medicine, Univ of Penna., 1892. Res. Phys. Presbyterian Hosp., Phila. Visiting surg. Springfield, Mercy and Kings Daughters Hosp. Chief Surg. and Director Hampden Hosp., etc. Served in U. S. A. Med. Dept. as colonel.  
*Ad.*, Springfield, Mass.
- Nicholas Fredrick Weisner, Ph.G.**  
*Thes.*, Atmosphere.  
*Ad.*, 20th and Parrish Street, Phila., Pa.
- Karl Henry Westphal, Ph.G.**  
*Thes.*, Peroxide of Hydrogen.
- Charles Henry White, Ph.G.**  
*Thes.*, The Olive.  
*Ad.*, Pine Rest Grove, Bowling Green, Fla.
- Preston Barnes White, Ph.G.**  
*Thes.*, Ointment Bases.  
 Detail work. Formerly with Frederick Stearns and Co. and E. R. Squibb and Sons.  
*Ad.*, 653 Phila. Avenue, Chambersburg, Pa.
- Thomas Jefferson Wier, Jr., Ph.G.**  
*Thes.*, Cornus Florida.  
*Ad.*, 1428 Van Buren Street, Wilmington, Del.
- \*Howard Marion Wilkinson, Ph.G.**  
*Thes.*, Syrup of Tolu.  
 Deceased, February, 1909.
- Charles Morgan Williams, Ph.G.**  
*Thes.*, Carbonic Dioxide, Its Industrial and Scientific Applications.  
 Physician and pharmacist.  
*Ad.*, Washington, Warren Co., N. J.
- Solomon Cohen Williams, Ph.G.**  
*Thes.*, Cascara Sagrada.  
 Salesman, Arlington Chem. Co. Formerly with Mallinckrodt Chem. Works and Hoffman-LaRoche Company.  
*Ad.*, 2219 N. 13th Street, Phila., Pa.
- \*William Harry Kitzmiller Wingert, Ph.G.**  
*Thes.*, Phlox Maculata.
- John Kaler Wittel, Ph.G.**  
*Thes.*, Antipyrine.  
 Eastern representative, Amer. Scientific Laboratories. Formerly retail pharmacist.  
*Ad.*, 1402 N. 60th Street, Phila., Pa.
- \*Oliver Brown Wolff, Ph.G.**  
*Thes.*, Milk.
- \*Richard Julius Wollmuth, Ph.G.**  
*Thes.*, Asbestos Amianthus.  
 Deceased, September 23, 1906.
- \*Tilghman Wesley Yeager, Ph.G.**  
*Thes.*, Syrup of Benzoin.
- \*Charles Ragan Yohn, Ph.G.**  
*Thes.*, Pharmaceutical Sins.
- Albert Lewis Ziegler, Ph.G.**  
*Thes.*, Turpentine.  
*Ad.*, 327 S. George Street, York, Pa.

Special Student.

Charles S. Vadner.  
 Received Certificate of Proficiency in Chemistry.

1893

- James Duffield Adams, Ph.G.**  
*Thes.*, Uranium.  
 Retail pharmacist.  
*Ad.*, 815 Ocean Avenue, Jersey City, N. J.
- Winfield Scott Adams, Ph.G.**  
*Thes.*, Cimicifuga.  
*Ad.*, Ilamburg, Pa.
- Frank Alleman, Ph.G.**  
*Thes.*, Antiseptics.  
 Physician. Graduated in medicine, Jeff. Med. College, 1896. Res. Phys. Phila. Gen. Hosp. and Boston Emergency Hosp. Mem. Penna. State Med. Soc.; Lancaster Co. Med. Soc., Pres. 1919; Mem. Amer. Med. Assn.; Fellow Amer. College of Surgeons. Chief Surg. Lancaster Hosp.  
*Ad.*, Lancaster, Pa.
- Frank John Althouse, Ph.G.**  
*Thes.*, Liquor Ammonii Acetatis.  
*Ad.*, 19 N. 13th Street, Harrisburg, Pa.
- Henry Peter Arnold, Ph.G.**  
*Thes.*, Lac Sulphur.  
 Retail pharmacist.  
*Ad.*, 3200 N. 5th Street, Phila., Pa.
- George Hulings Atkins, Ph.G.**  
*Thes.*, Rhamnus Purshiana.  
 Physician. Graduated in medicine, Jeff. Med. College, 1902.  
*Ad.*, 1727 S. Broad Street, Phila., Pa.
- Bismarck Henry Balls, Ph.G.**  
*Thes.*, Salicylic Acid Compared to Other Antiferments.  
 Pharmacist, George B. Evans.  
*Ad.*, 1921 Venango Street, Phila., Pa.



# 554 First Century of the Philadelphia College of Pharmacy

- Samuel Dey Bennett, Ph.G.**  
*Thes.*, Oleum Morrhuæ.  
 Physician.  
*Ad.*, Millville, N. J.
- \*Watson Berkatresser, Ph.G.**  
*Thes.*, Ethylic Alcohol.
- \*Robert Gillingham Blow, Ph.G.**  
*Thes.*, Alkaloids.
- Jacob Boadway, Ph.G.**  
*Thes.*, Benzoic Acid.  
 Retail pharmacist. Graduated Ontario College of Pharmacy. Received Phar. B., Univ. of Toronto.  
*Ad.*, Stouffville, Ont. Can.
- William Frank Bowman, Ph.G.**  
*Thes.*, Pichi, Fabiana Imbricata.
- \*John Samuel Boyd, Ph.G.**  
*Thes.*, Ointments.  
 Deceased, July 17, 1896.
- William Nathaniel Bradley, Ph.G.**  
*Thes.*, Unguentum Aquæ Rosæ.  
 Physician.  
*Ad.*, 1725 Pine Street, Phila., Pa.
- Herman Adam Brickner, Ph.G.**  
*Thes.*, Percolation.
- \*Edmund Lee Brown, Ph.G.**  
*Thes.*, Andromeda Ligustrina.  
 Deceased, March 22, 1917.
- Charles Monroe Butcher, Ph.G.**  
*Thes.*, Potassii Bitartras.  
 State Agt. for American Druggists Fire Ins. Co.  
 Formerly retail pharmacist.  
*Ad.*, Haddon Heights, N. J.
- Albert Reid Calhoun, Ph.G.**  
*Thes.*, Maltum.  
*Ad.*, Morristown, N. J.
- Theodore Campbell, Ph.G.**  
*Thes.*, Vanilla.  
 Retail pharmacist. Mem. Board of Trustees P. C. P. and Ex-pres. Alumni Assn. Pres. Phila. Assn. Retail Druggists. Mem. 34th Ward Sch. Board 8 years. In 1908 elected to Penna. Legislature, served 12 years and had charge of all present laws pertaining to pharmacy. January, 1920, appointed by Governor Sproul, mem. of commission to investigate compulsory health insurance.  
*Ad.*, 6312 Overbrook Avenue, Phila., Pa.
- \*Howard Preston Carpenter, Ph.G.**  
*Thes.*, My Ideal Pharmacy.
- Charles Robert Carson, Ph.G.**  
*Thes.*, Camphor.
- Herbert Gent Carter, Ph.G.**  
*Thes.*, Medicated Waters, Syrups and Tinctures.
- Albert Arthur Chance, Ph.G.**  
*Thes.*, Sugar Refining.  
*Ad.*, 2545 N. Vodges Street, Phila., Pa.
- \*Simmona Lee Cheek, Ph.G.**  
*Thes.*, Gossypium.
- William Gorgas Clark, Ph.G.**  
*Thes.*, Abstracts.  
 Mgr. Clark's Medicine Store, Harrisburg, Pa.  
*Ad.*, 306 Broad Street, Harrisburg, Pa.
- William Edward Cline, Ph.G.**  
*Thes.*, Nux Vomica.  
*Ad.*, 15th and Jackson Streets, Phila., Pa.
- Edward Smith Collina, Ph.G.**  
*Thes.*, Cocaine.
- Samuel Harry Conover, Ph.G.**  
*Thes.*, Pressure Percolation.  
 Sales Dept. E. R. Squibb and Sons.  
*Ad.*, The Essex, 34th and Chestnut Streets, Phila., Penna.
- Harry Thompson Copeland, Ph.G.**  
*Thes.*, Oleum Morrhuæ.
- \*Linwood Shamgar Corson, Ph.G.**  
*Thes.*, Aluminium.  
 Physician. Practiced at Glen Moore, Pa. Deceased, September 26, 1914.
- Harry Lehman Cox, Ph.G.**  
*Thes.*, Tinctura Zingiberis.  
 Retail pharmacist and optician. Graduate in optometry, 1893.  
*Ad.*, 21 W. Main Street, Ephrata, Pa.
- Russell LeVan Coxe, Ph.G.**  
*Thes.*, Extract of Vanilla.  
 Sales representative, Dusal Chem. Co.  
*Ad.*, Schuylkill Haven, Pa.
- \*Harry Roscoe Cushman, Ph.G.**  
*Thes.*, Oil of Wintergreen.  
 Deceased, March 28, 1896.
- Henry Hyman Dancy, Ph.G.**  
*Thes.*, Petrolatum.  
 Pharmacist. Graduated in medicine, Univ. of Penna., 1902.  
*Ad.*, Main and Bridge Street, Phoenixville, Pa.
- Frederick Dannenhauer, Ph.G.**  
*Thes.*, Basham's Mixture.  
*Ad.*, 7007 Hazel Avenue, Bywood Manor, Del. Co., Penna.
- \*Benjamin Franklin Davis, Ph.G.**  
*Thes.*, The Practical Pharmacist.
- George Warren Davis, Ph.G.**  
*Thes.*, Cardamon.  
 Real estate agt. County treas. Masonic affiliation.  
*Ad.*, 1728 Church Avenue, Scranton, Pa.
- William Lewis Deen, Ph.G.**  
*Thes.*, Coal Tar Products in Pharmacy.  
 Retail pharmacist.  
*Ad.*, 3311 N. Smedley Street, Phila., Pa.
- \*John Wolfraeberger Deininger, Ph.G.**  
*Thes.*, Phosphorus.
- George Ludwig Dengler, Ph.G.**  
*Thes.*, Tests for Tannins.  
*Ad.*, Mt. Penn, Pa.
- William Penn Detwiler, Ph.G.**  
*Thes.*, Aqua Ammonia.  
 Fruit farmer. Formerly retail pharmacist.  
*Ad.*, Phoenixville, Pa., R. D. 1.
- Harry Daniel Dietrich, Ph.G.**  
*Thes.*, Maltum.  
*Ad.*, 203 S. 4th Street, Reading, Pa.
- Charles Schaeffer Donough, Ph.G.**  
*Thes.*, Phytolacca Radix.  
 Retail pharmacist.  
*Ad.*, 631 Walnut Street, Lebanon, Pa.
- \*Luther Albert Drelsbach, Ph.G.**  
*Thes.*, The New Antipyretics.  
 Retail pharmacist, Phila. Deceased, April 16, 1912.
- George Francis Drever, Ph.G.**  
*Thes.*, Value of Pharmaceutical Education.
- \*Harry P. Eisenbart, Ph.G.**  
*Thes.*, Sapo.
- Paris Foster Elm, Ph.G.**  
*Thes.*, Cleaning of Druggists' Utensils.
- William Wallace Eshbach, Ph.G.**  
*Thes.*, Tincturæ.  
*Ad.*, 625 Union Street, Allentown, Pa.
- Thomas Addisor Fessler, Ph.G.**  
*Thes.*, Sugar Coated Pills.  
 Retail pharmacist.  
*Ad.*, Elkland, Pa.

- \*Josiah Hodgkinson Furman, Ph.G.**  
*Thes.*, Spices and Their Adulterants.  
 Physician. Graduated in medicine, College of Physicians, Memphis, Tenn., where he became Prof. of Therapeutics. Deceased, June 6, 1913.
- Charles Goss, Ph.G.**  
*Thes.*, Caffeine.  
 Physician. Graduated in medicine, Univ. of Penna., 1900. Served as pharmacist, U. S. N., U. S. S. Baltimore and U. S. S. Concord, Asiatic Station, 1893-96  
*Ad.*, 1316 W. Allegheny Avenue, Phila., Pa.
- Owen Lovejoy Gnest, Ph.G.**  
*Thes.*, Lard.  
*Ad.*, Swedesboro, N. J.
- Harry Cornish Hadley, Ph.G.**  
*Thes.*, Erythroxylon.  
*Ad.*, 118 E. Lancaster Avenue, Wayne, Pa.
- Mae Thompson Harders, (Mrs. Johnaton), Ph.G.**  
*Thes.*, Menstrua for Fluid Extract of Menispermum.  
*Ad.*, 131 Coulter Street, Ardmore, Pa.
- Susannah Garrigues Haydock, Ph.G.**  
*Thes.*, Saccharum.  
 Retail pharmacist. Chair of Pharmacy, Temple Univ.  
*Ad.*, 2123 Locust Street, Phila., Pa.
- Franklin Jacob Heckler, Jr., Ph.G.**  
*Thes.*, Walnut Hulls.  
 Mfg. confectioner, with E. G. Whitman and Co., Phila., Pa.  
*Ad.*, 6028 Cobb's Creek Parkway, Phila., Pa.
- William Joseph Heim, Ph.G.**  
*Thes.*, Cortex Sambuci.  
 Retail pharmacist.  
*Ad.*, 1747 N. 17th Street, Phila., Pa.
- Oscar Edwin Henritzy, Ph.G.**  
*Thes.*, Pills and Excipients.  
*Ad.*, Winburne, Pa.
- Walter Hayes Hersey, Ph.G.**  
*Thes.*, Citrine Ointment.  
 Representative, H. K. Mulford Co. Formerly with Sharp and Dohme.  
*Ad.*, 1714 Bolton Street, Baltimore, Md.
- Thomas Elwood Hickman, Ph.G.**  
*Thes.*, Percolation.  
*Ad.*, 1718 Welsh Road, Bustleton, Pa.
- William Hilpert, Ph.G.**  
*Thes.*, Honey.  
*Ad.*, 5th and Susquehanna Avenue, Phila., Pa.
- Samuel Wisler Hinkle, Ph.G.**  
*Thes.*, Gossypium.  
 Retail pharmacist.  
*Ad.*, Columbia, Pa.
- David Hamilton Holcombe, Ph.G.**  
*Thes.*, Suppositoria.  
 Retail pharmacist. Masonic affiliation.  
*Ad.*, 180 N. Laurel Street, Bridgeton, N. J.
- Ernest Charles Jaeger, Ph.G.**  
*Thes.*, The Genus Vitis and Its Chief Pharmaceutical Product.  
 Farmer and fruit grower. Served as pharmacist, U. S. N. on U. S. S. Olympia, Asiatic Station, 1894-97.  
*Ad.*, R. F. D. No. 7, Neosho, Mo.
- Rudolph Alexis Kalenborn, Ph.G.**  
*Thes.*, Rhamnus Purshiana.  
*Ad.*, 225 Tacoma Avenue, Tacoma, Wash.
- William Kearns, Ph.G.**  
*Thes.*, Metric System.
- Edgar Cyrus Keefer, Ph.G.**  
*Thes.*, Suppositoria.  
*Ad.*, Shippensburg, Pa.
- Edwin Russell Kennedy, Ph.G.**  
*Thes.*, Powdered Opium.  
 Instructor P. C. P. 1902-04. (See page 434.)  
*Ad.*, Norristown, Pa.
- \*Joseph Samuel Kinsey, Ph.G.**  
*Thes.*, Erythroxylon.  
 Deceased, July 5, 1909.
- Harry C. Kirchhoff, Ph.G.**  
*Thes.*, Relations of Pharmacists and Physicians.  
 Retired. Formerly retail pharmacist.  
*Ad.*, Bridgeton, N. J.
- \*John Hammond Kirk, Ph.G.**  
*Thes.*, Aluminium.  
 Deceased, February 6, 1913.
- Harry Joseph Kline, Ph.G.**  
*Thes.*, Powdered Opium.  
 Chemist, H. K. Wampole and Co., Phila. Mem. Amer. Chem. Soc., etc.  
*Ad.*, 4932 N. 12th Street, Phila., Pa.
- Edgar T. Knoop, Ph.G.**  
*Thes.*, Malt.  
 Physician and surgeon. Graduated in medicine, Miami Med. College, Cincinnati, Ohio, 1902. Instr. in Pharmacy and Therapeutics at Miami Med. College, 1902-06. Served in U. S. A. as Capt., Med. Dept.  
*Ad.*, 944 E. McMillan Street, Cincinnati, Ohio.
- Harry Warren Koch, (Now Cook), Ph.G.**  
*Thes.*, Ceratum Cantharidis.  
 Retail pharmacist.  
*Ad.*, 3rd Avenue and 74th Street, Brooklyn, N. Y.
- David George Kocher, Ph.G.**  
*Thes.*, Euphorbia Piliulifera.  
*Ad.*, 1123 S. 56th Street, Phila., Pa.
- Albert Koenig, Ph.G.**  
*Thes.*, Bismuth.
- Albert Charles Koeppen, Ph.G.**  
*Thes.*, Epiphegus Virginiana.  
 Retail pharmacist.  
*Ad.*, Pendleton, Ore.
- Charles Kohler, Ph.G.**  
*Thes.*, Extent of Adulteration and Deterioration of Drugs.  
*Ad.*, Glenside, Pa.
- Abraham Francis Kottcamp, Ph.G.**  
*Thes.*, Glycerin Suppositories.  
 General Secy., Y. M. C. A. Served as Y. M. C. A. Bldg. Secy., Camp Lee, Va.; Camp General Secy., Aviation Fields, Long Island; General Secy., Y. M. C. A., Hog Island Shipyards.  
*Ad.*, Warren, Pa.
- Ray Weaver Kottka, Ph.G.**  
*Thes.*, Distillation and Its Products.  
 Retail pharmacist and notary public.  
*Ad.*, 3101 N. Broad Street, Phila., Pa.
- Jerre Ray Kramer, Ph.G.**  
*Thes.*, Resin of Podophyllum.
- \*Daniel Kunkel, Ph.G.**  
*Thes.*, Pills and Excipients.  
 Deceased, December 18, 1894.
- \*C. Eugene Lack, Ph.G.**  
*Thes.*, Hydrargyrum.  
 Deceased, February 26, 1915.
- Henry Adolph Laessle, Ph.G.**  
*Thes.*, Euphorbia Ipecacuanha.  
*Ad.*, 59th and Market Streets, Phila., Pa.
- William Robinson Lamar, Ph.G.**  
*Thes.*, The Tannin of Krameria Triandra.  
 Consulting and research chemist. Prof. pharmaceutical chemistry, Univ. of Arkansas, 1894-95; Graduate student, Harvard Univ., 1895-96.  
*Ad.*, 763 E. 25th Street, Paterson, N. J.

- George Taylor Lambert, Ph.G.**  
*Thes.*, Alkaloids.  
 Salesman, Maltbie Chem. Co. Mem. Phila. Assn.  
 Retail Druggists.  
*Ad.*, 3959 Fairmount Avenue, Phila., Pa.
- Charles Herbert Lawall, Ph.G.**  
*Thes.*, Gaultheria.  
 Dean and Prof. of Theory and Practice of Pharmacy, P. C. P. (See page 420.)  
*Ad.*, 636 Race Street, Phila., Pa.
- George Dobson Leh, Ph.G.**  
*Thes.*, Ointments.  
*Ad.*, Siegfrieds, Pa.
- Sylvester W. Leidich, Ph.G.**  
*Thes.*, Distinction between Acetanilid and Antikamma.  
 Prop. of the Llewellyn Pharmacy.  
*Ad.*, 1518 Chestnut Street, Phila., Pa.
- Louis Leix, Ph.G.**  
*Thes.*, Syrups by Cold Percolation.  
 Retail pharmacist.  
*Ad.*, 2329 Broad Avenue, Altoona, Pa.
- Max Lippmann, Ph.G.**  
*Thes.*, Caullophyllum Thalictroides.
- Charles Peter Loeper, Ph.G.**  
*Thes.*, Eucalyptus.  
*Ad.*, 228 W. Tabor Road, Olney, Phila., Pa.
- \*Howard Edgar Long, Ph.G.**  
*Thes.*, Camphor.
- Robert McFarland, Ph.G.**  
*Thes.*, Stramonii Semen.
- \*Raphael McLaughlin, Ph.G.**  
*Thes.*, Mexican Valerian.
- Ivy Forman MacNair, Ph.G.**  
*Thes.*, Coca-Erythroxyton.
- Frederick William Meink, Ph.G.**  
*Thes.*, Assay of Coffee.  
*Ad.*, East View, Warrensville, Ohio.
- Joseph Adolph Meller, Ph.G.**  
*Thes.*, Tobacco.  
 Retail pharmacist. Formerly traveling salesman.  
 Recruiting officer U. S. Merchant Marine.  
*Ad.*, Boscobel, Wis.
- Harvey H. Mentzer, Ph.G.**  
*Thes.*, The Antipyretics.  
 Retired. Formerly Prof. of pharmacy and director pharmaceutical lab., Medico-Chi. College, Dept. of Pharmacy. Food Administrator for Cumberland Co., during War.  
*Ad.*, Carlisle, Pa.
- Robert Merrifield, Ph.G.**  
*Thes.*, Viscum Flavescens.  
 Foreman in laboratory of John Wyeth and Bro., Phila., Pa. Course in Munition Inspection at Drexel Inst., Phila.  
*Ad.*, 1410 S. 58th Street, Phila., Pa.
- George Franklin Metzger, Ph.G.**  
*Thes.*, The Successful Pharmacist.  
 Retail pharmacist. Mem. Bethlehem Town Council; Water Commission; Board of Health. Masonic Affiliation. Served in U. S. Emergency Hosp., Bethlehem Steel Co.  
*Ad.*, 4th and New Streets, Bethlehem, Pa.
- Louis Joseph Meyers, Ph.G.**  
*Thes.*, Suppositories.  
 Retail pharmacist.  
*Ad.*, 20th and York Streets, Phila., Pa.
- Byron Amzy Mintonye, Ph.G.**  
*Thes.*, A Pharmacy.
- William Joseph Monaghan, Ph.G.**  
*Thes.*, Kalmia Latifolia.  
 Physician. Served as Capt., Major, and Lieut.-Col., U. S. A. Med. Dept. Chief of med. service, Camp Hosp. Camp Mills, N. Y.; Commanding officer, U. S. A. Hosp., Decaneus, N. J.; Chief of Div. of Convalescent Hosps., Port of Embarkation, Hoboken, N. J.; Commanding officer, U. S. A. Debarcation Hosp., No. 3; Recruiting officer for Med. Dept., U. S. A., Hoboken, N. J.  
*Ad.*, 9 W. Main Street, Girardville, Pa.
- Charles Henry Morris, Ph.G.**  
*Thes.*, Liqueur Magnesii Citratis.
- \*Harry Kempton Mundorf, Ph.G.**  
*Thes.*, Compressed Pills.  
 Representative, Parke, Davis and Co., Phila. Deceased, March 10, 1913.
- Robley Duglison Newton, Ph.G.**  
*Thes.*, Iris Versicolor.  
 Physician. Graduated in medicine, Medico-Chi. College, 1896. Res. phys. Phila. Gen. Hosp., 1896-1897.  
*Ad.*, 718 N. 63rd Street, Phila., Pa.
- Albert Spencer Nichols, Ph.G.**  
*Thes.*, The History of Compressed Tablets in America.
- Edward John Noon, Ph.G.**  
*Thes.*, Education in Pharmacy.  
*Ad.*, 24 N. 13th Street, Phila., Pa.
- George Lambert Paulin, Ph.G.**  
*Thes.*, Ointments.  
 Retail pharmacist.  
*Ad.*, 69 Hampton Street, Bridgeton, N. J.
- \*Elmer May Paxson, Ph.G.**  
*Thes.*, Volumetric Assay of Tinctures of Iodine.
- William Edward Peabody, Ph.G.**  
*Thes.*, Petrolatum.  
 Retail pharmacist. Vice-pres. and director, City and County Bank.  
*Ad.*, 303 Jefferson Avenue, Moundsville, West Va.
- William Quinn Pettyjohn, Ph.G.**  
*Thes.*, Mercurial Ointment.  
*Ad.*, 16th and Race Streets, Phila., Pa.
- John Arthur Powders, Ph.G.**  
*Thes.*, Erythroxyton.
- \*Howard F. Pyfer, Ph.G.**  
*Thes.*, Cleanliness in Pharmacy.  
 Deceased, October 1919.
- Michael Jenkins Qattlebaum, Ph.G.**  
*Thes.*, Chionanthus Virginica.
- Edward A. Reap, Ph.G.**  
*Thes.*, Lippia Mexicana.
- Oras Reed, Ph.G.**  
*Thes.*, Assay of Belladonna.  
*Ad.*, 805 Atlantic Avenue, Atlantic City, N. J.
- William Howard Reaser, Ph.G.**  
*Thes.*, Unguentum Aquæ Rosæ.  
 Retail pharmacist.  
*Ad.*, 14th and Perkiomen Avenue, Reading, Pa.
- Wayne Schaeffer Regar, Ph.G.**  
*Thes.*, Balsamum Dipterocarpi.  
*Ad.*, Ephrata, Pa.
- Jacob H. Reh fuss, Ph.G.**  
*Thes.*, Suppositories.  
*Ad.*, 902 N. Hunter Street, Stockton, Cal.
- \*Vivian Ivanhoe Reid, Ph.G.**  
*Thes.*, Triosteum Perfoliatum.



**Ernest Reif, Ph.G.**

*Thes.*, Rosmarinus.  
Retail pharmacist.  
*Ad.*, 1632 N. 3rd Street, Phila., Pa.

**Thomas Jackson Rice, Ph.G.**

*Thes.*, Gossypium Herbaceum.  
Pharmacist. Business mgr. and buyer for H. C. Barnes, Inc.  
*Ad.*, 620 Marshall Avenue, S. W., Roanoke, Va.

**\*William McKinstry Rickert, Ph.G.**

*Thes.*, Pills.  
Retail pharmacist, Phila. Deceased, 1920.

**Charles Heber Riegel, Ph.G.**

*Thes.*, Stramonium.  
*Ad.*, 51st and Arch Streets, Phila., Pa.

**Louis Robecheck, Ph.G.**

*Thes.*, Narcissus Orientalis.  
*Ad.*, 101 Columbia Avenue, Cleveland, Ohio.

**Rees C. Roberts, Ph.G.**

*Thes.*, Plant Fertilization.  
*Ad.*, Ambler, Pa.

**William Franklin Robertson, Ph.G.**

*Thes.*, Gossypium Herbaceum.  
In furniture and undertaking business. Mem. Texas Pharm. Assn.; Texas Board of Pharmacy. Masonic affiliation.  
*Ad.*, Gonzales, Texas.

**\*Otto Moyer Ruete, Ph.G.**

*Thes.*, Arnica Flowers.  
Deceased, 1912.

**Oscar Gustave Ruge, Ph.G.**

*Thes.*, Acetanilid.  
Med. Dept., U. S. N. Served in Spanish-American and World Wars.  
*Ad.*, U. S. Medical Supply Depot, Navy Yard, Mare Is., Cal.

**John Louis Sahn, Ph.G.**

*Thes.*, Arnica Radix.  
Wholesale druggist. Prof. of Commercial Pharmacy, Univ. of Valparaiso, Valparaiso, Ind.  
*Ad.*, 428 S. Kenilworth Avenue, Oak Park, Ill.

**Victor Daniel Scheirer, (Now Shirer), Ph.G.**

*Thes.*, Glycerin and Its Relation to Pharmacy.  
Retail pharmacist.  
*Ad.*, Swarthmore, Pa.

**Bernhard Frederick Scherer, Ph.G.**

*Thes.*, Extractum Glycyrrhizæ Depuratum.

**Charles Franklin Schmickle, Ph.G.**

*Thes.*, Hydrochlorate of Cocaine.  
*Ad.*, 6519 Germantown Avenue, Phila., Pa.

**George John Schnuerer, Ph.G.**

*Thes.*, Cynoglossi Folia.  
*Ad.*, 3192 Whitehain Road, Cleveland Heights, Ohio.

**James Ireland Scull, Ph.G.**

*Thes.*, Strontium.

**Frank Morris Seifert, Ph.G.**

*Thes.*, Syrups.  
*Ad.*, 141 Main Street, Orange, N. J.

**Edward C. Sellen, Ph.G.**

*Thes.*, Salicylic Acid.  
*Ad.*, 22nd and Jackson Streets, Phila., Pa.

**\*William Gooding Shallcross, Ph.G.**

*Thes.*, Chloroformum.

**William Walls Sharp, Ph.G.**

*Thes.*, Opium-Smoking.  
Retail pharmacist. Mem. Kent Co. Legal Advisory Board during war. Masonic affiliation.  
*Ad.*, Harrington, Del.

**John Ware Sheppard, Ph.G.**

*Thes.*, Ancient Pharmacy.  
Retail pharmacist.  
*Ad.*, Charlotte, N. C.

**Howard Joseph Siegfried.**

*Thes.*, Review of a Thousand Prescriptions.  
Retail pharmacist. Director Phila. Wholesale Drug Co.  
*Ad.*, 4676 Frankford Avenue, Phila., Pa.

**\*Robert Wilson Smink, Ph.G.**

*Thes.*, Some Qualitative Analyses.  
Deceased, April 27, 1904.

**\*Daniel Evans Smith, Ph.G.**

*Thes.*, Petrolatum.  
Senior mem. of firm, Smith and Reeves, Millville, N. J. Deceased, December 16, 1901.

**Willis Lantus Smyser, Ph.G.**

*Thes.*, Squills.  
Retail pharmacist.  
*Ad.*, 291 W. Market Street, York, Pa.

**Clara Sprissler, Ph.G.**

*Thes.*, Eucalyptus Globulus.  
*Ad.*, 1151 S. Broad Street, Phila., Pa.

**Lawrence Albertson Stanger, Ph.G.**

*Thes.*, Iron.  
Chief clerk of order and complaints, United Gas Improvement Co.  
*Ad.*, 4667 Griscom Street, Frankford, Phila., Pa.

**Laurence S. A. Stedem, Ph.G.**

*Thes.*, Jambul.  
Retail pharmacist.  
*Ad.*, 3308 N. 18th Street, Phila., Pa.

**John Wesley Steele, Ph.G.**

*Thes.*, Vegetable Fibre.

**Frederick Eugene Steere, Ph.G.**

*Thes.*, Cranberries.  
*Ad.*, 604 Graham Road, B. H., Richmond, Va.

**\*Harry Smoyer Steltz, Ph.G.**

*Thes.*, Spiritus Ammonia Aromaticus.

**\*John Stewart, Ph.G.**

*Thes.*, Camphora.  
Physician. Graduated in medicine, Jeff. Med. College. Practiced in Phila. Deceased, November 17, 1912.

**James Pennington Stratton, Ph.G.**

*Thes.*, Hydrogen Peroxide.  
Retail pharmacist. Also in ranch and battle business in Idaho. Masonic affiliation.  
*Ad.*, Pueblo, Col.

**Clement Bryant Stroup, Ph.G.**

*Thes.*, Fermentation.  
*Ad.*, 1607 Chew Street, Allentown, Pa.

**\*Benjamin Spangler Thompson, Ph.G.**

*Thes.*, Prunus Virginiana.  
Deceased, August 15, 1906.

**Joseph Brinton Thompson, Ph.G.**

*Thes.*, Taraxacum.  
Real estate broker. Formerly retail pharmacist.  
*Ad.*, 18 W. Chestnut Street, West Chester, Pa.

**William Winebert Troop, Ph.G.**

*Thes.*, Essential Qualifications of a Pharmacist.  
*Ad.*, 320 N. 9th Street, Reading, Pa.

**Elliott Davis Truman, Ph.G.**

*Thes.*, Juglans Cinerea.  
Retail pharmacist. Mem. I. O. O. F.  
*Ad.*, Bainbridge, N. Y.

**Harvey Milton Ueberroth, Ph.G.**

*Thes.*, Analysis of Proprietary Headache Powders.  
*Ad.*, National Pharmacy, Easton, Pa.

- Walter Horace Umstead, Ph.G.**  
*Thes.*, Smilacina Racemosa.  
 Commercial representative, Bell Telephone Co.  
 Mem. Aldan Borough Sch. Board.  
*Ad.*, Aldan, Del. Co., Pa.
- Philip Henry Utech, Ph.G.**  
*Thes.*, Resina Sumbul.  
 Retail pharmacist. 1st Vice-pres. Penna. Pharm.  
 Assn., 1910-11; Chm. Pharm. and Disp. Sec.,  
 1911-12; Chm. Commercial Interests Sec., 1916-17;  
 Mem. National Formulary V. Rev. Com.; A. Ph.  
 A. Recipe Book Com. Contributor to pharma-  
 ceutical journals.  
*Ad.*, 209 Chestnut Street, Meadville, Pa.
- Thomas Franklin Van Buskirk, Ph.G.**  
*Thes.*, Lippia Mexicana.  
*Ad.*, Doylestown, Pa.
- \*Jacob Harrison Vogelbach, Ph.G.**  
*Thes.*, Serenoa Serrulata.  
 Deceased, June, 1916.
- John Kirby Wachtell, Ph.G.**  
*Thes.*, Erythroxyton Coca.
- Charles Wealey Wagner, Ph.G.**  
*Thes.*, Chocolate.  
*Ad.*, 5th and New York Ave., Washington, D. C.
- Harry Hurley Walton, Ph.G.**  
*Thes.*, Arsenic.  
 Retail pharmacist.  
*Ad.*, 859 N. Broad Street, Phila., Pa.
- Frank John Walz, Ph.G.**  
*Thes.*, History of Pharmacy.  
*Ad.*, Highland Bldg., Pittsburgh, Pa.
- Frank Nicholas Weber, Ph.G.**  
*Thes.*, Boroglyceride.  
*Ad.*, Millville, N. J.
- Ira Randolph Wehler, Ph.G.**  
*Thes.*, Sunday Observance.
- \*Fred Ellison Whitman, Ph.G.**  
*Thes.*, Saccharum.  
 Deceased, November, 1918.
- Richard Powers Wilkinson, Ph.G.**  
*Thes.*, Surgical Antiseptics.  
 Physician. Graduated in medicine Medico-Chi.  
 College, 1899. Clinical Asst. in Dermatology and  
 Syphilology, Polyclinic Hosp. Pres. South Branch  
 County Med. Soc., 1920. Masonic affiliation. Mem.  
 numerous med. societies.  
*Ad.*, 1613 S. Broad Street, Phila., Pa.
- Herbert Forrest Williams, Ph.G.**  
*Thes.*, Baptisia.
- \*Julius Wohlgenuth, Ph.G.**  
*Thes.*, Ipecacuanha.  
 Retail pharmacist, Phila. Deceased, September 23,  
 1906.
- Benjamin Franklin Wolfenden, Ph.G.**  
*Thes.*, Fluid Extract of Pulsatilla.  
*Ad.*, Upland, Pa.
- Charles Adam Zeller, Ph.G.**  
*Thes.*, How To Be a Successful Pharmacist.  
 Physician. Graduated in medicine, Medico-Chi.  
 College, 1896. Res. phys., Pottsville Hosp., 1896-  
 1897.  
*Ad.*, Dalton, Pa.
- Howard M. Zimmerman, Ph.G.**  
*Thes.*, Tinctura Opii Deodorati.  
 Retail pharmacist.  
*Ad.*, Mt. Carmel, Pa.
- George Merchant Alter, Ph.G.**  
*Thes.*, Syrup Simplex by Cold Percolation.
- Charles Eugene Ames, Ph.G.**  
*Thes.*, A Blast Furnace.  
 Dairy farmer. Pharmacist until 1904.  
*Ad.*, 109 Ferris Avenue, Syracuse, N. Y.
- Frank Hean Atkins, Ph.G.**  
*Thes.*, Compressed Tablets.  
 Retail pharmacist.  
*Ad.*, 26 N. 8th Street, Lebanon, Pa.
- William C. Aughinbaugh, Ph.G.**  
*Thes.*, The Official Inorganic Salts.  
 Retail pharmacist. Mem. B. P. O. E. Masonic  
 affiliation.  
*Ad.*, 54 W. Washington Street, Hagerstown, Md.
- John Henry Bailey, Ph.G.**  
*Thes.*, Acidum Boricum.  
*Ad.*, 13th and Walnut Streets, Phila., Pa.
- George Fisher Baker, Ph.G.**  
*Thes.*, Iodine.
- Walter Gilbert Barlow, Ph.G.**  
*Thes.*, Gossypium.  
 Minister of the Gospel. Graduated in Electrical  
 Engineering, 1896. Ordained Elder in Nazarene  
 Church, 1919.  
*Ad.*, North East, Md.
- \*Robert Hamilton Barr, Ph.G.**  
*Thes.*, Preparation of Tinctures from Fluid Ex-  
 tracts.
- George Franklin Baugh, Ph.G.**  
*Thes.*, Accidents and Poisoning.  
 Surgeon. Graduated in medicine, Western Re-  
 serve Univ. and Univ. of Penna. Post grad.  
 courses in Germany.  
*Ad.*, Lansing, Mich.
- \*George Barnard Beakey, Ph.G.**  
*Thes.*, Manufacturing Pharmacist.
- \*William Paul Benedict, Ph.G.**  
*Thes.*, Camphor.
- George Philip Bertsch, Ph.G.**  
*Thes.*, Gossypium.
- William Howard Betz, Ph.G.**  
*Thes.*, The Pharmacy of Emulsions.  
 Eastern distributor Intravenous Products Co.,  
 Denver, Colo. Field Exec. Boy Scouts of America.  
*Ad.*, 317 E. Dorset Street, Mt. Airy, Phila., Pa.
- Charles Jeffries Black, Ph.G.**  
*Thes.*, Linum, U. S. P.  
 Retail pharmacist.  
*Ad.*, 3rd Ave. and Kingsley St., Asbury Park,  
 New Jersey.
- Charles Albert Blunhard, Jr., Ph.G.**  
*Thes.*, Cotton.  
 Mfr. Vacuum bottles. Pres. National Vacuum Bot-  
 tle Co. Vol. Inf. and Hosp. service, Spanish-  
 American War. Capt. Inf. 1st Reg., Penna.,  
 Mexican Border. Served in U. S. A. as Capt.  
 109th Inf., 28th Div. during World War.  
*Ad.*, 2030 Westmoreland Street, Phila., Pa.
- Willia Elliott Bowen, Ph.G.**  
*Thes.*, The Assay of Opium and Its Extract.  
 Physician. Graduated in medicine, Cornell Med.  
 College, 1902. Res. phys. Rochester Gen. Hosp.  
 Mem. Surgical staff Rochester Gen. Hosp. Fellow  
 Amer. College of Surgeons. Served in U. S. A. as  
 Capt. Base Hosp., Camp Sevier, Greenville, S. C.,  
 Embarkation Hosp. 140.  
*Ad.*, 827 East Main Street, Rochester, N. Y.
- Frank Meagher Boyle, Ph.G.**  
*Thes.*, Kefir.  
*Ad.*, Anchorage, Alaska.
- Bentley B. Adams, Ph.G.**  
*Thes.*, Menthol.  
 3813 Haverford Avenue, Phila., Pa.

**Stanley A. E. Brallier, Ph.G.**

*Thes.*, Camphora.  
Physician. Graduated in medicine, Medico-Chi. College, 1899. Mem. numerous medical societies. Ex-pres. and phys. Board of Health of Conemaugh. Director Conemaugh Deposit Bank. Partner W. C. Tyler and Co., pharmacists.  
*Ad.*, Conemaugh, Pa.

**Frederick John Brellocks, Ph.G.**

*Thes.*, *Cypripedium Pubescens*.  
Relief drug clerk.  
*Ad.*, 5004 N. 9th Street, Phila., Pa.

**\*Francis Henry Brennan, Ph.G.**

*Thes.*, Nickel and Its Preparations.  
Deceased, October 4, 1918.

**\*Milton Welmer Britcher, Ph.G.**

*Thes.*, Emulsions.  
Deceased, 1918.

**Daniel Edward Brown, Ph.G.**

*Thes.*, Camphor.  
*Ad.*, 2nd and Smithfield Streets, Pittsburgh, Pa.

**James Reed Logan Brown, Ph.G.**

*Thes.*, Triturations.  
Retail pharmacist.  
*Ad.*, 7103 Penn Avenue, Pittsburgh, Pa.

**Wilbur Beers Brown, Ph.G.**

*Thes.*, Thymol as a Deodorant for Iodoform.  
*Ad.*, Philipsburg, Pa.

**Frank Allison Bunting, Ph.G.**

*Thes.*, *Cascara Sagrada*.  
Retail pharmacist. Chief pharmacist Polyclinic Hosp. Phila., 1895-1899. Recruiting officer U. S. Merchant Marine.  
*Ad.*, Souderton, Pa.

**Harvey Benjamin Bush, Ph.G.**

*Thes.*, Spongia.  
*Ad.*, Olyphant, Pa.

**Frank Butler Cameron, Ph.G.**

*Thes.*, Soap Plants.  
*Ad.*, Bradley Beach, N. J.

**Thomas Harrison Caspeau, Ph.G.**

*Thes.*, *Serpentaria*.  
*Ad.*, Delaware Avenue and DuPont Street, Wilmington, Del.

**\*William Windle Chalfant, Ph.G.**

*Thes.*, Incompatibility.  
Deceased, December 18, 1916.

**Charles Cherdron, Ph.G.**

*Thes.*, *Adeps Lanae*.  
*Ad.*, 12501 Euclid Avenue, Cleveland, Ohio.

**George Raymond Christ, Ph.G.**

*Thes.*, *The Pharmacopœias of 1820 and 1890*.  
Pres. Brooklyn College of Pharmacy. Retail pharmacist. Mem. Nat'l Assn. Retail Druggists; N. Y. State Pharm. Assn. Pres. Kings Co. Pharm. Assn.  
*Ad.*, 39 Grant Square, Brooklyn, N. Y.

**Robert Blean Claudy, Ph.G.**

*Thes.*, *Unguentum Hydrargyri Nitratis*.  
*Ad.*, Newville, Pa.

**Harvey Alfred Craig, Ph.G.**

*Thes.*, *Iodoformum*.  
*Ad.*, Galesburg, Ill.

**\*Jsmes Adam Crawford, Ph.G.**

*Thes.*, *Taraxacum*.

**John Culley, Ph.G.**

*Thes.*, *Granatum and Its Tannin*.  
Retail pharmacist. Mem. A. Ph. A.; Utah Board of Pharmacy.  
*Ad.*, 2579 Monroe Avenue, Ogden, Utah.

**Charles Wilfred Dare, Ph.G.**

*Thes.*, *Coccus Cacti*.  
Pres. Charles T. Dare and Son, Drugs and Chemicals, Domestic and Exporting.  
*Ad.*, 115 Broadway, New York City.

**William Davis, Ph.G.**

*Thes.*, Camphor.  
*Ad.*, Media, Pa.

**William Ruth Dawes, Ph.G.**

*Thes.*, *Copaiba*.  
Retail pharmacist.  
*Ad.*, 401 N. Main Avenue, Scranton, Pa.

**Frank Snyder Deen, Ph.G.**

*Thes.*, *Emplastra*.  
Pharmacist, Lancaster Gen. Hosp.  
*Ad.*, Lancaster Gen. Hosp., Lancaster, Pa.

**Charles Henry De Ford, Ph.G.**

*Thes.*, *Boroglycerinum*.  
Pharmaceutical and Branch Mgr. American Druggists Syndicate.  
*Ad.*, 54 Hunterspoint Avenue, Long Island City, New York.

**Edward Desmond, Ph.G.**

*Thes.*, *Black Oak Bark*.

**Harmon Dilks, Jr., Ph.G.**

*Thes.*, Camphor.  
Retail pharmacist. Director Pitman Nat'l Bank; Pitman Bldg. and Loan Assn.  
*Ad.*, Pitman, N. J.

**William Tyler Douglass, Ph.G.**

*Thes.*, Camphor Cream.  
*Ad.*, 1634 Derry Street, Harrisburg, Pa.

**Edward Walker Dunn, Ph.G.**

*Thes.*, *Contributions of Coal Tar to Pharmacy*.  
Retail pharmacist.  
*Ad.*, 2311 Atlantic Avenue, Atlantic City, N. J.

**\*John McCurdy Durham, Ph.G.**

*Thes.*, *Vaseline and Its Tests*.  
Deceased, October, 1906.

**Henry Gray Eakin, Ph.G.**

*Thes.*, *Cubeba*.  
*Ad.*, Union Hill, N. J.

**Frank William Ely, Ph.G.**

*Thes.*, *Potassii Bitartras*.  
*Ad.*, Wallis Run, Pa.

**Stratton Roger Engle, Ph.G.**

*Thes.*, *Ceylon Cinnamon*.

**Edward Augustus Eyer, Ph.G.**

*Thes.*, *Spiritus Aetheris Nitrosi*.  
Retail pharmacist.  
*Ad.*, 3526 Haverford Ave., Phila., Pa.

**John Michael Fackenthall, Ph.G.**

*Thes.*, *Extractum Jalapæ Fluidum*.  
Retail pharmacist.  
*Ad.*, 673 Columbia Avenue, Lancaster, Pa.

**Pliny Fishburne, Ph.G.**

*Thes.*, *Hypodermic Tablets*.  
Retail pharmacist. Pres. Waynesboro Nat'l Bank.  
Fruit grower.  
*Ad.*, Waynesboro, Va.

**Thomas Francis Flanagan, Ph.G.**

*Thes.*, *Acidum Aceticum*.  
*Ad.*, 293 N. Main Street, Wilkesbarre, Pa.

**Charles Lewis Fluck, Ph.G.**

*Thes.*, *Vanilla Planifolia*.  
*Ad.*, 24th and Montgomery Avenue, Phila., Pa.

**Hudson DeMott Fowler, Ph.G.**

*Thes.*, *Ichthyol*.  
Surgeon. Graduated in medicine, 1903. Surg. Glenville Hosp. and N. Y. Central Railway. Served in U. S. A. as Captain Med. Reserve Corps, Camp Wadsworth, S. C.  
*Ad.*, 15224 Plato Avenue, N. E. Cleveland, Ohio.



**Jacob Adam Fraunfelder, Ph.G.**

*Thes.*, Sulphur.  
Physician. Graduated in medicine, Medico-Chi. College, 1896. Attending phys. Northampton County Home. Member Local Draft Board No. 2. *Ad.*, 141 S. Broad Street, Nazareth, Pa.

**Carl Bennett Furnell, Ph.G.**

*Thes.*, The Metric System.  
Lieut. Med. Corps, U. S. N. In U. S. N. since 1898. Served on East and West Coasts, Cuba, South America, Philippine Is., England, France, Spain, Portugal, etc. In charge of medical property and personal records at U. S. Naval Acad., Annapolis, Md.  
*Ad.*, U. S. N. Hosp., Newport, R. I.

**Theodore Gabler, Ph.G.**

*Thes.*, Aluminium.

**Frank Peter Gabrio, Ph.G.**

*Thes.*, Liquor Sodæ.  
*Ad.*, Hazleton, Pa.

**Walter Joseph Garver, Ph.G.**

*Thes.*, Cod Liver Oil.  
Retail pharmacist. Member Princeton Board of Education.  
*Ad.*, Princeton, N. J.

**Ehrgott William Gebhardt, Ph.G.**

*Thes.*, Obsolete Pharmacy.  
Pharmacist and chemist. Mem. N. J. Pharm. Assn.  
*Ad.*, 3 E. Maple Avenue, Merchantville, N. J.

**Wallace Gillespie Geety, Ph.G.**

*Thes.*, Mistura Glycyrrhizæ Composita.  
*Ad.*, 138th Street and Broadway, New York City.

**Herman Gerlach, Ph.G.**

*Thes.*, Hydrastis.

**\*Hester Franklin Gibson, Ph.G.**

*Thes.*, Camphor.  
Retail pharmacist, Seattle, Wash. Deceased, July 6, 1905.

**Ernest Goico, Ph.G.**

*Thes.*, Emulsions.  
Mfg. pharmacist. Gen. Mgr. Logan Pharmacal Co. Mexican Consul for Penna, and Md. for 2 years.  
*Ad.*, 1013 Duncannon Avenue, Logan, Phila., Pa.

**Josiah Cole Gould, Ph.G.**

*Thes.*, Pareira.  
Retail pharmacist.  
*Ad.*, Bangor, Pa.

**Robert Nicholson Gregory, Ph.G.**

*Thes.*, Tablet Triturates.

**Martin Gruhler, Ph.G.**

*Thes.*, Achilla Millefolium.

**\*Frank Gunn, Ph.G.**

*Thes.*, Opium and Its Alkaloids.

**\*Frederic William Haas, Ph.G.**

*Thes.*, The Pharmacopœia Glycerites.

**Emil Frank Haenchen, Ph.G.**

*Thes.*, Syrupus Sarsaparillæ Compositus.  
Retail pharmacist.  
*Ad.*, 601 N. 39th Street, Phila., Pa.

**\*Moses Alexander Hahn, Ph.G.**

*Thes.*, Tinctura Opii.  
Deceased, 1912.

**Thomas Murphy Hall, Ph.G.**

*Thes.*, Unguentum Aquæ Rosæ.

**Charles Ernest Hamilton, Ph.G.**

*Thes.*, Gossypii Radicis Cortex.  
County Auditor. Formerly retail pharmacist. Chm. County Republican and Exec. Committees.  
*Ad.*, Lisbon, Ohio.

**Herman Harms, Ph.G.**

*Thes.*, Rubus Villosus.  
Chemist for State of Utah since 1903. Formerly chemist to the City of Salt Lake.  
*Ad.*, 139 State Capitol, Salt Lake City, Utah.

**William Henry Harrold, Ph.G.**

*Thes.*, Nux Vomica.  
Probation Officer, Municipal Court, Phila.  
*Ad.*, 2529 N. 8th Street, Phila., Pa.

**Thomas Miffin Hatton, Ph.G.**

*Thes.*, Fermentation.

**\*Joseph Healy, Ph.G.**

*Thes.*, Aluminium.  
Deceased, October 1, 1921.

**Ulysses Grant Hendee, Ph.G.**

*Thes.*, Assay of Powdered Opium.  
Retail pharmacist.  
*Ad.*, Stockton, N. Y.

**Robert Guy Henderson, Ph.G.**

*Thes.*, Castanca.  
Orange grower.  
*Ad.*, Auburduale, Fla.

**Fred John Herbst, Ph.G.**

*Thes.*, Preservation of Lard (for Medicinal Purposes).  
Retail pharmacist.  
*Ad.*, Milford, Pa.

**Miles Roscoe Hess, Ph.G.**

*Thes.*, Sodii Boras.

**George Almer Hightower, Ph.G.**

*Thes.*, Botany of Louisiana.  
Retail pharmacist.  
*Ad.*, Minden, La.

**Edwin Hodgson, Ph.G.**

*Thes.*, Acidum Sulphuricum Dilutum.  
*Ad.*, 4015 Terrace Street, Kansas City, Mo.

**James J. Hodil, Ph.G.**

*Thes.*, A Word on Fluid Extracts.  
Retail pharmacist.  
*Ad.*, 351 Armat Street, Germantown, Phila., Pa.

**George Jacob Holtzhausser, Ph.G.**

*Thes.*, Taenifuges.  
Physician. Graduated in medicine. Post grad. courses in Berlin hospitals.  
*Ad.*, 160 W. Girard Avenue, Phila., Pa.

**Edward Vernon Howell, Ph.G.**

*Thes.*, The Root of Rhus Glabra.  
Prof. of Pharmacy and Dean of School of Pharmacy, Univ. of N. C. since 1897. Received A.B. degree Wake Forest College. Post grad. course in chem., Univ. of N. C. Pres. People's Bank, Chapel Hill. Mem. A. Ph. A.; Amer. Chem. Soc.; N. C. Pharm. Soc.; Amer. Hist. Assn.; Amer. Folk-Lore Soc.; N. C. Folk-Lore Soc.; Elisha Mitchell Scientific Soc. of Univ. of N. C.; Sigma Alpha Epsilon and Kappa Psi Frats.  
*Ad.*, Chapel Hill, N. C.

**John Hiram Huhley, Ph.G.**

*Thes.*, Euphorbia Pilulifera.  
*Ad.*, 479 Bloomfield Avenue, Montclair, N. J.

**Frank W. Huddleson, Ph.G.**

*Thes.*, The Kola Nut.  
Treasurer of Fairfax County, Va.  
*Ad.*, Fairfax, Va.

**John Otto Jackel, Ph.G.**

*Thes.*, Fluid Extract of Yerha Santa.  
Order Clerk. Smith, Kline and French Co. Formerly with John Wyeth and Bro.  
*Ad.*, 5814 Christian Street, Phila., Pa.

**\*Joseph Jennings, Ph.G.**

*Thes.*, Manna.

**William Willets Jones, Ph.G.**

*Thes.*, Tincture of Nux Vomica.  
*Ad.*, American Aniline Products Co., New York City.

**Calvin Jordan, Ph.G.**

*Thes.*, The Metric System.  
Insurance and investments. Dept. Mgr. Colorado State Bank.  
*Ad.*, 1625 Broadway, Denver, Colo.

**\*Frederick William Kachline, Ph.G.**

*Thes.*, Elixir of Iron, Quinine and Strychnine.  
Deceased, March 23, 1902.

**Harry Adam Kalbach, Ph.G.**

*Thes.*, Sapo.  
*Ad.*, 210 E. Tabor Road, Olney, Phila., Pa.

**George Louis Kappes, Ph.G.**

*Thes.*, Homeopathic Pharmacy.  
Retail pharmacist.  
*Ad.*, 150 Greenwood Avenue, Zanesville, Ohio.

**John Joseph Kelley, Ph.G.**

*Thes.*, Tinctura Opii Deodorata.  
*Ad.*, 53rd and Kingessing Avenue, Phila., Pa.

**\*John Kenworthy, Ph.G.**

*Thes.*, Sulphuric Acid.  
Retail pharmacist, Coatesville, Pa. Deceased, March 31, 1915.

**Minor E. Keyes, Ph.G.**

*Thes.*, Compressed Powders or Pills.  
Wholesale milk dealer and mfr. of ice cream.  
*Ad.*, Milford, Mich.

**Lemuel Pastorius Kinsler, Ph.G.**

*Thes.*, Improved Blaud's Pills.  
*Ad.*, Wayne Avenue and Manheim Street, Germantown, Phila., Pa.

**Lewis Richardson Kirk, Jr., Ph.G.**

*Thes.*, The Magnesite of Chester County, Penna.

**Samuel Bird Kirk, Ph.G.**

*Thes.*, Mineral Glycerin.  
Mfg. pharmacist.  
*Ad.*, 62 Fishers Lane, Germantown, Phila., Pa.

**\*Lewis Calvin Klopp, Ph.G.**

*Thes.*, Botany an Aid to the Pharmacist.  
Deceased, June 8, 1921.

**Frank Light Kreider, Ph.G.**

*Thes.*, Bleaching and Its Agents.

**Sidney Krumrine, Ph.G.**

*Thes.*, Analysis of Absinthium.  
*Ad.*, 6838 Ogontz Avenue, Oak Lane, Phila., Pa.

**Edwin Jacob Kuhns, Ph.G.**

*Thes.*, Oleum Gaultheria.  
Retail pharmacist. Course in Medico-Chi., 1898.  
Sch. director. Local health officer for State of Penna.  
*Ad.*, Lansdale, Pa.

**Bartley Larue Lanterman, Ph.G.**

*Thes.*, Pills and Excipients.  
General sales agt., Middle West, for John Wyeth and Bro.  
*Ad.*, 5837 Central Street, Kansas City, Mo.

**Acton Ash LeFevre, Ph.G.**

*Thes.*, Camphor.  
Retail and mfg. pharmacist. Also dairy farmer and fruit grower.  
*Ad.*, S. Queen and Church Streets, Lancaster, Pa.

**Walter Felix Light, Ph.G.**

*Thes.*, Oleum Olive.  
*Ad.*, 350 S. 6th Street, Lebanon, Pa.

**\*Howard Harrison Lilly, Ph.G.**

*Thes.*, Kava Kava.  
Deceased, April 21, 1898.

**Jesse Diverty Lippincott, Ph.G.**

*Thes.*, Patent Nostrums.

**Richard Louia Lloyd, Ph.G.**

*Thes.*, Hydrogen Dioxide.

**Roland Wayne Loveland, Ph.G.**

*Thes.*, Potassium.  
In drug, grocery and dry goods business.  
*Ad.*, 901 W. Princess Street, York, Pa.

**George William Luft, Ph.G.**

*Thes.*, Berberis Repens.  
Pres. George W. Luft Co., mfrs. of pharmaceuticals, etc. Formerly retail druggist in Utah, and treas. and director of Production, Amer. Druggists Syndicate. Mem. A. Ph. A.; Amer. Chem. Soc.; Chamber of Commerce. Masonic affiliation.  
*Ad.*, 8th Street, Long Island City, N. Y.

**\*Daniel Joseph Lynch, Ph.G.**

*Thes.*, Camphor.  
Retail pharmacist, Phila. Deceased, November 23, 1911.

**\*Cornelius Joseph McCoy, Ph.G.**

*Thes.*, Medicated Waters.

**\*Charles McCreight, Ph.G.**

*Thes.*, Newer Remedies.  
Physician and pharmacist, Phila. Graduated in medicine, Univ. of Penna., 1900. Mem. Phila. County Med. Soc.; Amer. Med. Assn. Medical Examiner for Metropolitan Life Ins. Co. Deceased, January 22, 1916.

**Frank Patrick McHale, Ph.G.**

*Thes.*, Pichi—Fabiana Imbricata.  
*Ad.*, Dunmore, Pa.

**Francis Town McKee, Ph.G.**

*Thes.*, The Pharmacopœias' non Patrons.  
Clerk, Mailing Dept. E. I. DuPont de Nemours and Co.  
*Ad.*, 1205 Jefferson Street, Wilmington, Del.

**Harry B. McNeal, Ph.G.**

*Thes.*, Fermentation.  
Mfg. Pharmacist.  
*Ad.*, 417 Hanover Street, Baltimore, Md.

**Edward Glover MacCracken, Ph.G.**

*Thes.*, Aristol.  
Mgr. for George B. Evans.  
*Ad.*, 5344 Spruce Street, Phila., Pa.

**\*James William Mack, Ph.G.**

*Thes.*, Eucalyptus.  
Retail pharmacist, Slatington, Pa. Deceased, April 9, 1919.

**Charles Christian Manger, Ph.G.**

*Thes.*, Myrica Asplenifolia.  
Physician. Formerly Prof. Nervous and Mental Diseases, College Physicians and Surgeons, Los Angeles, Cal. and neuropathologist and lecturer on neurology at Central Hosp., Indianapolis.

**Albert Donald Miller, Ph.G.**

*Thes.*, Olea Europœa.  
Vice-pres. Miller United Shoe Co.  
*Ad.*, 1818 E. 89th Street, Cleveland, Ohio.

**Thomas Mooshake Mooradian, Ph.G.**

*Thes.*, Methylic Alcohol.

**Arnold Armstrong Myers, Ph.G.**

*Thes.*, Glycyrrhiza. U. S. P.  
*Ad.*, 330 DeKalb Street, Norristown, Pa.

**Henry Joseph Myers, Ph.G.**

*Thes.*, Senna.  
Chief pharmacist, Phila. Gen. Hosp.  
*Ad.*, 1206 S. 53rd Street, Phila., Pa.

**Clayton Moyer Nagle, Ph.G.**

*Thes.*, Lard and Its Preservatives.  
Retail pharmacist. Mem. B. P. O. E., etc.  
Masonic affiliation.  
*Ad.*, 457 W. Front Street, Plainfield, N. J.

**William Herman Frederick Nick, Ph.G.**

*Thes.*, Eugenia Jambolana.  
Life Ins. Agt. with Bankers Life Ins. Co. Formerly  
Secy.-treas. Erie Stamping and Mfg. Co., and  
Office Mgr. Maxwell Motor Co. Served as Lieut.  
Naval Militia of Penna.  
*Ad.*, 18 Lincoln Apts., Youngstown, Ohio.

**Daniel Andrew Nolan, Ph.G.**

*Thes.*, Official Syrups.  
*Ad.*, Middletown, Conn.

**Irvin Edwin O'Hail, Ph.G.**

*Thes.*, Assayed Extracts of Nux Vomica.  
Oil and gas business. Formerly retail pharmacist.  
*Ad.*, Wooster, Ohio.

**Albert Edgar Osborne, Ph.G.**

*Thes.*, Olea Europoea.

**Theodore Pachall, Jr., Ph.G.**

*Thes.*, Silica.

**Samuel H. Porter, Ph.G.**

*Thes.*, Zinc Bromide.  
*Ad.*, Pottstown, Pa.

**Harry Dunbavon Price, Ph.G.**

*Thes.*, Lead and Its Uses.  
*Ad.*, Walter, Okla.

**Lewis Reese, Ph.G.**

*Thes.*, Acidum Citricum.  
*Ad.*, 4165 Ridge Avenue, Phila., Pa.

**David Vogt Reinoehl, Ph.G.**

*Thes.*, Assays of Capsicum.  
Physician. Graduated in medicine, Univ. of  
Penna., 1895.  
*Ad.*, 139 W. 10th Street, Erie, Pa.

**Francis Xavier Rhein, Ph.G.**

*Thes.*, Hydrogen Dioxide.

**Frank Gore Richards, Ph.G.**

*Thes.*, Tinctures.  
*Ad.*, Hannibal, Mo.

**Charles Edward Roseman, Ph.G.**

*Thes.*, Pepsin.  
Pres. The Standard Drug Co., Cleveland, Ohio.  
*Ad.*, 2214 E. 9th Street, Cleveland, Ohio.

**\*Harry George Rothrock, Ph.G.**

*Thes.*, Citric Acid.  
Deceased, March 22, 1909.

**Thomas Sage, Ph.G.**

*Thes.*, Recent Antiseptics.

**P. Weaver H. Schearer, Ph.G.**

*Thes.*, Distillation of Whisky.

**Joseph Bernard Schuster, Ph.G.**

*Thes.*, Apiculture and Its Pharmaceutical Products.  
*Ad.*, 2707 Louisiana Avenue, St. Louis, Mo.

**Charles Abbey Scott, Ph.G.**

*Thes.*, Calcium Oxide.  
Pres. Church and Scott, Inc. Director and Vice-  
pres. Nat'l Bank and Chamber of Commerce.  
Director Savings and Loan Assn.  
*Ad.*, 75 Main Street, Cooperstown, N. Y.

**\*Oscar William Sellers, Ph.G.**

*Thes.*, Liquor Magnesii Citratis.  
Retail pharmacist, Phila. Deceased, December 15,  
1913.

**Edward Valentine Sheely, Ph.G.**

*Thes.*, Prescription Department.  
Retail pharmacist. Mem. Tenn. Board of Phar-  
macy; state and nat'l pharm. assns.  
*Ad.*, 554 Vance Avenue, Memphis, Tenn.

**Charles F. Shelton, Ph.G.**

*Thes.*, Guaiaaci Resina.  
*Ad.*, 2043 E. Lake Street, Canton, Ohio.

**Arthur Burton Shimer, Ph.G.**

*Thes.*, Oleum Morrhuæ.  
*Ad.*, 606 Pacific Avenue, Atlantic City, N. J.

**Charles Benjamin Shoemaker, Ph.G.**

*Thes.*, Piscidia.  
*Ad.*, Allentown, Pa.

**Beaton Smith, Ph.G.**

*Thes.*, A College of Pharmacy Education.  
Detail representative, E. R. Squibb and Sons.  
Formerly representative for Fairchild Bros. and  
Foster. Mem. Empire State Sons of Amer.  
Revolution; Maryland Soc. of New York City.  
*Ad.*, Closter, N. J.

**James Auburn Smith, Ph.G.**

*Thes.*, Percolators.  
Soil chemist for Bacterized Humus Co. Formerly  
Gen. Mgr. Soil Service Co. Chief Bureau Feeds  
and Fertilizers for State of Ohio during World  
War.  
*Ad.*, London, Ohio.

**Joseph Vanest Smith, Jr., Ph.G.**

*Thes.*, Potable Water.  
*Ad.*, 2417 S. 11th Street, Phila., Pa.

**Robert Victor Smith, Ph.G.**

*Thes.*, Clarifying of Liquids.  
*Ad.*, 209 Maple Avenue, Jersey City, N. J.

**\*Lewis Samuel Sorber, Ph.G.**

*Thes.*, Mercury.  
Deceased, September 30, 1922.

**Walter Scott Spickler, Ph.G.**

*Thes.*, The Adulteration of Volatile Oils.  
*Ad.*, Care of John H. Miller, Inc., Lancaster, Pa.

**William Alfred Sprenger, Ph.G.**

*Thes.*, Camphor and Its Therapy.  
Physician. Graduated in medicine, Medico-Chi.  
College 1899.  
*Ad.*, 1125 Dean Street, Brooklyn, N. Y.

**Frederick Lee Stevenson, Ph.G.**

*Thes.*, Strophanthus.  
Retail pharmacist.  
*Ad.*, Lamar and Bellevue Streets, Memphis, Tenn.

**Samuel Shelton Stewart, Ph.G.**

*Thes.*, Menstruum for Cocillana.  
*Ad.*, Columbiana, Ohio.

**Charles A. Stout, Ph.G.**

*Thes.*, Glycerine Suppositories.  
Retail pharmacist. Mem. Board of Health, Chel-  
tenham Township.  
*Ad.*, 5101 N. Broad Street, Phila., Pa.

**Samuel Henry Sulouff, Ph.G.**

*Thes.*, Copaiba and Its Adulterants.  
*Ad.*, 281 8th Street, Jersey City, N. J.

**Howard Davis Taylor, Ph.G.**

*Thes.*, Syrups by the Cold Process.  
*Ad.*, 11th and Asbury Avenue, Ocean City, N. J.

**William Francis Taylor, Ph.G.**

*Thes.*, Emulsion of Cod Liver Oil.

**Houston Talbott Thayer, Ph.G.**

*Thes.*, The Grape Fruit.  
Received Certificate of Proficiency in Chemistry,  
P. C. P., 1895.

**David Walter Thomas, Ph.G.**

*Thes.*, Quercus Prinus.  
*Ad.*, Spartansburg, S. C.

**Horace Lessy Tomkinson, Ph.G.**

*Thes.*, Pharmacy.  
Retail pharmacist.  
*Ad.*, 21 N. Wyoming Avenue, Ardmore, Pa.



**Frank Edward Truckemiller, Ph.G.**

*Thes.*, Mercury.  
*Ad.*, Watsontown, Pa.

\***Edward Rogers Van Horn, Ph.G.**

*Thes.*, Solution of Ammonia.

\***Merton Barber Ward, Ph.G.**

*Thes.*, Zinc.  
Deceased, May 1, 1917.

\***Harry Malcolm Wasley, Ph.G.**

*Thes.*, *Kalmia Laterifolia*.

**Abner Webb, Ph.G.**

*Thes.*, *Gossypium*.

**August Gerhard Wegener, Ph.G.**

*Thes.*, Crocus and Its Adulterations.  
*Ad.*, 4365 Lincoln Avenue, Chicago, Ill.

**Charles Lincoln Weidler, Ph.G.**

*Thes.*, Assay of Acetum Opii.

**William Higbee Whitcomb, Ph.G.**

*Thes.*, *Cocillana*.

**Ishmael James White, Ph.G.**

*Thes.*, Acidum Hydrochloricum Dilutum.  
*Ad.*, 4533 N. 19th Street, Phila., Pa.

**William B. Wilcox, Ph.G.**

*Thes.*, The Practice of Ancient and Modern Pharmacy.  
Physician. Graduated in medicine, Univ. of Penna., 1903. Formerly retail pharmacist.  
*Ad.*, 914 Belmont Avenue, Phila., Pa.

**Arthur John Wissler, Ph.G.**

*Thes.*, Arsenic.  
Retail pharmacist.  
*Ad.*, Chelton and Pulaski Avenue, Germantown, Phila., Pa.

**George Young Wood, Ph.G.**

*Thes.*, Petroleum and Its Products.  
*Ad.*, 10th and Spruce Streets, Phila., Pa.

**Otis Hunter Wood, Ph.G.**

*Thes.*, Granular Effervescing Salts.  
*Ad.*, Stoneleigh Court, Washington, D. C.

**Charles Markley Yerkes, Ph.G.**

*Thes.*, Liguor Potassa.  
*Ad.*, 534 N. Hobart Blvd., Los Angeles, Cal.

**Benjamin Franklin Young, Ph.G.**

*Thes.*, Glycerine.  
*Ad.*, Coatesville, Pa.

**Howard Philip Ziegler, Ph.G.**

*Thes.*, Mel et Apis Mellifica.  
*Ad.*, Windsor Street, Reading, Pa.

**Herbert James Zimmerman, Ph.G.**

*Thes.*, Antipyrine.

**Special Students.**

**Edward D. Heine, Ph.G.**

Received Certificate of Proficiency in Chemistry.  
*Ad.*, Burkburnett, Texas.

**David T. Werner, Ph.G.**

Received Certificate of Proficiency in Chemistry.

**1895**

**Hamilton Aley, Jr., Ph.G.**

*Thes.*, Aromatic Spirits of Ammonia.

**Ellsworth Quincy Anewalt, Ph.G.**

*Thes.*, *Sambucus Canadensis*.  
*Ad.*, 2221 Kemper Lane, Cincinnati, Ohio.

**Edwin Grey Bacon, Ph.G.**

*Thes.*, Gum Arabic.  
Retail pharmacist.  
*Ad.*, 9 West Main Street, Freehold, N. J.

**Joseph Selim Baddour, B.A., Ph.G.**

*Thes.*, Tobacco.

**John Bailey, Ph.G.**

*Thes.*, Opium.  
Pharmacist. Coroner, Clinton Co., Pa., 1906.  
*Ad.*, 106 Sixth Avenue, New York City.

\***William Ernest Ball, Ph.G.**

*Thes.*, Saw Palmetto.  
Deceased, June 24, 1904.

**Harry L. Barnitz, Ph.G.**

*Thes.*, An Old Remedy in a New Field.  
Consulting and construction engineer on oxygen and hydrogen.—Consultant to U. S. A. Div. Aeronautics, and to U. S. Dept. of Agriculture during war.  
*Ad.*, 617 W. 152nd Street, New York City.

**Elwyn Paul Barr, Ph.G.**

*Thes.*, *Prunus Virginiana*.  
Retail pharmacist. Secy. Board of Directors Pine Grove Nat'l Bank.  
*Ad.*, Pine Grove, Pa.

\***Harry R. Binns, Ph.G.**

*Thes.*, Oleum Ricini.  
Deceased, July, 1910.

\***Charles Lee Blair, Ph.G.**

*Thes.*, A Process for Tincture of Myrrh.  
Pharmacist. Asst. mgr. Stoever's Broad Street Station Pharmacy, Phila.

**Roger Boyd, Ph.G.**

*Thes.*, *Aspidosperma*.  
*Ad.*, 128 S. Pryor Street, Atlanta, Ga.

**Frederick Winston Branin, Ph.G.**

*Thes.*, *Zingiber Officinale*.  
*Ad.*, Medford, N. J.

**Frederick Charles Brendel, Ph.G.**

*Thes.*, Organic Chemistry.  
*Ad.*, Renton, Wash.

**Frank William Brockman, Ph.G.**

*Thes.*, Benzoin.  
*Ad.*, Duke and Phila. Streets, York, Pa.

**Joseph Warren Brooks, Ph.G.**

*Thes.*, Potassii Permanganas.  
Retail pharmacist.  
*Ad.*, Scottsdale, Pa.

**Frederick Brunnhouse, Jr., Ph.G.**

*Thes.*, Sulphur Sublimatum.  
Pres. Western Nat'l Bank, York, Pa. Member York Common Council 2 years.  
*Ad.*, 431 W. York Avenue, York, Pa.

**George Franklin Brunier, Ph.G.**

*Thes.*, Glycerinum.

**William Lewis Bucher, Ph.G.**

*Thes.*, *Strophanthus*.  
Retail pharmacist. Mem. board of directors several mfg. industries.  
*Ad.*, 403 Locust Street, Columbia, Pa.

**Clinton Thomas Bundy, Ph.G.**

*Thes.*, Belladonna.  
*Ad.*, 321 N. Graham Street, Pittsburgh, Pa.

**Maude Florence Cain, Ph.G.**

*Thes.*, Lanolin.

**Andrew Campbell, Ph.G.**

*Thes.*, Solution of Potassium Arsenite—A New Process.

**Thomas Palmer V. Campbell, Ph.G.**

*Thes.*, Preservation of Medicines.  
Served in U. S. A. Base Hosp. No. 34.

**Edward Albert Carpenter, Ph.G.**

*Thes.*, Pills.  
*Ad.*, Plano, Tex.

- Charles Franklin Carter, Ph.G.**  
*Thes.*, Syrupus Ferri Iodidi.  
Organizer Southern Drug Co. Member Univ. Club,  
etc. Masonic affiliation.  
*Ad.*, Houston, Texas.
- Charles Joseph Cavanaugh, Ph.G.**  
*Thes.*, Emulsions.  
Physician. Graduated in medicine, Jeff. Med.  
College, 1899. Served in U. S. A. as 1st Lieut.,  
Med. Dept.  
*Ad.*, 1240 S. 53rd Street, Phila., Pa.
- \*John Eliason Chatham, Ph.G.**  
*Thes.*, Kola Nut.  
Deceased, March 6, 1905.
- Maurice Grant Coffey, Ph.G.**  
*Thes.*, Successful Pharmacist.  
Retail pharmacist.  
*Ad.*, Mill Hall, Pa.
- George Henry Colsten, Ph.G.**  
*Thes.*, Camphora.
- Norman Shoemaker Conard, Ph.G.**  
*Thes.*, Digitalis and Strophanthus.
- Henry Slicer Conroy, Ph.G.**  
*Thes.*, Coca.  
*Ad.*, 214 E. Meade Street, Phila., Pa.
- Charles Brewster Coppenhaver, Ph.G.**  
*Thes.*, Pilocarpus.
- William Richard Davies, Ph.G.**  
*Thes.*, Kola Acuminata.
- Robert Goode Davis, Ph.G.**  
*Thes.*, Ginger.  
Physician. Graduated in medicine, Jeff. Med. Col-  
lege, 1901. Coroner Gorlando Co., Ark., 2 terms.  
*Ad.*, Hot Springs, Ark.
- \*Guy Stewart Dean, Ph.G.**  
*Thes.*, Eucalyptus.
- Arthur John Durand, Ph.G.**  
*Thes.*, Pharmacy—Tablet Triturates.  
Mgr. M. H. Bickley's drug store.  
*Ad.*, 715 Barclay Street, Chester, Pa.
- John George Durbin, Ph.G.**  
*Thes.*, Syrupus Acidi Hydriodici.  
Retail pharmacist. Director Plymouth Nat'l Bank.  
*Ad.*, 139 E. Main Street, Plymouth, Pa.
- David Alexander Eberly, Ph.G.**  
*Thes.*, Ancient History of Pharmacy.  
Retail pharmacist. Served in U. S. A. Hosp.  
Corps, 1895-1903. In Spanish-Amer. War.  
*Ad.*, Alameda, Cal.
- David Ellis, Ph.G.**  
*Thes.*, Menthol.
- Anthony Farnsworth, Ph.G.**  
*Thes.*, Fucus Vesiculosus.  
*Ad.*, R. F. D. No. 1, Northeast, Pa.
- Benjamin Rice Faunce, Ph.G.**  
*Thes.*, Cocillana.  
*Ad.*, 35 Scott Street, Riverside, N. J.
- Edmund Keim Fisher, Ph.G.**  
*Thes.*, Menthol.  
*Ad.*, 526 E. Indiana Avenue, Phila., Pa.
- Warren Whitney Flitcraft, Ph.G.**  
*Thes.*, Cochineal.  
Retail pharmacist. Received Certificate of Pro-  
ficiency in Chemistry, P. C. P., 1896.  
*Ad.*, Haddonfield, N. J.
- Harry Bastian Foresman, Ph.G.**  
*Thes.*, Properties of Acidum Aceticum of Different  
Strengths as an Extractive.  
Retail pharmacist.  
*Ad.*, R. D. 4, Montoursville, Pa.
- Charles Henry Freethy, Ph.G.**  
*Thes.*, Medicated Wines.  
Retail pharmacist. Recruiting officer for U. S.  
Merchant Marine.  
*Ad.*, Hawley, Pa.
- Frederick Edwin Geuther, Ph.G.**  
*Thes.*, Tinctura Nucis Vomice.  
Retail pharmacist.  
*Ad.*, 211 E. Mt. Carmel Avenue, Glenside, Pa.
- David Lehman Greenswalt, Ph.G.**  
*Thes.*, Examination of Lime Water and Compressed  
Lime Tablets.  
Retail pharmacist.  
*Ad.*, Chambersburg, Pa.
- Milton Grotz, Ph.G.**  
*Thes.*, Success of the American Pharmacist.  
Evangelist. Formerly pharmacist Stetson Hosp.,  
Phila.  
*Ad.*, Wm. Penn Highway and Chestnut Street,  
Bethlehem, Pa.
- Edward Titus Hahn, Ph.G.**  
*Thes.*, Hypodermic Tablets.  
Asst. in Pharmaceutical Lab. P. C. P., 1895-1900.  
(See page 453.)  
*Ad.*, 1242 N. 53rd Street, Phila., Pa.
- Walter Scott Hamilton, Ph.G.**  
*Thes.*, Guarana.  
Pharmacist. Graduated in medicine, Univ. of  
Ore., 1897. Mayor of Roseburg, Ore.  
*Ad.*, Roseburg, Ore.
- \*Mary Augusta Haney, Ph.G.**  
*Thes.*, Disinfectants.
- Thomas Lewis Herbert, Ph.G.**  
*Thes.*, Aluminium.
- Edwin Arney Hering, Ph.G.**  
*Thes.*, The Microscopical Structure of Euonymus  
Bark.  
Retail pharmacist.  
*Ad.*, 801 Fourth Street, North Braddock, Pa.
- William Herrmann, Ph.G.**  
*Thes.*, Acidum Aceticum.  
Retail pharmacist and chemist. Publisher of Phar-  
maceutical and Medical Compendium. Graduate,  
Transue Bus. College. Formerly with Phila. and  
Reading Coal and Iron Co.  
*Ad.*, 112 N. Centre Street, Pottsville, Pa.
- Annie Louise Hetrick, Ph.G.**  
*Thes.*, Belladonna.  
*Ad.*, Wellsville, Pa.
- \*Horace Besson Heysham, Ph.G.**  
*Thes.*, Aconitum U. S. P.  
Deceased, November 13, 1915.
- William Roseborough Hodge, Ph.G.**  
*Thes.*, Belladonna.  
*Ad.*, Texarkana, Tex.
- \*Arthur Stadiger Hollopeter, Ph.G.**  
*Thes.*, Urethral Suppositories.  
Deceased, January 16, 1916.
- Wilmer Preston Hoopes, Ph.G.**  
*Thes.*, Saccharum Lactis.
- John Hoskins, Ph.G.**  
*Thes.*, Saw Palmetto.  
Physician. Graduated in medicine, Univ. of  
Penna., 1898. Res. phys. Chester Hosp. Chester  
City Councilman 2 years. Examiner U. S. Pub.  
Health Service.  
*Ad.*, 2414 Edgmont Avenue, Chester, Pa.
- Harry Bittenbender Hughes, Ph.G.**  
*Thes.*, Liquor Calcis.
- \*David Fox Hnmel, Ph.G.**  
*Thes.*, Atropa Belladonna.

- Henry Blount Hunter, Ph.G.**  
*Thes.*, Metallic Stearates.  
 Received Certificate of Proficiency in Chemistry,  
 P. C. P., 1895.
- \*Percy Hyers, Ph.G.**  
*Thes.*, Estimations of Fluid Extract Cubebs.  
 Deceased, February 1, 1910.
- \*Robert MacGregor Jackson, Ph.G.**  
*Thes.*, Pills and Pill Excipients.  
 Deceased, December 1, 1910.
- Charles Lyston Jones, Ph.G.**  
*Thes.*, Glycyrrhiza.  
 Retail pharmacist.  
*Ad.*, 215 Lafayette Street, Easton, Pa.
- Charles Peter Kalbach, Ph.G.** —  
*Thes.*, Incompatibility.  
 Retail pharmacist and fruit grower. Mem. Board  
 of Education, 10 years; mem. I. O. O. F., etc.  
*Ad.*, Bernville, Pa.
- Henry Alfred Kalkman, Ph.G.**  
*Thes.*, Coca and Its Alkaloids.  
 Pres. Kalkman Pharmacy, Inc. Served in U. S.  
 N., 1901-05, as Hosp. Steward, U. S. S. Monon-  
 gahela.  
*Ad.*, Newport, R. I.
- John William Kauffman, Ph.G.**  
*Thes.*, Resorcin.  
 Physician. Graduated in medicine, Jeff. Med. Col-  
 lege, 1896. Mem. staff Reading Hosp. Mem.  
 numerous med. societies. Med. mem. Draft Board  
 No. 3.  
*Ad.*, 841 N. 11th Street, Reading, Pa.
- Reuben M. Kaufman, Ph.G.**  
*Thes.*, Pharmacy.  
 Retail pharmacist. Mem. Del. State Pharmacy  
 Board.  
*Ad.*, Seaford, Del.
- Henry Charles Frederick Kellner, Ph.G.**  
*Thes.*, Pharmacy.  
 Physician. Retail pharmacist 10 years. Graduated  
 in medicine, 1898. Member Local Draft Board  
 No. 11.  
*Ad.*, 1337 E. Montgomery Avenue, Phila., Pa.
- Francis Patrick Kelly, Ph.G.**  
*Thes.*, Antiseptics.  
 Retail pharmacist. Served in U. S. N. as Hosp.  
 Steward, 1902-06.  
*Ad.*, Carbondale, Pa.
- Edwin Harry Kercher, Ph.G.**  
*Thes.*, Microscopy.  
 Retail pharmacist. Member A. Ph. A.; Penna.  
 Pharm. Assn.; Phila. Assn. Retail Druggists.  
 Treas. 40th and Market Streets Business Men's  
 Assn.; Assessor 6th Div. 27th Ward, Phila.  
 Masonic affiliation.  
*Ad.*, 4128 Market Streets, Phila., Pa.
- Albert Joseph King, Ph.G.**  
*Thes.*, Peumus Boldus.  
 Retail pharmacist.  
*Ad.*, Ardmore, Pa.
- Harry Herbert Kline, Ph.G.**  
*Thes.*, Linaria Vulgaris.  
*Ad.*, American House, Reading, Pa.
- August Henry Knaner, Ph.G.**  
*Thes.*, Jamaica Dogwood, Bark of the Root.
- Edward Blaise Labbé, Ph.G.**  
*Thes.*, The Resin of Podophyllum.  
 Investments.  
*Ad.*, 624 Gasco Bldg., Portland, Ore.
- Harvey Gillette LaMaster, Ph.G.**  
*Thes.*, Camphora.
- Herbert Grayson Lamhart, Ph.G.**  
*Thes.*, Tablet Triturates.
- Brenton Solomon Lancaster, Ph.G.**  
*Thes.*, Antitoxine.  
*Ad.*, 22nd and Market Streets, Phila., Pa.
- Ross McDonald Lanus, Ph.G.**  
*Thes.*, Glycerin Suppositories.
- \*Willis Leslie LaRue, Ph.G.**  
*Thes.*, Fluid Extracts.
- Scott Wolford Lau, Ph.G.**  
*Thes.*, Disinfectants.  
 Physician. Graduated in medicine, Jeff. Med.  
 College, 1899.  
*Ad.*, N. E. Cor. Ritner and 15th Streets, Phila., Pa.
- Emanuel Hiram Lauer, B.A., Ph.G.**  
*Thes.*, Epiphegus Virginiana.  
*Ad.*, 357 S. Wilton Place, Los Angeles, Cal.
- Henry Cuthbert Lawton, Ph.G.**  
*Thes.*, Vaccine Virus.  
 Physician. Graduated in medicine, Medico-Chi.  
 College, 1904. Pres. Cumberland Co. Med. Soc.  
 Mem. Acad. Medicine, Harrisburg; Secy. Board  
 of Health.  
*Ad.*, Camp Hill, Pa.
- Davis Hendrix Leaman, Ph.G.**  
*Thes.*, Ipecacuanha.  
*Ad.*, Reading, Pa.
- Morria Leedom, Ph.G.**  
*Thes.*, Ethylenediamine.  
*Ad.*, Pacific and Burk Streets, Wildwood, N. J.
- Joseph David Lehman, Ph.G.**  
*Thes.*, Hydrastis Canadensis.  
 Physician.  
*Ad.*, 4255 Main Street, Manayunk, Phila., Pa.
- Arthur Rimmer Lewis, Ph.G.**  
*Thes.*, Oleum Gossypii Seminis.
- William Elliott Linn, Ph.G.**  
*Thes.*, Camphora.
- Charles Henry Long, Ph.G.**  
*Thes.*, Acetic Acid.  
*Ad.*, 7th and Cumberland Streets, Lebanon, Pa.
- James Grier Long, Ph.G.**  
*Thes.*, Ustilago.  
 Retail pharmacist. Mem. Phila. Assn. Retail Drug-  
 gists; Penna. Pharm. Assn.  
*Ad.*, 11th and Berks Streets, Phila., Pa.
- Charles Gustave Lorenz, Ph.G.**  
*Thes.*, Fluid Extracts and Cause of Changes in the  
 Same.  
 With Bell Telephone Co. of Penna.  
*Ad.*, Plymouth Meeting, Pa.
- \*Damian Aloysius Loser, Ph.G.**  
*Thes.*, Opium Contrasted with Alcoholic Beverages.  
 Deceased, December 28, 1916.
- George Grafley Lower, Ph.G.**  
*Thes.*, Jaborandi.
- \*Walter Preston Lutz, Ph.G.**  
*Thes.*, Heat and Cold.  
 Deceased, April, 1907.
- \*John Milton McCanna, Ph.G.**  
*Thes.*, Oleum Morrhuæ.
- \*Wilson Cathcart McClosky, Ph.G.**  
*Thes.*, Benzinum.
- Thomas Francis Joseph McFadden, Ph.G.**  
*Thes.*, The Study of Botany as an Interesting, In-  
 structive and Healthful Source of Diversion.
- Saylor John McGhee, Ph.G.**  
*Thes.*, Chocolate.  
 Physician. Graduated in medicine, Jeff. Med. Col-  
 lege, 1898. Res. Phys. Jeff. Hosp. Director and  
 Vice-Pres. Lock Haven Trust and Safe Deposit  
 Co. Mem. Lock Haven Board of Education; Ex-  
 emption Board Clinton Co., Pa., during war.  
*Ad.*, 214 Main Street, Lock Haven, Pa.



- William Righter McNair, Ph.G.**  
*Thes.*, Vegetable Coloring Matters.  
 Physician. Graduated in medicine, Jeff. Med. College, 1899. Served in U. S. A. as Capt. Med. Dept. during World War.  
*Ad.*, 608 Brockman Bldg., Los Angeles, Cal.
- Edwin Golding MacKenzie, Ph.G.**  
*Thes.*, Pill Excipients of Permanganate Potash.
- Thomas Duncan Macphee, Ph.G.**  
*Thes.*, Peppermint.  
 Retail pharmacist.  
*Ad.*, 301 N. 9th Street, Phila., Pa.
- Elias R. Mader, Ph.G.**  
*Thes.*, Taraxacum.  
 Retail pharmacist and partner in Mader Boiler Works.  
*Ad.*, 521 Cumberland Street, Lebanon, Pa.
- Emanuel Manko, Ph.G.**  
*Thes.*, Asbestos.  
 Physician. Graduated in medicine, 1905. Prof. of Chem., Kansas City College of Pharm., 1903-1906. Post Grad. work, Harvard Univ. and Johns Hopkins Univ. Fellow Amer. Med. Assn.  
*Ad.*, 225 W. 12th Street, Kansas City, Mo.
- William Joseph Mathews, Ph.G.**  
*Thes.*, Sodii Boras.  
 Physician.  
*Ad.*, 938 Hudson Street, Hoboken, N. J.
- Charles Holmes Mayhew, Ph.G.**  
*Thes.*, Cinchona.  
*Ad.*, Millville, N. J.
- Ralph LaShelle Melick, Ph.G.**  
*Thes.*, Chemistry.
- Elmer David Michener, Ph.G.**  
*Thes.*, Belladonna.  
 Retail pharmacist.  
*Ad.*, 2600 N. 12th Street, Phila., Pa.
- Albert T. Miller, Ph.G.**  
*Thes.*, Tablet Triturates.  
 Pharmacist.  
*Ad.*, Trappe, Montgomery Co., Pa.
- Harper Guiley Miller, Ph.G.**  
*Thes.*, The Metric System.
- Henry McKee Minton, Ph.G.**  
*Thes.*, Castor Oil.  
 Physician. Graduated in medicine, Jeff. Med. College, 1906. Phys. to Mercy Hosp.; Disp. Phys. Phipps Inst.  
*Ad.*, 1130 S. 18th Street, Phila., Pa.
- Albert Tippett Mitchell, Ph.G.**  
*Thes.*, Pharmaceutical Assay.
- Charles Otto Moosbrugger, Ph.G.**  
*Thes.*, Elder Bark.  
 Pharmacist. Mem. A. Ph. A.; Ohio State Pharm. Assn.; Drug Merchants of Montgomery Co., Ohio.  
*Ad.*, 650 N. Main Street, Dayton, Ohio.
- Birdis Emanuel Moritz, Ph.G.**  
*Thes.*, Ichthyocolla.  
 Retail pharmacist.
- \*Max Morris, Ph.G.**  
*Thes.*, Yucca Filamentosa.  
 Deceased, April 22, 1918.
- \*Michael Charles Murphy, Ph.G.**  
*Thes.*, Wines.  
 Deceased, April 3, 1908.
- Morris Myera Musselman, Ph.G.**  
*Thes.*, Poisons and Their Antidotes.
- William Henry Myers, Ph.G.**  
*Thes.*, Patent Medicines.  
 Traveling salesman, Eli Lilly and Co. Served in U. S. N. as apothecary, 1895-98.  
*Ad.*, 125 Midland Avenue, Syracuse, N. Y.
- Sarah Susan Naly, Ph.G.**  
*Thes.*, The Microscopical Laboratory.  
 Received P.D. 1910.  
*Ad.*, Woman's Hospital, 22nd and College Avenue, Phila., Pa.
- James Weller Nickum, Ph.G.**  
*Thes.*, Anatolian Licorice Root.
- Thomas Francis Nugent, Ph.G.**  
*Thes.*, A Drug Store.  
*Ad.*, 715 Bleecker Street, Utica, N. Y.
- \*John Merritt Parse, Ph.G.**  
*Thes.*, Acidum Boricum.  
 Deceased, October 6, 1904.
- Francisco Pazmiño, Ph.G.**  
*Thes.*, Tinctura Galla.
- William Legoria Peabody, Ph.G.**  
*Thes.*, The Tannin of Cloves.
- Oscar Wilson Phillipa, Ph.G.**  
*Thes.*, Pyroxylinum.
- John Morris Porter, Ph.G.**  
*Thes.*, Incompatibility.
- \*William Edgar Porter, Ph.G.**  
*Thes.*, Cocillana.  
 Combustion Engineer, Bureau of Smoke Regulation, City of Pittsburgh, Pa. Mgr. Pittsburgh Male Chorus. Deceased, December 30, 1919.
- Benjamin Chamberlain Quick, Ph.G.**  
*Thes.*, Strophanthus Hispidus.  
 Salesman. J. B. Foley and Co. Served in Spanish-Amer. War as Pvt. Btn. B. 5th Art., U. S. A., 1898, and as Hosp. Steward, U. S. A. 5th Army Corps, Btn. G., 1899. Mem. Spanish War Vets. Masonic affiliation.  
*Ad.*, Port Jervis, N. Y.
- Arwed Gustav Rabenau, Ph.G.**  
*Thes.*, Electrolysis.
- Louis Aloysius Rectenwald, Ph.G.**  
*Thes.*, Jambal Seed.  
*Ad.*, 117 Brownsville Road, Mt. Oliver, Pittsburgh, Penna.
- Richard Reiser, Ph.G.**  
*Thes.*, Oleum Ricini.  
 Physician. Graduated in medicine, Jeff. Med. College, 1896. Res. Phys. Phila. Gen. Hosp. and Phila. Hosp. for Contagious Diseases. Surgeon on Schoolship Saratoga. Surgeon to Columbia Hosp. Served in U. S. A. as Capt. 25th F. A., 9th Brigade, 9th Div. Regimental Surg.  
*Ad.*, Columbia, Pa.
- Daniel Schaeffer Regar, Ph.G.**  
*Thes.*, Theobroma Cacao.  
 Physician.  
*Ad.*, Akron, Pa.
- Solomon Mittler Reich, Ph.G.**  
*Thes.*, Manna and Mannit.  
*Ad.*, 1101 Wylie Avenue, Pittsburgh, Pa.
- \*Edward Elliott Rhoads, Ph.G.**  
*Thes.*, Acetic Acid.  
 Deceased, July, 1905.
- Arthur Norris Richardson, Ph.G.**  
*Thes.*, Achillea Millefolium.  
*Ad.*, Electra, Texas.
- \*Edward Milton Richman, Ph.G.**  
*Thes.*, Erythroxylon Coca.  
 Deceased, March 2, 1918.
- William Edward Ridenour, Ph.G.**  
*Thes.*, Some Derivatives of Chimaphilin.  
 Mfg. chemist, Pres. Franklin Chemical Works. Supt. factories, Bird-Archer Co. Received Certificate of Proficiency in Chemistry, P. C. P., 1895.  
*Ad.*, 433 E. Walnut Lane, Germantown, Phila., Pa.

- William Frederick Ridgway, Ph.G.**  
*Thes.*, Commercial Syrup Hydriodic Acid.
- Frederick Willam Ritter, Ph.G.**  
*Thes.*, Eriodictyon Glutiniosum.
- George Delbert Robbins, Ph.G.**  
*Thes.*, Eugenia Caryophyllata.  
*Ad.*, 3600 University Avenue, Los Angeles, Cal.
- Peter Joseph Rock, Ph.G.**  
*Thes.*, The Cotton Plant and Its Derivatives.  
*Ad.*, 2030 Santa Clara Avenue, Alameda, Cal.
- \*Frank George Roessner, Ph.G.**  
*Thes.*, The Preparations of Sanguinaria.  
Retail pharmacist, Phila. Deceased, December 19, 1907.
- George Albert Roasman, Ph.G.**  
*Thes.*, Nux Vomica.  
Retail pharmacist.  
*Ad.*, 726 Market Street, Sunbury, Pa.
- Walter Rothwell, Ph.G.**  
*Thes.*, Cod Liver Oil with the Hypophosphites.  
Retail pharmacist, real estate and insurance agt., and investments. Director Hatboro Nat'l Bank; American Druggists Fire Ins. Co. Served in Spanish-American War.  
*Ad.*, Hatboro, Pa.
- Joseph Howard Sames, Ph.G.**  
*Thes.*, Cicuta Maculata.
- Albert Herman Schmitt, Ph.G.**  
*Thes.*, Tasteless Fluid Extract of Cascara Sagrada.  
*Ad.*, 1027 W. 46th Street, Los Angeles, Cal.
- Robert Franklin Schrack, Ph.G.**  
*Thes.*, Glycerin.
- Henry Beidleman Semple, Jr., Ph.G.**  
*Thes.*, Fluid Extract Kola.  
Retail pharmacist.  
*Ad.*, 233 Northampton Street, Easton, Pa.
- John Semple, Ph.G.**  
*Thes.*, Education in Pharmacy.  
Retail pharmacist.  
*Ad.*, 1201 W. 3rd Street, Chester, Pa.
- Miles Herman Shimer, Ph.G.**  
*Thes.*, Camphor.  
Retail pharmacist. Served as Chief Pharmacist's Mate in U. S. N.  
*Ad.*, 5900 Market Street, Phila., Pa.
- \*Clinton Llewellyn Shoemaker, Ph.G.**  
*Thes.*, Solanum Carolinense, L.
- \*Otto Simonia, Jr., Ph.G.**  
*Thes.*, Glycerin Suppositories.
- Harry Fisher Simons, Jr., Ph.G.**  
*Thes.*, The Pharmacist.  
Mfg. pharmacist. with H. K. Mulford Co. With 2nd Penna. Nat'l Guard as Hosp. Steward 5 years. Served with 2nd Penna. Vol. Inf. during Spanish-American War.  
*Ad.*, 1936 N. 6th Street, Phila., Pa.
- Harry Wharton Skinner, Ph.G.**  
*Thes.*, Oleum Morrhuæ.
- Leo Engelman Slifer, Ph.G.**  
*Thes.*, Belladonna.
- Charles Hye Smith, Ph.G.**  
*Thes.*, The Requirements Necessary for a Successful Pharmacist.  
Office Secy., Y. M. C. A. Served during World War, Troop Train Y. M. C. A. auspices.  
*Ad.*, P. O. Box 275, Union, N. Y.
- Rodney Smith, Ph.G.**  
*Thes.*, Benzoinum.  
*Ad.*, Saegertown, Pa.
- Arthur Stengel, Ph.G.**  
*Thes.*, Benzoic Acid.  
Chief of Phila. Food and Drug Inspection Service, U. S. Dept. of Agriculture.  
*Ad.*, 134 S. 2nd Street, Phila., Pa.
- \*Annie Rex Stephen, Ph.G.**  
*Thes.*, Tinctures.
- Walker Lewis Stephen, Ph.G.**  
*Thes.*, The Chemist.
- \*Charles Wilson Stern, Ph.G.**  
*Thes.*, Cream of Bismuth.
- George Strickler, Jr., Ph.G.**  
*Thes.*, Gum Arabic.  
Mgr., P. M. Ziegler Co.  
*Ad.*, 418 Douglas Street, Reading, Pa.
- Robert Cummins Stuart, Ph.G.**  
*Thes.*, Belladonna.  
*Ad.*, N. Y. Life Insurance Co., Seattle, Wash.
- Edward F. Swartz, Ph.G.**  
*Thes.*, Malt.  
*Ad.*, 53 Carey Avenue, Wilkesbarre, Pa.
- Robert H. Tarr, Ph.G.**  
*Thes.*, General Chemistry.
- Henry Bruno Terne, Ph.G.**  
*Thes.*, Animal Refuse, Their Products and Use in Pharmacy.  
*Ad.*, 5015 Chestnut Street, Phila., Pa.
- John Herman Terry, Ph.G.**  
*Thes.*, Suppositories.  
Retail pharmacist.  
*Ad.*, 2352 Thompson Street, Phila., Pa.
- Guy Parker Thayer, Ph.G.**  
*Thes.*, Heuchera Americana.
- Nathan Lincoln Thompson, Ph.G.**  
*Thes.*, Examination of Kola.
- Thomas Redman Thornton, Ph.G.**  
*Thes.*, The Tannin of Cinnamomum Cassia.  
Retail pharmacist. Apothecary to Ga. State Sanitarium, Milledgeville, 2 years.  
*Ad.*, Union Point, Ga.
- Stephen Edward Ulmer, Ph.G.**  
*Thes.*, The Metric System.  
*Ad.*, 24 Lockwood Avenue, Cleveland, Ohio.
- Julius Hirsch Ulrich, Ph.G.**  
*Thes.*, Acetic Acid as a Solvent.  
*Ad.*, 709 Hayward Street, Peoria, Ill.
- \*Harvey Edgar Unanget, Ph.G.**  
*Thes.*, Fluid Extracts and the Compound Léver Press.  
Deceased, June 4, 1895.
- William Van Korb, Ph.G.**  
*Thes.*, Rhubarb.  
Physician. Served in U. S. A. as Roentgenologist, Evac. Hosp. No. 27, with A. E. F. in France.  
*Ad.*, 5633 Wyalusing Avenue, Phila., Pa.
- William Sylvester Warfel, Ph.G.**  
*Thes.*, Syrupus Acidi Hydriodici.
- \*Thomas Carsey Waters, Ph.G.**  
*Thes.*, Analysis of a Liquid.
- Walter Walton Watson, Ph.G.**  
*Thes.*, Anesthetics.  
Physician (oculist). Graduated in medicine, Medico-Chi. College, 1900. Med. Examiner and Surg. Broad Street Sta., Penna. R. R., 1903-11. Res. phys. Medico-Chi Hosp.; Phila. Gen. Hosp. On Staff, Wills, Polyclinic, Medico-Chi. and Howard Hosps. Instr. Polyclinic Post Grad. Sch., 1911-1918. Med. Examiner Draft Board.  
*Ad.*, 1712 Walnut Street, Phila., Pa.

- Wilmer John Weaver, Ph.G.**  
*Thes.*, Vaccine Virus.
- John Karl Webb, Ph.G.**  
*Thes.*, Spiritus Aetheris Nitrosi.  
Physician.  
*Ad.*, McComb City, Miss.
- Harry Sigler Webbert, Ph.G.**  
*Thes.*, Cellulose.  
Pharmacist.  
*Ad.*, 1100 N. 3rd Street, Harrisburg, Pa.
- Spencer Bucher Weiser, Ph.G.**  
*Thes.*, Syrup Made by Cold Process.
- Robert Emmet Welsh, Ph.G.**  
*Thes.*, Pepsin.  
*Ad.*, 8th Avenue and 19th Street, Altoona, Pa.
- John Campbell Whitely, Ph.G.**  
*Thes.*, Incompatibility.  
*Ad.*, 94th Street and 3rd Avenue, Brooklyn, N. Y.
- Edward Albert Whiteley, Ph.G.**  
*Thes.*, Rhubarb.
- William Henry Whittem, Ph.G.**  
*Thes.*, Glycyrrhiza Glabra.  
*Ad.*, 105 Bethlehem Pike, Chestnut Hill, Phila., Pa.
- John Swain Wilson, Ph.G.**  
*Thes.*, Precipitates in Sanguinaria Preparations.
- Howard George Winch, Ph.G.**  
*Thes.*, Elixir Cinchona.  
Retail pharmacist. Pharmacist Presbyterian Hosp.,  
Phila., 1898-1907. Mem. Board of Health. Masonic  
affiliation.  
*Ad.*, Clifton Heights, Pa.
- David Zwingle Winger, Ph.G.**  
*Thes.*, Menthol.  
Retail pharmacist.  
*Ad.*, Thurmont, Md.
- William Holmes Wolfe, Ph.G.**  
*Thes.*, Basham's Mixture, U. S. P., 1880 and 1890.
- Samuel Ross Woods, Ph.G.**  
*Thes.*, Pharmaceutical Education.  
Retail pharmacist.  
*Ad.*, Lamar, Colo.
- \*Washington Irving Woolley, Ph.G.**  
*Thes.*, Structure of Convallaria.  
Retail pharmacist, Ocean Grove and Asbury Park,  
New Jersey. Deceased, August 20, 1919.
- John Congie Wyatt, Ph.G.**  
*Thes.*, Assay of Sanguinaria.  
*Ad.*, Vancouver, Wash.
- \*Florence Yapple, Ph.G.**  
*Thes.*, Twelve Commercial Cocos.  
Business Mgr. American Journal of Pharmacy from  
1894 to 1912. Chm. Memorial Com. P. C. P.  
Alumni Assn. Deceased, October 9, 1912.
- Samuel Newton Yeakle, Ph.G.**  
*Thes.*, Eucalyptus Globulus.  
Retail pharmacist.  
*Ad.*, DeKalb and Jacoby Streets, Norristown, Pa.
- \*George E. Young, Ph.G.**  
*Thes.*, Interesting Problems for the Druggist.  
Deceased, October 31, 1921.
- Warren Ray Young, Ph.G.**  
*Thes.*, Ipecacuanha.  
*Ad.*, 2447 Ridge Avenue, Phila., Pa.
- John Noah Zook, Ph.G.**  
*Thes.*, Syrup of Hydriodic Acid.
- Special Student.**
- Theodore Littlefield Gamble,**  
Received Certificate of Proficiency in Chemistry.  
*Ad.*, 3726 N. Gratz Street, Phila., Pa.
- 1896
- Herbert Spencer Albaugh, Ph.G.**  
*Thes.*, The Structure of Elder Bark.  
Retail pharmacist.  
*Ad.*, Franklin, Ohio.
- Charles Ellis Alexander, Ph.G.**  
*Thes.*, The Value of Granulated Effervescent Caf-  
feine and Potassium Bromide.  
Studied medicine for one year after graduation.  
Entered U. S. N. Served on staff of Surgeon-Gen.,  
U. S. N., Washington. Now Asst. to Fleet Surg.  
U. S. Pacific Fleet. Special study of civil hygiene  
and sanitation. Masonic affiliation. Served as  
Lieut., Med. Corps, U. S. N. during World War.  
*Ad.*, Bureau of Medicine and Surgery, Navy Dept.,  
Washington, D. C.
- Harry Edward Arcularius, Ph.G.**  
*Thes.*, Cocillana.  
Retail pharmacist.  
*Ad.*, Neosho, Mo.
- Walter Armstrong, Ph.G.**  
*Thes.*, Spiritus Frumenti.  
*Ad.*, Sunbury, Pa.
- Harry Arndt, Jr., Ph.G.**  
*Thes.*, Pharmaceutical Degrees.  
*Ad.*, Manheim, Pa.
- Louise Henrietta Azzman, (Mrs. George H.  
Hance), Ph.G.**  
*Thes.*, Carbolic Acid.  
*Ad.*, Westminster Apts., 41st and Westminster  
Avenue, Phila., Pa.
- Hermanus Ludwig Baer, Ph.G.**  
*Thes.*, Estimation of Official Sulphuric Acid.  
Physician.  
*Ad.*, Mt. Vernon, N. Y.
- Leon Kahn Baldauf, Ph.G.**  
*Thes.*, Tinctura Iodi.  
Physician.  
*Ad.*, Henderson, Ky.
- Francis Joseph Barbiera, Ph.G.**  
*Thes.*, Rhubarb.  
Salesman, Eli Lilly and Co.
- Wesley Johnson Barrett, Ph.G.**  
*Thes.*, Phosphorus.  
Physician. Graduated in medicine, Hahnemann  
Med. College, 1901.  
*Ad.*, 606 Cooper Street, Camden, N. J.
- Fremont Kessler Bartho, Ph.G.**  
*Thes.*, Sodii Bicarbonas.  
*Ad.*, Tamaqua, Pa.
- Hannah Frances Bartlett, (Mrs. W. E. Tyson),  
Ph.G.**  
*Thes.*, Magnolia Glauca.  
Physician. Graduated in medicine, Woman's Med.  
College of Penna., 1901. Res. Phys. West Phila.  
Hosp. for Women, and Phila. Gen. Hosp. Studied  
in Europe. Mem. Leonia Board of Health; Health  
Officer; Med. inspector of schools. Staff Engle-  
wood Hosp. Lecturer on public health. Conductor  
of 1st Aid classes.  
*Ad.*, 101 Leonia Avenue, Leonia, N. J.
- Irwin Atwood Becker, Ph.G.**  
*Thes.*, Calx Sulphurata.  
Pharmacist, Michael Reese Hosp., Chicago. Mem.  
Franklin Inst.; A. A. A. S.; Chicago Drug Club;  
Chicago Geographic Soc. Received Certificate of  
Proficiency in Chemistry, P. C. P., 1896.  
*Ad.*, 2839 Ellis Avenue, Chicago, Ill.
- Josiah Bee Beckett, Ph.G.**  
*Thes.*, The Pharmacist in Emergencies.  
Retail pharmacist.  
*Ad.*, 1032 S. 3rd Street, Camden, N. J.
- Aaron Wilson Beeler, Ph.G.**  
*Thes.*, The Future of United States Pharmacy.  
*Ad.*, 6315 Brooklyn Avenue, Seattle, Wash.



- George Irvin Bensinger, Ph.G.**  
*Thes.*, Datura Stramonium.  
*Ad.*, Schuylkill Haven, Pa.
- Theodore Christian Bode, Ph.G.**  
*Thes.*, Terpene.  
 Retail pharmacist. City Alderman, Salida, Colo.  
*Ad.*, Salida, Colo.
- Alfred Harrison Bolton, Jr., Ph.G.**  
*Thes.*, Syrupus Ferri Iodidi.  
 Traveling salesman, Otto Eisenlohr and Bros.,  
 Phila. Retail pharmacist until 1901.  
*Ad.*, Bridgeton, N. J.
- \***William Engelhart Booe, Ph.G.**  
*Thes.*, Tabacum.
- James Lofton Booth, Ph.G.**  
*Thes.*, Kola Nut.
- William Henry Booth, Ph.G.**  
*Thes.*, Aqua Hydrogenii Dioxidi.
- John Clinton Boyer, Ph.G.**  
*Thes.*, Arnica.  
 Physician.  
*Ad.*, 745 S. 3rd Street, Phila., Pa.
- Elmer George Brugler, Ph.G.**  
*Thes.*, Koumys.
- David Alexander Buehler, Ph.G.**  
*Thes.*, Sapo.  
*Ad.*, 1104 N. 2nd Street, Harrisburg, Pa.
- \***Marcus Buss, Ph.G.**  
*Thes.*, Calcium and Its Compounds.  
 Retail pharmacist, Phila., Pa. Deceased, July 2,  
 1922.
- Charles Sherwood Cameron, Ph.G.**  
*Thes.*, Naphthalinum.  
 Retail pharmacist.  
*Ad.*, 719 N. 64th Street, Phila., Pa.
- Frank Book Campbell, Ph.G.**  
*Thes.*, Calx Chlorata.  
 Served in U. S. A., 314th Inf.
- Harry Alfred Carman, Ph.G.**  
*Thes.*, Strophanthus.  
 Chemist, Davis and Lawrence Co., New York and  
 Montreal. Mem. Amer. Chem. Soc.  
*Ad.*, 59 Arlington Avenue, Westmount, P. Q.  
 Canada.
- Lewis Peter Caratena, Ph.G.**  
*Thes.*, Chemical Analysis of Honey Locust Bark.  
 Retail pharmacist.  
*Ad.*, 302 Harrison Street, Davenport, Iowa.
- Luella Case, Ph.G.**  
*Thes.*, The Scale Salts of Iron.  
 Botanical research and farming.  
*Ad.*, Powell, Ohio.
- James Wilson Casaal, Ph.G.**  
*Thes.*, An Examination of Commercial Glucose.  
 Retail pharmacist.  
*Ad.*, 429 S. 50th Street, Phila., Pa.
- Isaac Newton Catherman, Ph.G.**  
*Thes.*, Lanolin.  
 Traveling salesman, Aschenbach and Miller. Vice-  
 pres. Selinsgrove Chamber of Commerce. Graduate  
 of Susquehanna Univ. Pres. Borough Council.  
*Ad.*, Selinsgrove, Pa.
- Joseph Sylvester Clair, Ph.G.**  
*Thes.*, Ipecacuanha.
- William Warner Collier, Ph.G.**  
*Thes.*, Cimicifuga Racemosa.  
*Ad.*, Coopersburg, Pa.
- John Hall Collins, Ph.G.**  
*Thes.*, Pharmacy as a Profession.  
*Ad.*, Hotel Marlyn, 40th and Walnut Streets,  
 Phila., Pa.
- William Stephen Gray Cook, Ph.G.**  
*Thes.*, Apparatus for reprecipitation.  
 Real estate, insurance, steamship ticket agency and  
 foreign exchange.  
*Ad.*, 5 S. 1st Avenue, Coatesville, Pa.
- \***James Craig, Ph.G.**  
*Thes.*, Tar and Its Preparations.  
 Deceased, November 3, 1913.
- Frank Blair Crayton, Ph.G.**  
*Thes.*, Hypericum.  
 Farmer. Retail pharmacist until 1919.  
*Ad.*, Anderson, S. C.
- James Henry Crumbie, Ph.G.**  
*Thes.*, Practical Pharmaceutical Education.  
 Retail pharmacist.  
*Ad.*, 1313 W. Allegheny Avenue, Phila., Pa.
- Charles Rockford Daniels, Ph.G.**  
*Thes.*, Strontium.
- John Ellsworth Davis, Ph.G.**  
*Thes.*, Ergot.  
*Ad.*, Elcentro, Cal.
- \***George Morton Hays Deemer, Ph.G.**  
*Thes.*, Glycerin.  
 Retail pharmacist, Atlantic City, N. J. Deceased,  
 August 31, 1917.
- Bertha Leon DeGraffe, (Mrs. Josiah C.  
 Peacock), Ph.G.**  
*Thes.*, The Tannins of Some Medicinal Ericaceae.  
 Associated with J. C. Peacock, retail pharmacist,  
 1900-18. Received Certificate of Proficiency in  
 Chemistry, P. C. P., 1897.  
*Ad.*, 3701 Germantown Avenue, Phila., Pa.
- John Grenville DeLorme, Ph.G.**  
*Thes.*, Geranium.  
 Retail pharmacist. Member S. C. Board of Phar-  
 macy.  
*Ad.*, Sumter, S. C.
- William Holstein Dewees, Ph.G.**  
*Thes.*, Petroleum.  
*Ad.*, Care of Wm. R. Warner and Co., New York  
 City.
- Charles Seymour Dickinson, Ph.G.**  
*Thes.*, Stearic Acid.  
 Physician. Graduated in medicine, Jeff. Med. Col-  
 lege, 1907. Served 2 years in World War.  
*Ad.*, Freeland, Pa.
- Pierce Abbott Dietrich, Ph.G.**  
*Thes.*, Cotton Plants and Derivatives.  
 Retail pharmacist.  
*Ad.*, 6031 Haverford Avenue, Phila., Pa.
- Benjamin Dill, Ph.G.**  
*Thes.*, Spouges.  
*Ad.*, 602 Huntingdon Pike, Fox Chase, Phila., Pa.
- Albert Dougherty, Ph.G.**  
*Thes.*, Beef, Wine and Iron.  
*Ad.*, 818 Maryland Avenue, Wilmington, Del.
- Oscar Carmen Draper, Ph.G.**  
*Thes.*, Variations of Official Tinctura Opii.  
 Retail pharmacist. Mem. Del. State Board of  
 Pharmacy, 5 years; Wilmington City Council and  
 Board of Education.  
*Ad.*, 7th and Jackson Streets, Wilmington, Del.
- \***William Dutt, Ph.G.**  
*Thes.*, The Estimation of Morphine in Opium  
 Plaster.
- Joseph William Ehman, Ph.G.**  
*Thes.*, Solution of Magnesium Citrate.  
 Instr. Analyt. Chemistry, P. C. P. (See page 436.)  
*Ad.*, 145 N. 10th Street, Phila., Pa.
- \***Boyce Elliott, Ph.G.**  
*Thes.*, Problems Confronting the American Phar-  
 macist.  
 Deceased, March 25, 1911.

- Martin Edward Farrell, Ph.G.**  
*Thes.*, Cascara Sagrada.  
Retail pharmacist.  
*Ad.*, Marshall and Astor Streets, Norristown, Pa.
- Charles Taylor Farrow, Ph.G.**  
*Thes.*, Syrup of Guaiac.  
*Ad.*, Haddonfield, N. J.
- Harry Felker, Ph.G.**  
*Thes.*, Benzoin.  
*Ad.*, 916 Delaware Avenue, Bethlehem, Pa.
- Frederick Franklin Fischer, Ph.G.**  
*Thes.*, Oleum Morrhuæ.  
Retail pharmacist.  
*Ad.*, 13th and Dauphin Streets, Phila., Pa.
- Samuel Walter Fitzgerald, Ph.G.**  
*Thes.*, Tinctures.  
Retail pharmacist. Mem. N. J. State Board of Health, 1901-04.  
*Ad.*, Bordentown, N. J.
- \*John Byron Flenniken, Ph.G.**  
*Thes.*, A Pharmacist and the Public.
- Franklin Wilson Fluck, Ph.G.**  
*Thes.*, Ethyl Chloride.  
*Ad.*, 24th and Ridge Avenue, Phila., Pa.
- \*Josiah Klisterhock Freeman, Ph.G.**  
*Thes.*, Compressed Tablets.  
Retail pharmacist, Phila. Deceased, February 29, 1912.
- Robert Rudolph Gabriel, Ph.G.**  
*Thes.*, Cascara Sagrada.
- Walter Samuel Geiger, Ph.G.**  
*Thes.*, Eriodictyon.
- George Leonard Genz, Ph.G.**  
*Thes.*, Commelina Virginica.  
Mgr. Chicago Branch, Parke, Davis and Co. since 1913.  
*Ad.*, 162 N. Franklin Street, Chicago, Ill.
- Lee Goldsmith, Ph.G.**  
*Thes.*, Glycerin.  
Retail pharmacist.  
*Ad.*, 19th and Diamond Streets, Phila., Pa.
- Robert Franklin Good, Ph.G.**  
*Thes.*, Oleum Gaultheriæ.  
Retail pharmacist. Mem. Rotary Club, etc.  
*Ad.*, 602 Hamilton Street, Allentown, Pa.
- \*Harry Edgar Graham, Ph.G.**  
*Thes.*, Therapeutics and Hygiene.
- James Adam Griesemer, Ph.G.**  
*Thes.*, Electricity.
- Charles Maust Griswold, Ph.G.**  
*Thes.*, Acetic Acid as a Menstruum.
- Charles Roberts Haig, Jr., Ph.G.**  
*Thes.*, Acidum Boricum.  
Physician. Served in U. S. A. as 1st Lieut. Med. Dept. 16th Inf., 1st Div.  
*Ad.*, 1818 Diamond Street, Phila., Pa.
- Charles Henry Haines, Ph.G.**  
*Thes.*, Unguentum Aquæ Rosæ.
- Robert Carson Hall, Ph.G.**  
*Thes.*, Iodine.  
Investment banker. Mem. Hermit Club; Union Club; Shaker Heights Country Club.  
*Ad.*, 401 Guardian Bldg., Cleveland, Ohio.
- \*George Headley Hance, Ph.G.**  
*Thes.*, A Pharmaceutical Still.
- \*Frank William Hannan, Ph.G.**  
*Thes.*, Honey.
- Herbert Dean Harrell, Ph.G.**  
*Thes.*, Spirit of Camphor.
- Clarence Mulford Harris, Ph.G.**  
*Thes.*, Cod Liver Oil.  
Physician. Graduated in medicine, Medico-Chi. College, 1900. Res. phys. Phila. Hosp. Mem. staff Conemaugh Valley Memorial and Mercy Hosp. Mem. numerous med. societies.  
*Ad.*, 604 Trust Bldg., Johnstown, Pa.
- \*Milo Miller Haymaker, Ph.G.**  
*Thes.*, Stillingia.
- Walter Hayman, Ph.G.**  
*Thes.*, Hydrargyri Sulphidum Rubrum.  
*Ad.*, 918 Parade Street, Erie, Pa.
- \*Adam Bruce Heckerman, Ph.G.**  
*Thes.*, Examination of Fluid Extract of Geranium.  
Retail pharmacist, Port Royal, Pa. Deceased, November 16, 1919.
- Edgar Franklin Heffner, Ph.G.**  
*Thes.*, Potassii Chloras.  
Retail pharmacist. Pres. Lock Haven Business Men's Assn.; Secy. Penna. Pharm. Assn.; Chm. War Resources Com. for Clinton Co.; Organizer, Ambulance Co. No. 305.  
*Ad.*, Lock Haven, Pa.
- \*Frank Walton Heinbach, Ph.G.**  
*Thes.*, Camphor.  
Retail pharmacist, St. Clair, Pa. Deceased, February 16, 1920.
- Edward Daniel Helfrich, Ph.G.**  
*Thes.*, Podophyllum.  
Physician and surgeon. Graduated in medicine, Ohio Med. Univ., 1902. Post grad. work Phila. Polyclinic Hosp. Representative Ohio State Legislature, 1916-20. Served in U. S. Pub. Health Dept. during War.  
*Ad.*, Galion, Ohio.
- Edwin Fayette Hellyer, Ph.G.**  
*Thes.*, Acacia.  
Grower of citrus fruit.  
*Ad.*, Orange, Cal.
- Albert Herzog, Ph.G.**  
*Thes.*, Aqua Hydrogenii Dioxidii.
- Jonas Edward Heyser, Ph.G.**  
*Thes.*, Advertising a Retail Pharmacy.  
Physician.  
*Ad.*, 3235 N. 15th Street, Phila., Pa.
- William Joseph Hiffmeyer, Ph.G.**  
*Thes.*, Belladonna.  
Retail pharmacist. Graduated, Northern Ill. College of Optometry.  
*Ad.*, 3327 N. 21st Street, Phila., Pa.
- Harry Richmond Hippler, Ph.G.**  
*Thes.*, Fluid Extracts.  
Photo-engraver and retail pharmacist.  
*Ad.*, 634 Park Avenue, Collingswood, N. J.
- \*Frank Dilworth Hodil, Ph.G.**  
*Thes.*, Eucalyptus.  
Deceased, October 7, 1921.
- James Stephen Holt, Ph.G.**  
*Thes.*, Cascara Sagrada.  
*Ad.*, 7th and Cambria Streets, Phila., Pa.
- John Edgar Howard, Ph.G.**  
*Thes.*, Water.  
Physician. Graduated in medicine, Jeff. Med. College, 1901. Res. phys., Harrisburg Hosp. Fellow Amer. Med. Soc.; Mem. Camden Co. Med. Soc.; N. J. State Med. Soc.; etc.  
*Ad.*, 67 King's Highway, W. Haddonfield, N. J.
- \*Albert Norton Humpton, Ph.G.**  
*Thes.*, Roots and Leaves.  
Retail pharmacist, Phila. Deceased, October 11, 1918.
- Warren Ernest Hunt, Ph.G.**  
*Thes.*, Castor Oil.  
*Ad.*, 2305 18th Street, N. W., Washington, D. C.

**Charles Thomas Ink, Ph.G.**

*Thes.*, Camphor, Its Preparation.  
Vice-Pres. Day Drug Co. Asst. Secy. and director  
Summit Wholesale Drug Co., Akron, Ohio. Mem.  
Rotary Club. Served during Spanish-Amer. War  
as Hosp. Steward of 14th Penna. Reg.  
*Ad.*, 83 Adolph Avenue, Akron, Ohio.

**William Page Ireland, Ph.G.**

*Thes.*, Belladonna.  
Mfr. trusses, abdominal supporters, etc.  
*Ad.*, 519 Penn Street, Reading, Pa.

**Thomaa Jackson, Ph.G.**

*Thes.*, Prescriptions.  
*Ad.*, Frankford Avenue and Dyre Street, Phila.,  
Penna.

**Charles Nicholas Jacoby, Ph.G.**

*Thes.*, Antiseptics and Disinfectants.  
*Ad.*, Care of Richardson Corp., Rochester, N. Y.

**\*Robert Rosser James, Ph.G.**

*Thes.*, Heracleum Lanatum Fructus.

**Albert Burtis Johnson, Ph.G.**

*Thes.*, Estimation of Ammonium Chloride Tablets.  
Retail pharmacist. Mem. Red Men; K. of G. E.  
Masonic affiliation. Recruiting officer, U. S. Mer-  
chant Marine.  
*Ad.*, Point Pleasant, N. J.

**Charlton Graham Johnson, Ph.G.**

*Thes.*, Solanum Carolinense, Linné.  
Retail pharmacist.  
*Ad.*, Columbus, Ga.

**Ollve Curtis Johnson, Ph.G.**

*Thes.*, Assay of Tincture of Nux Vomica.  
Retail pharmacist.  
*Ad.*, Danville, Pa.

**\*John Comer Jonea, Ph.G.**

*Thes.*, Sassafras.  
Physician. Graduated in medicine Jeff. Med. Col-  
lege 1897. Practiced in Millville, N. J. Deceased,  
February 2, 1904.

**Lester David Jones, Ph.G.**

*Thes.*, Emulsion of Cod Liver Oil.

**\*Thomas Morgan Jones, Ph.G.**

*Thes.*, The Chemical Composition of Mine Water.

**Charles Eber Kelchner, Ph.G.**

*Thes.*, Some Criticisms on the United States Phar-  
macopœia of 1890.  
Mgr. for H. T. Waldner, druggist.  
*Ad.*, 105 Walnut Street, Berwick, Pa.

**Alfred Logan Kelley, Ph.G.**

*Thes.*, Camphor.  
Physician and pharmacist. Pres. Union Drug Co.,  
Wilmington, Del. Graduated in medicine. Served  
in Spanish-Amer. War as Hosp. Steward.  
*Ad.*, 1307 DuPont Street., Wilmington, Del.

**Martin Ketterer, Ph.G.**

*Thes.*, Repercolation.  
Retail pharmacist.  
*Ad.*, 4401 N. 5th Street, Phila., Pa.

**William Smith Killiam, Ph.G.**

*Thes.*, Cod Liver Oil.

**Frank Kluse, Ph.G.**

*Thes.*, Iodine.  
Retail pharmacist.  
*Ad.*, 432 Schuylkill Avenue, Reading, Pa.

**Arthur Eugene Knoefel, Ph.G.**

*Thes.*, Syrupus Acidi Hydriodici.

**Charles Cornelius Kunz, Ph.G.**

*Thes.*, Calomel.

**Henry Julius Lachenmayer, Ph.G.**

*Thes.*, Kola.  
*Ad.*, 22nd and Allegheny Avenue, Phila., Pa.

**\*William Irwin Laucks, Ph.G.**

*Thes.*, Preparations of Iron.  
Deceased, March 1, 1914.

**\*William Roth Lautenbacher, Ph.G.**

*Thes.*, Strophanthus.

**\*Harry Francis Lee, Ph.G.**

*Thes.*, Sumbul.

**David Malcolm Leech, Ph.G.**

*Thes.*, Ipecacuanha.  
Retail pharmacist.  
*Ad.*, 3500 Germantown Avenue, Phila., Pa.

**George Louis LeSage, Ph.G.**

*Thes.*, Acetum Opii 1850 U. S. P.  
Salesman, Burrongs Adding Machine Co. N. Y.  
State representative for Division of Films.  
*Ad.*, White Plains, N. Y.

**Harry Carter Leslie, Ph.G.**

*Thes.*, The Assay of Acetic Acid.  
Salesman, Eli Lilly and Co.  
*Ad.*, 711 Prescott Avenue, Scranton, Pa.

**Howard Hornberger Lewis, Ph.G.**

*Thes.*, Cod Liver Oil.  
Retail pharmacist.  
*Ad.*, 7941 Frankford Avenue, Phila., Pa.

**\*James Raymond Light, Ph.G.**

*Thes.*, Infusum Digitalis.

**Bradford Allen Littlefield, Ph.G.**

*Thes.*, Potassa Sulphurata.  
Retail pharmacist.  
*Ad.*, 26 Public Square, Watertown, N. Y.

**Ephraim Augustus Lloyd, Ph.G.**

*Thes.*, Kaolin.  
*Ad.*, Bonndbrook, N. J.

**Charles Henry Longmire, Ph.G.**

*Thes.*, Iron, Its Preparation and Uses.  
Retail pharmacist.  
*Ad.*, 49 High Street, Germantown, Phila., Pa.

**Leon Franklin Luburg, Ph.G.**

*Thes.*, The Examination of Glycerin Suppositories.  
Physician. Graduated in medicine, Univ. of  
Penna., 1899. Instr. Obstetrics, Univ. of Penna.  
Asst. Obstetrician and Gynecologist Phila. Gen.  
Hosp. Assoc. Gynecologist Amer. Stomach Hosp.  
Former Chief, Obstetrical Disp. Univ. of Penna.  
Ex-mural Surg. Methodist Epis. Hosp. Major and  
surgeon, 3rd Penna. Inf., Mexican Border, 1916.  
Med. Mem. Local Draft Board. Surg. Bureau  
Police and Fire, Dept. Pub. Safety, Phila.  
*Ad.*, 1822 Girard Avenue, Phila., Pa.

**Paul L. McConomy, Ph.G.**

*Thes.*, Pills.  
Retail pharmacist.  
*Ad.*, 2000 Callowhill Street, Phila., Pa.

**James Henry McCracken, Ph.G.**

*Thes.*, Estimation of Tannic and Malic Acids in  
Fluid Extract of Rhus Glabra.  
Retail pharmacist. Food controller, Northern  
Tulare Co., Cal., during War.  
*Ad.*, Dinuba, Tulare Co., Cal.

**Walter Greenleaf McHenry, Ph.G.**

*Thes.*, Ipecacuanha and Its Preparations.  
Mfg. pharmacist. Supt. laboratory Smith, Kline  
and French Co. Pres. Christian Endeavor Union  
2 years: Treas. 2 years.  
*Ad.*, 3415 Devereaux Street, Phila., Pa.

**Charles Bishop McLoughlin, Ph.G.**

*Thes.*, The Histological Structure of the Rhizome  
of Smilacina Racemosa.  
*Ad.*, 8 Merion Street, Collingswood, N. J.

**Hillman Gaskill Malabury, Ph.G.**

*Thes.*, What Makes the Successful Pharmacist.  
Representative. Hynson, Wescott and Dunning.  
*Ad.*, Woodbury Heights, N. J.



- Murf Ford Maples, Ph.G.**  
*Thes.*, Acid Sulphurous.
- Charles Gross Marshall, Ph.G.**  
*Thes.*, Acidum Hydrochloricum Dilutum.
- Merry O. Martin, Ph.G.**  
*Thes.*, Sabal Serulata.
- August Jacob Meier, Ph.G.**  
*Thes.*, Pyroligneous Spirit.  
Retail pharmacist. Mem. Exec. Com. Phila. Retail Druggists Assn. Now Vice-pres. Formerly secy. of Professional Unit Germantown Business Assn.  
*Ad.*, Chew Street and Chelton Avenue, Germantown, Phila., Pa.
- Charles Howard Meredith, Ph.G.**  
*Thes.*, Kaolin.  
*Ad.*, Bryn Mawr, Pa.
- Abram Lehman Metz, Ph.G.**  
*Thes.*, The Ideal Pharmacist.  
*Ad.*, Chambersburg, Pa.
- James Augustus Miller, Ph.G.**  
*Thes.*, Syrupus Picis Liquidæ Compositus.  
Mfg. Chemist.  
*Ad.*, 262 Fulton Street, Brooklyn, N. Y.
- John Henry Miller, Ph.G.**  
*Thes.*, Hydrochloric Acid, U. S. P.  
*Ad.*, 525 W. Chestnut Street, Lancaster, Pa.
- George Arnold Moleen, Ph.G.**  
*Thes.*, Cocillana.  
Physician. Graduated in medicine Rocky Mt. Univ., 1900. Alienistic and neurologic specialist. Chm. Neurological Sec. Amer. Med. Assn., 1916. Asst. Prof. Neurology, Univ. Colorado Med. Dept.  
*Ad.*, 324 Mack Bldg., Denver, Colo.
- \*John Custis Montgomery, Ph.G.**  
*Thes.*, The Present Art of Galen.  
Deceased, November 18, 1918.
- George Cooper Moore, Ph.G.**  
*Thes.*, Asafetida.  
Physician.  
*Ad.*, Boyertown, Pa.
- Ferdinand Adsm Mosebach, Ph.G.**  
*Thes.*, Syrup of Iron Iodide.
- William Lewis Mountaine, Ph.G.**  
*Thes.*, Extractum Theræ Fluidum.  
*Ad.*, 21 Adams Street, Bangor, Me.
- John Musselman, Ph.G.**  
*Thes.*, Professional Pharmacy.  
*Ad.*, 11th and Pine Streets, Phila., Pa.
- David Howard O'Donnel, Ph.G.**  
*Thes.*, Dorema Ammoniacum.  
Retail pharmacist.  
*Ad.*, Fleetwood, Pa.
- Edward Lewars Page, Ph.G.**  
*Thes.*, The Chemist in Pharmacy.  
*Ad.*, 342 S. Queen Street, Lancaster, Pa.
- Howard Eugene Parker, Ph.G.**  
*Thes.*, Orchids.
- Edmund B. Pellett, Ph.G.**  
*Thes.*, Pills.  
Retail pharmacist. Secy. and Treas. Pellett Bros., Inc.  
*Ad.*, 483 Broadway, Paterson, N. J.
- \*William Newton Phillips, Ph.G.**  
*Thes.*, Iodine.
- Herman Judson Pierce, Ph.G.**  
*Thes.*, Chemical Analysis of the Canada Thistle.  
Retail pharmacist. Director Grange National Bank, Troy, Pa. Member Borough Council.  
*Ad.*, Troy, Pa.
- \*John W. Pilgrim, Ph.G.**  
*Thes.*, Opium.
- \*Charles Ross Place, Ph.G.**  
*Thes.*, Estimation of Phosphoric Acid.  
Deceased, May 27, 1922.
- Edward Meigs Post, Ph.G.**  
*Thes.*, Goulard's Extract.  
Received Certificate of Proficiency in Chemistry, P. C. P., 1898.
- Charles Deitz Powell, Ph.G.**  
*Thes.*, Sulphur.  
Physician.  
*Ad.*, Coatesville, Pa.
- \*James Perlie Pulsifer, Ph.G.**  
*Thes.*, Syrupus Pini Albi Compositus.  
Deceased, January, 1908.
- Arthur Benjamin Reed, Ph.G.**  
*Thes.*, Gelatine.  
*Ad.*, West Huntingdon and Masher Streets, Phila., Penna.
- James Whitaker Reeve, Ph.G.**  
*Thes.*, Suppositories.  
Surgical instruments.  
*Ad.*, 516 Boston Bldg., Salt Lake City, Utah.
- Jay William Rewalt, Ph.G.**  
*Thes.*, Cascara Sagrada.  
*Ad.*, Roselle, N. J.
- \*Neslie Richardson, Ph.G.**  
*Thes.*, Scale Pepsin.  
Physician. Graduated in medicine, 1906. Practiced in Phila. Deceased, October 30, 1921.
- William Homer Ricker, Ph.G.**  
*Thes.*, Tobacco.  
Retail pharmacist.  
*Ad.*, 1501 S. 19th Street, Phila., Pa.
- \*Charles Peter Roach, Ph.G.**  
*Thes.*, Sodium Bisulphite.  
Physician and surgeon. Served in U. S. A. as 1st Lieut., Capt. and Major, Med. Dept.
- \*Raleigh Robinson, Ph.G.**  
*Thes.*, Vanilla.
- Frank Budd Ross, Ph.G.**  
*Thes.*, Ferrum.  
*Ad.*, 52nd and Haverford Avenue, Phila., Pa.
- \*Pinkas Rovno, Ph.G.**  
*Thes.*, Acidum Sulphuricum Dilutum.  
Retail pharmacist, Phila. Deceased, May 30, 1906.
- Harry Robert Rudy, Ph.G.**  
*Thes.*, Spongia Usta.  
*Ad.*, Hagerstown, Md.
- George Bertram Ryland, Ph.G.**  
*Thes.*, Cork.  
Vice-pres. and managing director May Drug Co. Recruiting officer, U. S. Merchant Marine.  
*Ad.*, Liberty and 5th Avenue, Pittsburgh, Pa.
- Verner Edward Sager, Ph.G.**  
*Thes.*, Mecca Oil.
- \*Hunter Albert Sallada, Ph.G.**  
*Thes.*, Crystallization.  
Deceased, December, 1906.
- Charles Schabinger, Ph.G.**  
*Thes.*, Zea.  
Physician. Studied medicine at Jeff. Med. College. 1 year. Graduated in medicine, Medico-Chi. College. 1899. Served in U. S. A. as Capt. Med. Dept.  
*Ad.*, 4526 N. Broad Street, Phila., Pa.
- Harry John George Schad, Ph.G.**  
*Thes.*, Grape Juice.  
*Ad.*, 122 N. 5th Street, Reading, Pa.

**Otis Oliver Schaeffer, Ph.G.**

*Thes.*, Estimation of Caffeine in the preparation of Kola.

**David Philip Schindel, Ph.G.**

*Thes.*, Preservation of Syrups.  
Retail pharmacist.  
*Ad.*, 47 S. Potomac Street, Hagerstown, Md.

**Joseph Alphonse Schmieg, Ph.G.**

*Thes.*, Petroleum.  
Retail pharmacist. Mem. Penna. Pharm. Assn.  
*Ad.*, 700 W. Venango Street, Phila., Pa.

**Kingsley Clark Thompson Schneider, Ph.G.**

*Thes.*, Assay of Fluid Extract of Coca.  
*Ad.*, 115 Western Avenue, Minneapolis, Minn.

**Harry Samuel Schnnrman, Ph.G.**

*Thes.*, Fungi as Medicine.  
*Ad.*, 108 S. 13th Street, Allentown, Pa.

**Johann Heinrich Schroeder, Ph.G.**

*Thes.*, The Chemistry of some Members of the Genus Cassia.  
Served as Capt. U. S. A., Med. Dept.  
*Ad.*, The Livingstone, 7th and Race Streets, Cincinnati, Ohio.

**James Patrick Edward Scott, Ph.G.**

*Thes.*, Nux Vomica.  
Physician. Graduated in medicine, Hahnemann Med. College, 1903.  
*Ad.*, 1516 Girard Avenue, Phila., Pa.

**\*Walter Spangler Sellers, Ph.G.**

*Thes.*, Mentha Piperita, U. S. P.  
Lost his life in the explosion of the U. S. S. Maine in Havana Harbor. (See page 254.)

**Frank Pierce Semmel, Jr., Ph.G.**

*Thes.*, Extraction Nucis Vomicae.  
Retail pharmacist. Mgr. State Capitol Bldg. and Loan Assn.  
*Ad.*, 106 S. 1st Street, Lehigh, Pa.

**Julius Frederic Seyforth, Ph.G.**

*Thes.*, Acetic Acid and Its Uses in Pharmacy.  
Jeweler. Retail pharmacist, 13 years.  
*Ad.*, Skivvin Hotel, Oklahoma City, Okla.

**Warren Reed Sharp, Ph.G.**

*Thes.*, Acetanilidum.  
*Ad.*, Coatesville, Pa.

**John Benjamin Shenk, Ph.G.**

*Thes.*, Grindelia.  
*Ad.*, 13th and Lombard Streets, Phila., Pa.

**Robert S. Sherwin, Ph.G.**

*Thes.*, Syrupus Pini Albi Compositus.  
Retail pharmacist. Mem. Board of Trustees, P. C. P.; A. Ph. A.  
*Ad.*, 149 Roseville Avenue, Newark, N. J.

**Alexander Shreve, Ph.G.**

*Thes.*, Cannabis Sativa.  
Florist.  
*Ad.*, Belvidere, N. J.

**Willard Eugene Simpler, Ph.G.**

*Thes.*, Salicylic Acid.  
Retired. Retail pharmacist until 1913.  
*Ad.*, White Deer, Union Co., Pa.

**Leroy William Sisler, Ph.G.**

*Thes.*, Chloral Hydrate.

**John Ritner Smith, Ph.G.**

*Thes.*, Pills, Ointments and Plasters.  
Railroad clerk, Penna. R. R. Co.  
*Ad.*, 2450 N. 6th Street, Harrisburg, Pa.

**Paul Smith, Ph.G.**

*Thes.*, Acetylene.  
*Ad.*, 428 Walnut Street, Sunbury, Pa.

**George Balthaser Spath, Ph.G.**

*Thes.*, Stoichiometry as Applied in Pharmacy.  
Physician. Mem. staff St. Mary's Hosp., Hoboken; Auxiliary staff, North Hudson Hosp., Weehawken; Hoboken Chamber of Commerce; Union Club; Amer. Med. Assn.; N. J. Med. Soc.; Hudson Co. Med. Soc. Masonic affiliation.  
*Ad.*, 722 Hudson Street, Hoboken, N. J.

**Albert Oyater Spotta, Ph.G.**

*Thes.*, Acidum Boricum.

**Albert William Stahel, Ph.G.**

*Thes.*, Belladonna.

**Merril Linn Steadman, Ph.G.**

*Thes.*, Estimation of Medicinal Ammonium Chloride.  
*Ad.*, Mifflinburg, Pa.

**Halsey DeForrest Stephens, Ph.G.**

*Thes.*, Wintergreen.  
*Ad.*, Bloomfield, N. J.

**Thomaa Ray Stevens, Ph.G.**

*Thes.*, The Pharmacist as a Bacteriologist.  
*Ad.*, Bethlehem, Ind.

**Howard F. Stine, Ph.G.**

*Thes.*, Aromatic Spirit of Ammonia.  
*Ad.*, Gibraltar, Pa.

**Edward Clayton Stout, Ph.G.**

*Thes.*, Antipyrine.  
Retail pharmacist.  
*Ad.*, 5745 Baltimore Avenue, Phila., Pa.

**Freeman Preston Stroup, Ph.G.**

*Thes.*, Volatile Oil Cicuta Maculata.  
Prof. of Chemistry, P. C. P. (See page 417.)  
*Ad.*, 145 N. 10th Street, Phila., Pa.

**Adam Franklin Marshall Stump, Ph.G.**

*Thes.*, Ergota.  
Physician.  
*Ad.*, 218 N. 6th Street, Reading, Pa.

**Charles Miller Swainbank, Ph.G.**

*Thes.*, Fabiana Imbricata.

**Calvin I. Swartz, Ph.G.**

*Thes.*, Elixir Iron, Quinine and Strychnia.  
Retail pharmacist.  
*Ad.*, Waynesboro, Pa.

**Alexander Peterson Thompson, Ph.G.**

*Thes.*, Poisons.  
*Ad.*, 1326 W. Airdrie Street, Phila., Pa.

**Morris Clayton Thrush, Ph.G.**

*Thes.*, Solanum Carolinense.  
Surgeon. Graduated in medicine Medico-Chi. College. Ph.M. Univ. of Buffalo. Instr. Pharmacology and Therapeutics, Medico-Chi. College. Surgeon to Central Hosp. Served in U. S. A. as Lieut., Capt. and Major, Med. Dept. With A. E. F. in France.  
*Ad.*, 3705 Spring Garden Street, Phila., Pa.

**John Carl Thum, Ph.G.**

*Thes.*, Liquor Magnesii Citratis.  
Pharmacist, Lankenau Hosp., Phila., Pa.  
*Ad.*, Lankenau Hosp., Phila., Pa.

**Jacob Fred Tiefenbach, Ph.G.**

*Thes.*, The Preparations of Zinc Oxide.  
Retail pharmacist. Member Jenkintown Sch. Board.  
*Ad.*, Jenkintown, Pa.

**Therret Rankin Towles, Ph.G.**

*Thes.*, The Assay of Aromatic Sulphuric Acid.  
*Ad.*, 12 E. 22nd Street, New York City.

**\*James Vaughan Townsend, Ph.G.**

*Thes.*, The Analysis of Dover Powder.  
Retail pharmacist, Atlantic City, N. J. Deceased.  
August 27, 1919.

1897

- Paul Jacob Waldner, Ph.G.**  
*Thes.*, Stramonium.  
Pharmacist, U. S. N. Served on U. S. S. Amphitrite during Spanish-Amer. War and on U. S. S. Comfort during World War.  
*Ad.*, 305 Berkeley Avenue, Palmyra, N. J.
- Fred Stanley Wasley, Ph.G.**  
*Thes.*, Passiflora.  
*Ad.*, Shenandoah, Pa.
- Mack McInnis Watkins, Ph.G.**  
*Thes.*, Zinc Oxide Ointment.
- \***Jonathan Ingham Watson, Ph.G.**  
*Thes.*, Coptis Trifolia.  
Pres. of Class 1896, P. C. P. Deceased, August, 1907.
- Charles Arthur Welda, Ph.G.**  
*Thes.*, Acetylene.  
*Ad.*, 1557 Mineral Spring Road, Reading, Pa.
- William Erhard Weiss, Ph.G.**  
*Thes.*, Assay of Fluid Extract of Coffee.  
Gen. Mgr. Sterling Products (Inc.), Wheeling, West Va. Vice-pres. and Gen. Mgr. The Bayer Co., Inc.  
*Ad.*, 88 19th Street, Wheeling, West Va.
- Edythe Weston, (Mrs. George C. Parry), Ph.G.**  
*Thes.*, Assay of Fluid Extract of Guarana.  
Pharmacist, West Phila. Hosp. for Women. Courses in bact. Member Philomusian Club.  
*Ad.*, 731 N. 41st Street, Phila., Pa.
- Lewis Reese Whitacre, Ph.G.**  
*Thes.*, Aluminum.  
Retail pharmacist.  
*Ad.*, 121 West Penn Street, Germantown, Phila., Penna.
- \***George Frederick Wild, Ph.G.**  
*Thes.*, Aromatic Spirit of Ammonia.  
Deceased, April 14, 1902.
- Thomas McGill Williamson, Ph.G.**  
*Thes.*, Analysis of Manna.  
*Ad.*, 40 N. Market Street, Frederick, Md.,
- Willets Wilson, Ph.G.**  
*Thes.*, Liquorice and Its Menstruums.  
Physician. Graduated in medicine, Cornell Med. College, 1902. Medical examiner, Draft Board.  
*Ad.*, 210 W. Green Street, Ithaca, N. Y.
- \***Herman Bayard Wissmann, Ph.G.**  
*Thes.*, Glyceritum Acidi Carbolici.  
Deceased, December 29, 1916.
- Enos Frederick Woltman, Ph.G.**  
*Thes.*, Abrus Precatorius.  
Real estate.  
*Ad.*, 420 Stratton Lane, Pittsburgh, Pa.
- Ben Lee Young, Ph.G.**  
*Thes.*, Chlorine in Nitric Acid.  
Retail pharmacist. Member Rotary Club.  
*Ad.*, Huntsville, Ala.
- John Clayton Ziegler, Ph.G.**  
*Thes.*, Spermacti.  
Received Certificate of Proficiency in Chemistry, P. C. P., 1896.
- Charles James Zipp, Ph.G.**  
*Thes.*, Acidum Salicylicum.  
Traveling salesman, Gibson Snow Co.
- Aaron Henry Zullinger, Ph.G.**  
*Thes.*, Syrupus Hypophosphitum, U. S. P., 1890.  
Retail pharmacist. Owner of several apartment houses.  
*Ad.*, 40th and Locust Streets, Phila., Pa.
- Special Students.**
- William Joseph Doyle.**  
Received Certificate of Proficiency in Chemistry.
- Clarence Blaine Gowen.**  
Received Certificate of Proficiency in Chemistry.
- Harry B. Althouse, Ph.G.**  
*Thes.*, Pharmacy Journals.  
*Ad.*, 1840 N. 3rd Street, Harrisburg, Pa.
- Ralph Samuel Lloyd Anderson, Ph.G.**  
*Thes.*, Progress in Pharmacy.  
*Ad.*, Latrobe, Pa.
- Newton Claire Baker, Ph.G.**  
*Thes.*, Arsenic and Its Preparations.
- Claude Lafayette Bartholomew, Ph.G.**  
*Thes.*, Antipyrine.  
*Ad.*, 415 N. 5th Street, Allentown, Pa.
- \***John Phillips Bates, Ph.G.**  
*Thes.*, Liquor Potassæ and Liquor Sodæ.  
Deceased, September 21, 1922.
- Alphons Peter Breithaupt, Ph.G.**  
*Thes.*, Structure of Leptandra.
- Albert Sylvester Brumbaugh, Ph.G.**  
*Thes.*, The Digestive Value of Carica Papaya.
- Edward B. Clark, Ph.G.**  
*Thes.*, Glycerinum.  
Pharmacist.  
*Ad.*, 1335 Perry Street, Reading, Pa.
- \***Norman H. Cloud, Ph.G.**  
*Thes.*, Copaiba.  
Pharmacist, Phila. Deceased, October 13, 1914.
- Simon Jacob Codori, Jr., Ph.G.**  
*Thes.*, Cinchona Bark.  
Retail pharmacist.  
*Ad.*, 5 Prospect Avenue, Ingram, Pa.
- Richard Hal Compton, Ph.G.**  
*Thes.*, Valuation of Liquor Iodi Compositus.  
*Ad.*, San Angelo, Texas.
- Morris Cooper, Ph.G.**  
*Thes.*, Testing in Retail Pharmacies.
- Edward Kreidler Cope, Ph.G.**  
*Thes.*, Opium and Its Uses.  
Retail pharmacist.  
*Ad.*, Germantown Avenue and Norris Streets, Phila., Pa.
- Edward Ott Criswell, Ph.G.**  
*Thes.*, Cascara Sagrada.  
Retail pharmacist.  
*Ad.*, 22nd and Wharton Streets, Phila., Pa.
- William Henry Delbert, Ph.G.**  
*Thes.*, Tasteless Cascara Sagrada Compounds.  
In charge of pharmaceutical lab., Hance Bros. and White.  
*Ad.*, 4339 N. 17th Streets, Phila., Pa.
- \***Clarence Derby Eschbach, Ph.G.**  
*Thes.*, Syrupus Acidi Hydriodici.  
Deceased, April 11, 1912.
- Levi James Farley, Ph.G.**  
*Thes.*, Vegetable Histology.  
Retail pharmacist. Member Rotary Club. One of the original stockholders of the United Drug Co. Recruiting officer U. S. Merchant Marine.  
*Ad.*, Asbury Park, N. J.
- Colin Spangler Few, Ph.G.**  
*Thes.*, Oleum Olivæ.  
Retail pharmacist. Mem. Dauphin Co. Historical Soc.; Middletown Park Commission.  
*Ad.*, Middletown, Pa.
- Joseph Miller Garrison, Jr., Ph.G.**  
*Thes.*, Value of Pharmacognosy.  
*Ad.*, Elmer, N. J.
- Otice Eugene Gessford, Ph.G.**  
*Thes.*, The Pharmacist.



- Swain Townseud Godfrey, Ph.G.**  
*Thes.*, Coal.  
*Ad.*, Hammonton, N. J.
- \***Samuel R. Godshall, Ph.G.**  
*Thes.*, Acidum Aceticum Dilutum.  
 Deceased, April 21, 1904.
- Charles Rumney Goodfellow, Ph.G.**  
*Thes.*, Pharmacists and Their Imitators.  
 Retail pharmacist. Mem. Crescent Temple, Trenton, N. J.  
*Ad.*, Vineland, N. J.
- Paul Herbert Grossa, Ph.G.**  
*Thes.*, Olive Oil and Its Production.  
*Ad.*, Valley Drug Co., Johnstown, Pa.
- \***Hamilton Maxwell Harry, Ph.G.**  
*Thes.*, Camphor.  
 Deceased, October 2, 1900.
- Christian Helm, Ph.G.**  
*Thes.*, Liquor Plumbi Subacetatis.  
*Ad.*, North Avenue and East Street, Pittsburgh, N. S., Pa.
- Howard Ovid Hildebrand, Ph.G.**  
*Thes.*, Coca.  
*Ad.*, 101 W. Market Street, York, Pa.
- Harry Lewia Hörst, Ph.G.**  
*Thes.*, The Pharmacy of Brewing.  
 Life insurance agt., with Prudential Ins. Co.  
*Ad.*, 2438 S. Garnett Street, Phila., Pa.
- Harry Field Howell, Ph.G.**  
*Thes.*, Cocaine.
- Oscar K. Hukill, Ph.G.**  
*Thes.*, Pharmaceutical Education.
- Howard Edgar Ingling, Ph.G.**  
*Thes.*, Cinchona.  
 Retail pharmacist.  
*Ad.*, 2311 Atlantic Avenue, Atlantic City, N. J.
- David Strode Jeffers, Ph.G.**  
*Thes.*, Opium.  
 Retail pharmacist. Secy. Delaware Co. Retail Druggists Assn. Treas. 1st Baptist Church; Treas. Media Fire Co.; Vice-pres. West York Bldg. and Loan Assn.  
*Ad.*, Media, Pa.
- \***Isaac Astor Jennings, Ph.G.**  
*Thes.*, Relation of Druggist to the Physician.  
 Retail pharmacist, Pittsburgh, Pa. Deceased, February 24, 1914.
- Frank James Johns, Ph.G.**  
*Thes.*, Koumys.  
 Pharmacist.  
*Ad.*, 1114 Green Ridge Street, Scranton, Pa.
- \***Lawrence Anthony Keasler, Ph.G.**  
*Thes.*, Assay of Spiritus Aetheris Nitrosi.
- Charles Coleman Hagenbuch Kirilin, Ph.G.**  
*Thes.*, Attar or Otto of Rose.  
*Ad.*, 63rd and Girard Avenue, Phila., Pa.
- Samuel Clarence Klapp, Ph.G.**  
*Thes.*, Kola Nut.  
 Retail pharmacist.  
*Ad.*, Watsontown, Pa.
- George Henry Kramer, Ph.G.**  
*Thes.*, Syrupus Ferri Iodidi.  
*Ad.*, 2300 N. 21st Street, Phila., Pa.
- Albert Russell Laughlin, Ph.G.**  
*Thes.*, Gossypium Herbaceum.  
*Ad.*, 334 Bryn Mawr Avenue, Cynwyd, Pa.
- Enos Samuel Lenhart, Ph.G.**  
*Thes.*, Sulphuric Acid.  
 Salesman John Wyeth and Bro.  
*Ad.*, 641 S. Conestoga Street, Phila., Pa.
- Walter Levan, Ph.G.**  
*Thes.*, Ergot.  
*Ad.*, 2317 Maple Avenue, Altoona, Pa.
- Daniel William Lewis, Ph.G.**  
*Thes.*, Opium.  
 Physician and pharmacist. Surgeon at Camp Humphries, Va., during World War.  
*Ad.*, 3144 N. 22nd Street, Phila., Pa.
- Charles Frederick Liebert, Ph.G.**  
*Thes.*, Concentrated Infusions.  
 Mgr. William J. Jenks Pharmacy. Member P. C. P.  
*Ad.*, 4043 Market Street, Phila., Pa.
- Thomas Elmer Longshaw, Ph.G.**  
*Thes.*, Poisons and Their Antidotes.  
 Physician.  
*Ad.*, 1629 Spruce Street, Phila., Pa.
- Fred A. Luhr, Ph.G.**  
*Thes.*, Cascara Sagrada.  
*Ad.*, St. Mary's, Pa.
- Charles Baker Lukena, Ph.G.**  
*Thes.*, Hydrogen Dioxide.
- Hanford Bell McGehee, Ph.G.**  
*Thes.*, Ointments.  
 Retail pharmacist.  
*Ad.*, 3945 Fairmount Avenue, Phila., Pa.
- Thomas Hunter McNeil, Ph.G.**  
*Thes.*, Kola.
- Harry Matusow, Ph.G.**  
*Thes.*, Kalmia Latifolia.  
 Mfr. Proprietary Remedies. Retail pharmacist until 1919. Received Certificate of Proficiency in Chemistry, P. C. P., 1898.  
*Ad.*, 612 Chestnut Street, Phila., Pa.
- Claude Dallas Metzler, Ph.G.**  
*Thes.*, Belladonna.  
*Ad.*, 1441 Germantown Avenue, Phila., Pa.
- \***Clayton Edward Morgan, Ph.G.**  
*Thes.*, Adulteration.  
 Associated with Frank E. Morgan, Phila. Deceased, November 17, 1920. Received Certificate of Proficiency in Chemistry, P. C. P., 1900.
- \***Charles Augustus Mueller, Ph.G.**  
*Thes.*, Abstracts.  
 Deceased, 1921.
- Charles William Nebel, Ph.G.**  
*Thes.*, Ointments and Cerates.  
 Retail pharmacist.  
*Ad.*, 721 Wynnewood Road, Phila., Pa.
- \***Edward Parry, Ph.G.**  
*Thes.*, Powdered Extract of Licorice.
- \***William H. Parry, Ph.G.**  
*Thes.*, Medicated Waters.
- Samuel Robert Pearce, Ph.G.**  
*Thes.*, Camphor.  
 Retail pharmacist.  
*Ad.*, Doylestown, Pa.
- Charles Oscar Peiffer, Ph.G.**  
*Thes.*, Acacia.  
*Ad.*, Memphis and Ann Streets, Phila., Pa.
- Walter Francia Praul, Ph.G.**  
*Thes.*, Rheum.  
*Ad.*, 5907 Greene Street, Germantown, Phila., Pa.
- Arnold Anthony Joseph Punt, Ph.G.**  
*Thes.*, Density of Solutions.  
 Salesman, Shoemaker and Busch, Phila., Pa.  
*Ad.*, 2533 S. 17th Street, Phila., Pa.
- \***John Bull Reese, Ph.G.**  
*Thes.*, Cinchona.  
 Retail pharmacist, Mahanoy City, Pa. Deceased, January 12, 1908.

**Ernest Eleben, Ph.G.**

*Thes.*, Stramonium.  
Retail pharmacist.  
*Ad.*, Cheltenham, Pa.

**Francis J. Roth, Ph.G.**

*Thes.*, Arsenic and Its Compounds.  
Dentist. Graduated in dentistry, Phila. Dental College and Garrettsen Hosp. of Oral Surgery. Former demonstrator, Phila. Dental College and Medico-Chi. Hosp. Masonic affiliation. Member numerous clubs and societies.  
*Ad.*, 1703 Chestnut Street, Phila., Pa.

**\*Harry Bertram Seipel, Ph.G.**

*Thes.*, Zingiber Officinale.

**Laura Marguerite Smiley, Ph.G.**

*Thes.*, Podophyllum.

**Henry Aloysius Stommel, Ph.G.**

*Thes.*, Liquorice in Pharmacy.  
Retail pharmacist.  
*Ad.*, 54th and Berks Streets, Phila., Pa.

**Austin Streeper, Ph.G.**

*Thes.*, Cinchona Barks.  
*Ad.*, 311 Haws Avenue, Norristown, Pa.

**Isaac Herbert Tobias, Ph.G.**

*Thes.*, A Preservative for Syrup of Ferrous Iodide.  
*Ad.*, Hancock, Md.

**John Isaac Peter Troxell, Ph.G.**

*Thes.*, Ergot.  
Retail pharmacist. Recruiting agt. U. S. Merchant Marine.  
*Ad.*, 5130 Tacony Street, Phila., Pa.

**Sue C. Weitzel, Ph.G.**

*Thes.*, Veratrum Viride.  
*Ad.*, S. Main Street, Greensburg, Pa.

**Hartman Gotthard Wentzler, Ph.G.**

*Thes.*, The Percolation of Every Tincture of United States Pharmacopœia.  
*Ad.*, 2849 N. 12th Street, Phila., Pa.

**\*Samuel Wetzel, Ph.G.**

*Thes.*, Belladonna.

**\*Oliver Fawcett Wilson, Ph.G.**

*Thes.*, Solid Extracts by Acetic Acid.  
For many years representative for J. Hungerford Smith Co. Later retail pharmacist, Pittsburgh, Pa. Deceased, February 4, 1919.

**John Bowman Winger, Ph.G.**

*Thes.*, Gelatin Capsules.  
*Ad.*, Thurmont, Md.

**Special Students.****S. Allen Tucker.**

Received Certificate of Proficiency in Chemistry.  
*Ad.*, 3030 Emerald Street, Phila., Pa.

**William Clements White.**

Received Certificate of Proficiency in Chemistry.

1898

**Frederick Arthur Abrams, P.D.**

*Thes.*, Glycerin.

**\*Harry Clay Albert, P.C.**

*Thes.*, Lime Water and Lime Water Tablets.  
Received P. D. degree, 1906. Retail pharmacist, Atlantic City, N. J. Deceased, 1918.

**Lemuel Miles Baer, P.D.**

*Thes.*, Liquor Potassæ.  
Retail pharmacist.  
*Ad.*, 1550 S. 15th Street, Phila., Pa.

**George Ridenour Beans, P.C.**

*Thes.*, Menthol.  
Woolen salesman, J. B. Ellison and Sons. Served as 1st Lieut. Chemical Warfare Service.  
*Ad.*, 437 5th Avenue, New York City.

**\*Herman Berberich, P.D.**

*Thes.*, Piscidia Erythrina.  
Physician and pharmacist, Phila. Deceased, July 26, 1914.

**Robert Taylor Berry, P.D.**

*Thes.*, Acidum Aceticum, United States Pharmacopœia.  
Retail pharmacist.  
*Ad.*, 5237 Jefferson Street, Phila., Pa.

**Charles Wellington Beyerle, P.D.**

*Thes.*, Aromatic Sulphuric Acid.  
*Ad.*, 3600 Kensington Avenue, Phila., Pa.

**David Kerlin Bishop, P.D.**

*Thes.*, Dilute Hydrobromic Acid.  
*Ad.*, Milroy, Pa.

**Robert Morris Black, P.D.**

*Thes.*, Potassium Bromide.  
*Ad.*, Main and Johnson Streets, Germantown, Phila., Pa.

**\*Thomaa Booth, P.D.**

*Thes.*, Phenylacetamide.

**Cornelius Brach, P.D.**

*Thes.*, Honey.  
*Ad.*, 1446 Kenwood Avenue, Camden, N. J.

**Edward Burton Bradford, P.D.**

*Thes.*, Digitalis.  
*Ad.*, Port Norris, N. J.

**William Ramsey Bready, Jr., P.D.**

*Thes.*, Lactic Acid.  
Physician. Graduated in medicine, Univ. of Penna., 1902. Res. phys. Delaware Hosp., Wilmington, Del. Phys. in charge Northern Disp., Phila. Mem. numerous med. societies. Masonic affiliation. Served in U. S. A. as Capt. Med. Dept.  
*Ad.*, 1857 N. 11th Street, Phila., Pa.

**Swain Hoffman Brewton, P.D.**

*Thes.*, Acidum Hydrochloricum Dilutum.  
*Ad.*, 5315 Thompson Street, Phila., Pa.

**Lulu Brookes, Ph.G.**

*Thes.*, Kola.  
Received P. D. degree, 1899. *Thes.*, Bismuth Subcarbonate.  
*Ad.*, Waelder, Texas.

**John Edward Coleman, P.D.**

*Thes.*, Acidum Sulphurosum.  
Mgr. Lacey's drug store.  
*Ad.*, 1722 Green Street, Phila., Pa.

**Walter Greenlee Cooper, P.D.**

*Thes.*, Calx Chlorata.  
*Ad.*, Savannah, Mo.

**Linwood Cox, P.D.**

*Thes.*, Phytolacca Decandra.  
*Ad.*, East Greenville, Pa.

**David Dale, P.D.**

*Thes.*, Granulation of Powders for Compressed Pills.

**William Robert Decker, P.D.**

*Thes.*, Aqua Hydrogenii Dioxidi.  
Retail pharmacist. Mem. A. Ph. A.; Phila. Assn. Retail Druggists; National Assn. Retail Druggists; P. C. P.; P. C. P. Alumni Assn.  
*Ad.*, 1607 Ridge Avenue, Phila., Pa.

**Ida Valeria DeHaven, P.C.**

*Thes.*, Digestive Ferments.

**Charles Walter Dirmitt, P.D.**

*Thes.*, Quantative Estimation of Starch.  
Mfg. chemist, Smith, Kline and French Co. Received Certificate of Proficiency in Chemistry, P. C. P., 1898.  
*Ad.*, 521 Vine Street, Camden, N. J.

- Alexander Dubell, P.D.**  
*Thes.*, Diluted Nitrohydrochloric Acid.  
 Retail pharmacist. Pres. N. J. Rexall Club. Re-  
 cruiting Officer, U. S. Merchant Marine.  
*Ad.*, 12 Broad Street, Mt. Holly, N. J.
- Walter Forrest Eatlack, P.D.**  
*Thes.*, Cocaine and Erythroxylen Coca Plant.  
 Retail pharmacist. Attended Jeff. Med. College  
 and Univ. of Penna. Mem. Penna. Genealogical  
 Soc.; Central High Sch. Alumni Assn.  
*Ad.*, 1235 S. 17th Street, Phila., Pa.
- Ahner Thomas Evans, P.D.**  
*Thes.*, Labarraque's Solution.  
*Ad.*, Greensburg, Pa.
- Samuel Evans, Jr., P.D.**  
*Thes.*, Solution of Ferric Chloride.
- Fred Reeves Farrow, P.D.**  
*Thes.*, The Future of American Pharmacy.  
 Retail pharmacist. Recruiting officer, U. S. Mer-  
 chant Marine.  
*Ad.*, 29th and Columbia Avenue, Phila., Pa.
- Samuel Keim Fisher, P.D.**  
*Thes.*, Preservation of Syrup of Ferrous Iodide.  
 Retail pharmacist.  
*Ad.*, 677 Williams Avenue, Portland, Ore.
- John Halbert Fleming, Ph.G.**  
*Thes.*, Adulterations.  
 Retail pharmacist.  
*Ad.*, Media, Pa.
- Harry Eugene Frieheley, P.D.**  
*Thes.*, Tinctura Ferri Chloridi.  
*Ad.*, 8618 Germantown Avenue, Phila., Pa.
- Robert Rowland Funk, P.D.**  
*Thes.*, Unguentum Aquæ Rosæ.  
 Retail pharmacist.  
*Ad.*, Gay and Washington Streets., Phoenixville,  
 Penna.
- James White Gladhill, P.D.**  
*Thes.*, Castanea Dentata.  
 Chemist.  
*Ad.*, 338 Newbold Avenue, Moorestown, N. J.
- Mary Caroline Greer, P.C.**  
*Thes.*, Stramonium.  
*Ad.*, 3603 N. 22nd Street, Phila., Pa.
- Harry Musselman Groff, P.D.**  
*Thes.*, Ananassa Sativa.  
*Ad.*, 108 W. Gravers Lane, Chestnut Hill, Phila.,  
 Penna.
- Percival Edward Grunden, P.D.**  
*Thes.*, Aqua Chlori, U. S. P.  
*Ad.*, 933 N. 6th Street, Harrisburg, Pa.
- Herbert Wallace Guth, P.D.**  
*Thes.*, Urine Analysis.  
*Ad.*, 117 N. 7th Street, Allentown, Pa.
- Ralph Leonard Haus, P.D.**  
*Thes.*, Diluted Hypophosphorous Acid.  
 Retail pharmacist.  
*Ad.*, 6137 Market Street, Phila., Pa.
- Joseph Augustus Heintzelman, Jr., P.D.**  
*Thes.*, Syrup of Ferrous Iodide.  
 Physician and pharmacist. Graduated in medicine,  
 1902.  
*Ad.*, 2000 Ridge Avenue, Phila., Pa.
- Fred Chase Heverly, P.D.**  
*Thes.*, Rhus Toxicodendron U. S. P.  
 Retail pharmacist. Pres. Colo. Pharmacal Assn.,  
 1916. Alderman City of Longmont, 1919-20.  
*Ad.*, Longmont, Colo.
- William Anton Hoffman, P.D.**  
*Thes.*, Stramonium.  
*Ad.*, Beaver Falls, Pa.
- \*Joseph Huntingdon, P.D.**  
*Thes.*, Seidlitz Powders.  
 Retail pharmacist, Phila. Deceased, February 10,  
 1919.
- William Lawless Jacoby, Ph.G.**  
*Thes.*, Oleum Ricini.  
*Ad.*, 1515 Girard Avenue, Phila., Pa.
- Frank Heifaton Jenkins, P.D.**  
*Thes.*, Liquor Potassii Arsenitis.  
 Retail pharmacist.  
*Ad.*, Hanover, Pa.
- \*John Kauffman Kain, P.D.**  
*Thes.*, Podophyllum.  
 Deceased, May 15, 1898.
- George Carl Keen, P.D.**  
*Thes.*, Fluid Extract of Buchu.  
 Retail pharmacist. Mem. Phila. Wholesale Drug  
 Company.  
*Ad.*, Laurel Springs, N. J.
- John Joseph Keenan, P.D.**  
*Thes.*, Examinations of Official Nitric Acid.
- Joseph Faxon Keim, P.D.**  
*Thes.*, Chlorophyll.
- Weldon Stover Kepner, P.D.**  
*Thes.*, Guarana.  
*Ad.*, 126 Market Street, Phila., Pa.
- James David King, P.D.**  
*Thes.*, Spiritus Aetheris Nitrosi.  
 Received Certificate in Bacteriology, P. C. P., 1914.  
*Ad.*, Haddonfield, N. J.
- Frank Brennand Kirby, P.D.**  
*Thes.*, Acidum Tartaricum.  
 Sales mgr. Abbott Laboratories, Chicago. Gradu-  
 ated in medicine, Jeff. Med. College, 1902. Mem.  
 Amer. Med. Assn.  
*Ad.*, 4753 Ravenswood Avenue, Chicago, Ill.
- George Koehler, Ph.G.**  
*Thes.*, Lard.
- Harold Dohle Konover, Ph.G.**  
*Thes.*, Artificial Light.  
*Ad.*, 818 Webster Avenue, Chicago, Ill.
- William Eghert Krewson, Jr., P.D.**  
*Thes.*, Larrea Mexicana.  
 Retail pharmacist. Pharmacist, Municipal Hosp.,  
 Phila., 1898-1902.  
*Ad.*, 6755 Germantown Avenue, Phila., Pa.
- George Herherth Kyser, P.C.**  
*Thes.*, Gossypium.  
 Received P.D. degree, 1899.
- Orwan Luther Latchford, P.D.**  
*Thes.*, Acidum Aceticum.  
 Physician and surgeon. Graduated in medicine,  
 Medico-Chi. College. 1903. Mem. Alumni Assn.  
 Medico-Chi. Clinical Asst., Instr. Diseases of the  
 Eye, Phila., Polyclinic Hosp.; Acting Chief of  
 Clinic until 1912. Student Jeff. Med. College,  
 1908. Clinical Asst. Diseases Nose, Throat, and  
 Ear, Lebanon Hosp., Phila. Formerly mem. staff  
 Northwestern Gen. Hosp. Mem. numerous medical  
 and pharmaceutical societies. One of organizers  
 and Mem. Board of Directors, Broad St. Trust Co.  
*Ad.*, 1075 Drexel Bldg., Phila., Pa.
- Walter Evan Lee, P.D.**  
*Thes.*, Coca.  
 Physician.  
*Ad.*, 887 Main Street, Darby, Pa.
- George Washington Lincoln, Ph.G.**  
*Thes.*, Glycerin.  
 Physician.  
*Ad.*, Cynwyd, Pa.
- Charles Warren Lindig, P.D.**  
*Thes.*, Scaled Salts, U. S. P.  
 Retail pharmacist.  
*Ad.*, 3101 Kensington Avenue, Phila., Pa.



- August Gustav Luebert, P.D.**  
*Thes.*, Hydrangea Paniculata var. Grandiflora.  
 Retail and wholesale pharmacist. Received P. C. degree 1900.  
*Ad.*, 338 Lincoln Highway, Coatesville, Pa.
- \*Harry Walter McCleary, P.D.**  
*Thes.*, The Successful Pharmacist.
- Grace Mathers, (Mrs.. H. H. Snyder), P.C.**  
*Thes.*, Colchicum.  
*Ad.*, 4610 Palatine Avenue, Seattle, Wash.
- \*Walter Scott Metzler, P.D.**  
*Thes.*, Ipecacuanha.  
 Retail pharmacist, Coshocton, Ohio. Deceased, November 24, 1912.
- \*Clande Ruoff Middleton, P.D.**  
*Thes.*, Acidum Hydrocyanicum Dilutum.  
 Retail pharmacist, New Hope, Pa. Deceased, December 21, 1918.
- John Leopold Mills, P.D.**  
*Thes.*, The Druggist and His Time.  
*Ad.*, Guerneville, Cal.
- Thomas Francis Monaghan, P.D.**  
*Thes.*, Vegetable Dissemination.  
*Ad.*, 29th and Allegheny Avenue, Phila., Pa.
- \*William Robeson Monroe, P.C.**  
*Thes.*, Aralia Californica.  
 Deceased, November 23, 1901.
- Charles Joseph Morell, P.D.**  
*Thes.*, Syrupus Acidi Hydriodici.  
 Physician.  
*Ad.*, 53rd and Spruce Streets, Phila., Pa.
- Frank William Morgan, P.D.**  
*Thes.*, Cotton Root Bark.
- Lloyd Lott Mountain, P.D.**  
*Thes.*, The Progress of Pharmacy in America.  
 Retail pharmacist.  
*Ad.*, Confluence, Pa.
- \*Andrew Connet Parse, P.D.**  
*Thes.*, Glycerinum.  
 Deceased, 1918.
- Julius Martin Pasold, Ph.G.**  
*Thes.*, Calcium.
- \*Gilbert Kent Preston, P.D.**  
*Thes.*, A Species of Commelina.  
 Deceased, 1921.
- Milton Thomas Putt, P.D.**  
*Thes.*, Cinchona Bark.  
*Ad.*, 5112 Race Street, Phila., Pa.
- John Wilson Raker, P.D.**  
*Thes.*, Camphor.  
 Retail pharmacist.  
*Ad.*, Frankford Avenue and Huntingdon Street, Phila., Pa.
- James Richardson, P.D.**  
*Thes.*, Tinctura Iodi.
- Louis Johnson Ringer, P.D.**  
*Thes.*, Fresh Emulsion of Cod Liver Oil.  
 Retail pharmacist.  
*Ad.*, 6th and Poplar Streets, Phila., Pa.
- \*Henry Paul Rinker, P.D.**  
*Thes.*, Liqueur Potassae.  
 Pharmacist, Phila. Deceased, May 20, 1908.
- Charles August Ritz, P.D.**  
*Thes.*, Potassii et Sodii Tartras.
- Frank Rose, P.D.**  
*Thes.*, Gallic Acid.  
 Retail pharmacist.  
*Ad.*, 5002 Walnut Street, Phila., Pa.
- Anna Catharine Ross, (Mrs. G. Van Gilder Heberton), P.D.**  
*Thes.*, Animal Substances.  
*Ad.*, Chelsea, N. J.
- Theodore Storb Schlauch, Ph.G.**  
*Thes.*, Acidum Phosphoricum Dilutum.
- Joseph Dallas Seiberling, P.D.**  
*Thes.*, The Structure of Gelsemium.  
 Physician. Graduated in medicine, Medico-Chi. College, 1909. Formerly demonstrator in histology; Asst. in Oto-laryngology, Polyclinic Hosp. Now Prof. of Oto-laryngology, Univ. of Penna. Grad. School.  
*Ad.*, 339 S. 18th Street, Phila., Pa.
- Lloyd A. Sheatz, P.D.**  
*Thes.*, Nux Vomica.  
*Ad.*, 38 Preston Street, Atlantic City, N. J.
- Russell Nicholas Shemp, P.D.**  
*Thes.*, Althaea.  
 Retail pharmacist. Mem. Phila. Assn. Retail Druggists; National Assn. Retail Druggists.  
*Ad.*, 6652 Musgrave Street, Germantown, Phila., Penna.
- George Augustus Shwab, P.C.**  
*Thes.*, The Mexican Awa.  
*Ad.*, Market and Church Street, Nashville, Tenn.
- Isaac Grafton Sieber, P.D.**  
*Thes.*, Iron.  
 Physician. Graduated in medicine, Jeff. Med. College, 1902. Vice-pres. Audubon National Bank; Director Audubon Bldg. and Loan Assn.; Med. Inspector Pub. Schools.  
*Ad.*, Audubon, N. J.
- Rose Slobodkin, P.D.**  
*Thes.*, Syrup of Ferrous Iodide.  
*Ad.*, 5th and Tasker Streets, Phila., Pa.
- Benjamin James Smith, P.D.**  
*Thes.*, Opium and Its Preparations.  
*Ad.*, 1630 E. Hewson Street, Phila., Pa.
- Clarence Osborne Snavely, P.D.**  
*Thes.*, Thymol Sulphuric Acid.  
*Ad.*, 8th and Cumberland Streets, Phila., Pa.
- John Paul Snyder, P.D.**  
*Thes.*, Tincture of Ginger.  
 Retail pharmacist.  
*Ad.*, 1643 Christian Street, Phila., Pa.
- \*William Baer Steinmetz, P.D.**  
*Thes.*, Emulsions.  
 Deceased, March 19, 1903.
- Howard George Stimms, P.D.**  
*Thes.*, Honey.  
*Ad.*, 300 Kaighn Avenue, Camden, N. J.
- Jacob Franklin Strawinski, P.D.**  
*Thes.*, A Pharmaceutical Sieve.  
*Ad.*, 3900 Terrace Street, Phila., Pa.
- Harry Mahlon Swartley, P.D.**  
*Thes.*, Moschus.  
*Ad.*, 286 King Street, Charleston, S. C.
- Henry Kirk Thompson, P.C.**  
*Thes.*, Vallet's Mass.  
*Ad.*, 142 N. Western Avenue, Detroit, Mich.
- Henry Merrill Thompson, P.D.**  
*Thes.*, Sodii Bicarbonas.  
 Oculist. Graduated, Susquehanna Univ., 1902. Graduated in medicine, Jeff. Med. College, 1906. Post grad. work, New York and Vienna. Res. phys., St. Mary's Hosp., Brooklyn, N. Y.  
*Ad.*, Pueblo, Colo.
- Charles Toelke, Ph.G.**  
*Thes.*, Disinfectants.
- George Walton Tomlinson, P.D.**  
*Thes.*, Liqueur Soda.  
 Pharmacist, George B. Evans.  
*Ad.*, 4436 N. 19th Street, Phila., Pa.

- Ernest Augustine Troth, P.D.**  
*Thes.*, Sulphuric Acid.  
*Ad.*, 4828 Baltimore Avenue, Phila., Pa.
- James Harris Underwood, P.C.**  
*Thes.*, Calomel.  
 Physician. Received P.D. degree, 1899.  
*Ad.*, 49 N. Broad Street, Woodbury, N. J.
- Herman Theodore Waldner, P.D.**  
*Thes.*, Mistura Glycyrrhizæ Composita.  
 Retail pharmacist. Pres. Berwick Business Men's Assn. Secy. Rotary Club, Berwick, Pa.  
*Ad.*, 108 W. Front Street, Berwick, Pa.
- William Bell Walter, P.D.**  
*Thes.*, The Colloidions.  
 Retail pharmacist.  
*Ad.*, Beatrice, Neb.
- Hervey Beale Weisa, Ph.G.**  
*Thes.*, A Cold Cream Apparatus.  
 Physician. Graduated in medicine, Jeff. Med. College, 1901.  
*Ad.*, 1929 N. Howard Street, Phila., Pa.
- George Waashington Wilt, Jr., P.D.**  
*Thes.*, Ammonia Water.  
 Retail and wholesale pharmacist.  
*Ad.*, Flemingsburg, Ky.
- Oscar Charles Winkler, P.D.**  
*Thes.*, Poisonous Drugs of the Pharmacopœia and Their Toxicity.  
 Retail pharmacist. Treas. Southampton Fire Co.  
*Ad.*, Southampton, Bucks Co., Pa.
- John Hayes Winslow, P.D.**  
*Thes.*, Nutgalls.  
 Physician, surgeon and pharmacist. Graduated in medicine, Jeff. Med. College, 1902. Served in U. S. A. Med. Dept., Base Hosp. Camp Mills, Long Island, N. Y.  
*Ad.*, Vineland, N. J.
- John Julius Yates, Jr., Ph.G.**  
*Thes.*, The Class of Algæ.  
*Ad.*, 10th and Pine Streets, Wilmington, Del.
- Special Studenta.**
- Millwood C. Cheney.**  
 Received Certificate of Proficiency in Chemistry.  
*Ad.*, 3rd and Market Streets, Camden, N. J.
- William Conard Heckerorth.**  
 Received Certificate of Proficiency in Chemistry.  
*Ad.*, Gravel Pike, Torresdale, Phila., Pa.
- Charles Louia Suhr.**  
 Received Certificate of Proficiency in Chemistry. Pres. and Gen. Mgr. Penn American Refining Co., Oil City, Pa. Pres. Pennzoil Co. Vice-pres. British-American Oil, Toronto, Can. Director in other oil companies.  
*Ad.*, Oil City, Pa.
- 1899**
- Milton Deronda Allen, P.D.**  
*Thes.*, Syrnus and Saccharum.  
 Retail pharmacist.  
*Ad.*, 52nd Street and Larchwood Avenue, Phila., Penna.
- Willard Crandall Andrews, P.D.**  
*Thes.*, Acidum Carbolicum.  
 Received Certificate of Proficiency in Chemistry, P. C. P., 1901.  
*Ad.*, Box 649, Erie, Pa.
- William Arnott, P.D.**  
*Thes.*, Syrnus Ferri Iodidi.  
 Retail pharmacist.  
*Ad.*, Greenport, N. Y.
- John Keely Aughinbaugh, P.D.**  
*Thes.*, Saffron.  
 Retail pharmacist.  
*Ad.*, 15th and Porter Streets, Phila., Pa.
- Herbert Keck Bachman, P.D.**  
*Thes.*, Liquor Potassæ.  
 Retail pharmacist.  
*Ad.*, 439 Wyandotte Street, Bethlehem, Pa.
- \*Clifford Arthur Ball, P.D.**  
*Thes.*, Castor Oil.
- \*Howard Paul Balliet, P.C.**  
*Thes.*, Colchicum.  
 Received P.D. degree 1900.
- Melvin William Bamford, P.D.**  
*Thes.*, A Note on Powdered Drugs.  
 Retail pharmacist.  
*Ad.*, 8 South 5th Street, Reading, Pa.
- \*Benjamin Samuël Janney Bear, M.D., P.D.**  
*Thes.*, Oleum Morrhuæ.
- Llewellyn Jenkins Beddow, P.D.**  
*Thes.*, Ammonia Water.  
*Ad.*, Penn and Trenton Avenue, Pittsburgh, Pa.
- \*Henry John Blankemeyer, Jr., P.D.**  
*Thes.*, Advantages of Modern Pharmacy.
- John Henry Booth, P.D.**  
*Thes.*, Liquor Potassæ.  
 With Myers Mfg. Co., Tin Ointment Boxes. Secy. of Rotary Club, Camden, N. J. Wholesale and retail druggist until 1910.  
*Ad.*, 5143 Locust Street, Phila., Pa.
- Hampton Houseman Brown, P.D.**  
*Thes.*, The Successful Drug Clerk.  
 Retail pharmacist.  
*Ad.*, 31 E. Gay Street, West Chester, Pa.
- Harry Sheldon Buckingham, P.D.**  
*Thes.*, Mass of Quinine Sulphate.
- \*Gustave Emil Chalquest, P.D.**  
*Thes.*, Rhus Radicans.  
 Deceased, January 30, 1909.
- Lowell Holbrook Chamberlain, P.D.**  
*Thes.*, Opium.  
 Physician.  
*Ad.*, 3829 Grand Avenue, Des Moines, Iowa.
- William Allen Chamberlin, P.D.**  
*Thes.*, Fanatics in Science.  
 Retail pharmacist. Director Collingswood National Bank; Collingswood Bldg. and Loan Assn.; Camden Co. Investment Co.  
*Ad.*, Collingswood, N. J.
- John Edward Clark, P.D.**  
*Thes.*, Belladonna.
- David Holiday Crockroft, P.D.**  
*Thes.*, Starches.  
 Retail pharmacist.  
*Ad.*, 118 W. Allegheny Avenue, Phila., Pa.
- John Thomas Cohen, P.D.**  
*Thes.*, Acidum Phosphoricum.  
 Chemist, Viscose Co., Marcus Hook, Pa. Formerly Medical Property Clerk, Panama Canal. Masonic affiliation.  
*Ad.*, 115 West 24th Street, Chester, Pa.
- \*Horace Victor Crawford, P.D.**  
*Thes.*, Euphorbia Inæcarnata.  
 Retail pharmacist, Phila., Pa. Deceased, February 15, 1920.
- \*Walter Gihson Culby, P.D.**  
*Thes.*, Opium and Its Official Preparations.
- \*Henry Curtis, P.D.**  
*Thes.*, Eucalyptus Globulus.  
 Deceased, May 19, 1914.
- Benjamin Winter Davis, P.D.**  
*Thes.*, Successful Pharmacy.  
*Ad.*, 442 Stevens Street, Camden, N. J.

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- Berryman K. Davis, P.D.**  
*Thes.*, Sanitary Science as Applied to Pharmacy.  
*Ad.*, 7th and Oxford Streets, Phila., Pa.
- Samuel Bond Davis, P.D.**  
*Thes.*, Konseals.  
 Retail pharmacist.  
*Ad.*, Broad Street and Nedro Avenue, Phila., Pa.
- William Hare DeBuest, P.D.**  
*Thes.*, Volumetric Analysis of Citric Acid.
- George Edward Diehl, Ph.G.**  
*Thes.*, Benzin.  
*Ad.*, Charlestown, West Va.
- John Glaspey Dixon, P.D.**  
*Thes.*, Syrupus Acidi Hydriodici.  
 Retail pharmacist.  
*Ad.*, Salem, N. J.
- Harry Aloysius Doherty, P.D.**  
*Thes.*, Liquor Zinci Chloridi, U. S. P.  
*Ad.*, 2 S. Stenton Place, Atlantic City, N. J.
- Clarence Eugene Donnelly, P.D.**  
*Thes.*, Liquor Magnesii Citratis.
- \*George Hougen Doubler, P.D.**  
*Thes.*, Methyl Salicylate.  
 Deceased, August 24, 1903.
- Frederick William Egel, P.D.**  
*Thes.*, Liquor Sodæ.  
*Ad.*, 519 E. 49th Street, Chicago, Ill.
- Charles Falkenhainer, Jr., P.D.**  
*Thes.*, Ferri Sulphas Exsiccatus.  
 Retail pharmacist. Pharmacy Commissioner. Mem.  
 National Boards of Pharmacy.  
*Ad.*, Dubuque, Iowa.
- Gustave Adolph Faulhaber, P.D.**  
*Thes.*, Scopolia Carniolica.  
*Ad.*, 916 N. 3rd Street, Harrisburg, Pa.
- \*Richard Levia Fishburne, P.D.**  
*Thes.*, Cod Liver Oil.  
 Retail pharmacist, Lock Haven, Pa. Deceased, Feb-  
 ruary 22, 1914.
- Arthur Bowles Fleming, P.D.**  
*Thes.*, Emulsion Cod Liver Oil.  
 Physician. Graduated in medicine Medico-Chi. Col-  
 lege, 1902. Res. Phys. State Hosp., Ashland, Pa.  
 Post grad. work, Univ. of Nancy, France. Served  
 in U. S. A. as Capt., in Med. Dept. With A. E. F.  
 in France.  
*Ad.*, 137 Pine Street, Tamaqua, Pa.
- \*Edgar David Grant Foltz, P.D.**  
*Thes.*, How to Become a Successful Pharmacist.  
 Retail pharmacist, Phila., Pa. Deceased, November  
 25, 1921.
- Richard Joseph Gasslein, P.D.**  
*Thes.*, Drug-Mill and Sieve Combined.  
 Physician.  
*Ad.*, 3314 N. 15th Street, Phila., Pa.
- William Patrick Grady, P.D.**  
*Thes.*, Benzine Extraction.  
 Physician.  
*Ad.*, 1214 N. 7th Street, Phila., Pa.
- John Francis Gryning, P.D.**  
*Thes.*, Camphor Tree and Its Products.  
 Mfg. pharmacist, with George B. Evans. Received  
 Certificate in Cosmetics and Perfumes, P. C. P.,  
 1921.  
*Ad.*, 206 Linden Street, Phila., Pa.
- Nathan Browne Hammond, P.D.**  
*Thes.*, Advantages of Collegiate Training in Phar-  
 macy.  
 Physician.  
*Ad.*, 4951 Walnut Street, Phila., Pa.
- Howard Ivina Hance, P.D.**  
*Thes.*, Examination of Strychnine Sulphate.
- \*John Lewis Hannum, P.D.**  
*Thes.*, The Beet Sugar Industry.  
 Deceased, April 10, 1917.
- Charles John Harvey, P.D.**  
*Thes.*, Liquor Magnesii Citratis.
- Alfred Heineberg, P.D.**  
*Thes.*, Examination of Jalap.  
 Instr. Mat. Med. P. C. P., 1905-17. (See page  
 438.)  
*Ad.*, N. E. Cor. 16th and Spruce Streets, Phila.,  
 Penna.
- Frederick William Hesse, P.C.**  
*Thes.*, Hemp.
- Harry Leady Hetrick, P.D.**  
*Thes.*, Aconitum.
- Charlea Ambrose Heyl, P.D.**  
*Thes.*, Official Chlorinated Compounds.
- Raymond High, P.D.**  
*Thes.*, Syrupus Ipecacuanhæ.  
 Chemist, National Drug Co., Phila., Pa. Mem.  
 Amer. Chem. Soc. Research work in Bussey Inst.,  
 Harvard Univ.  
*Ad.*, Delaware Ave. and Mifflin St., Phila., Pa.
- \*Robert John Hoagland, P.D.**  
*Thes.*, The Improvement of Three Official Syrups.  
 Deceased, March 26, 1912.
- Quintus Hoch, P.D.**  
*Thes.*, Acidum Aceticum.  
 Retail pharmacist. Treas. Kensington Assn. Retail  
 Druggists. Treas. Phila. Rexall Club. Recruiting  
 officer U. S. Mercbant Marine.  
*Ad.*, 2429 Frankford Avenue, Phila., Pa.
- Albert James Fowler Holland, P.D.**  
*Thes.*, Unguentum Hydrargyri Nitratiss.  
 Retail pharmacist.  
*Ad.*, 5900 Cobb's Creek Parkway, Phila., Pa.
- Edwin Merrimon Holt, P.D.**  
*Thes.*, Syrupus Lactucarii.  
 Pharmacist, U. S. Public Health Service.  
*Ad.*, 116 R Street, N. E., Washington, D. C.
- Peter David Hottenstein, P.D.**  
*Thes.*, Ammonium.  
 Physician and pharmacist. Graduated in medicine,  
 1903.  
*Ad.*, 4 S. 51st Street, Phila., Pa.
- Curtia Huzzard, P.D.**  
*Thes.*, Ergota.  
*Ad.*, 837 De Kalb Street, Norristown, Pa.
- Charlea Henry Jackson, P.D.**  
*Thes.*, Estimations of Lithia Tablets.  
 Retail pharmacist.  
*Ad.*, Pacific Avenue cor. Delaware Avenue, Atlantic  
 City, N. J.
- \*Arthur Bernstein James, P.D.**  
*Thes.*, Safeguards Against Deterioration of Stock.
- David Evans Jenkins, P.D.**  
*Thes.*, Elixirs.
- Eugene John Kaderly, P.D.**  
*Thes.*, Estimation of Pills of Ferrous Iodide.  
*Ad.*, New Philadelphia, Ohio.
- Frederick Illick Ketaer, P.D.**  
*Thes.*, Unguenta.
- Lucien Scott Kemp, P.D.**  
*Thes.*, Tincture of Iodine.  
*Ad.*, 5 S. 5th Street, Reading, Pa.
- \*Frederick William Kimberlin, P.D.**  
*Thes.*, Phytolacca Decandra.  
 Retail pharmacist, Norristown, Pa. Deceased,  
 October 11, 1918.



- Henry Chester Klusmeyer, P.D.**  
*Thes.*, Fluid Extract of Kola.  
 Retail pharmacist.  
*Ad.*, 8th and Federal Streets, Phila., Pa.
- Christopher Koch, Jr., P.D.**  
*Thes.*, Commercial Sodium Thiosulphate.  
 Retail pharmacist. Mem. State Pharm. Examining Board of Penna. Pres. Phila. Assn. Retail Druggists, 1912. Chm. War Camp Community Service, Camp Dix, N. J.  
*Ad.*, Wrightstown, N. J.
- William Frederick Constantine Kraus, P.D.**  
*Thes.*, Emulsions.  
*Ad.*, 4116 Haverford Avenue, Phila., Pa.
- Benjamin Krehl, P.D.**  
*Thes.*, Pancreatinum.  
 Retail pharmacist.  
*Ad.*, 3558 Germantown Avenue, Phila., Pa.
- \*Julius Paul Lauer, P.D.**  
*Thes.*, Commercial Malt Extracts.  
 Physician. Graduated in medicine, Univ. of Penna., 1908. Deceased, March 16, 1915.
- George Theodore Lehman, P.D.**  
*Thes.*, Oleum Olivae.  
 Proprietary medicines. Traveling representative Parke, Davis and Co., 13 years.  
*Ad.*, 2 E. Patterson Avenue, Columbus, Ohio.
- William Lock, P.D.**  
*Thes.*, The Microscope.  
 Dentist. Graduated in dentistry, Phila. Dental College, 1904.  
*Ad.*, 443 E. Girard Avenue, Phila., Pa.
- Thomas B. Love, P.D.**  
*Thes.*, The Remington Pestle.  
 Retail pharmacist. Masonic affiliation.  
*Ad.*, 2400 N. 19th Street, Phila., Pa.
- Theodore Brown McClintock, P.D.**  
*Thes.*, Assay of Fluid Extract of Guarana.
- Richard Ferris McClure, P.D.**  
*Thes.*, An Examination of Glycerin.  
*Ad.*, Henry Clay Street, Wilmington, Del.
- James Garrett McCollin, Jr., P.D.**  
*Thes.*, Examination of Tinctura Ferri Chloridi.  
*Ad.*, 5472 Baltimore Avenue, Phila., Pa.
- Joseph Francis McDonnell, P.D.**  
*Thes.*, Honey.  
 Retail pharmacist. Director Abington Library Assn. 1st pharmacist, Abington Hosp. Councilman, 3 terms.  
*Ad.*, 407 York Road, Jenkintown, Pa.
- John Allen McFall, P.D.**  
*Thes.*, The Valuation of Compound Jalap Powder.  
*Ad.*, Smith and Minis Streets, Charleston, S. C.
- Ivan LeRoy MacPherran, P.D.**  
*Thes.*, The Soda Fountain.  
 Cold Storage business. Wholesale dealer in butter, eggs, cheese, etc.  
*Ad.*, 101 S. Main Street, Jamestown, N. Y.
- Richard V. Mattison, Jr., P.G.**  
*Thes.*, Asbestos.  
 Vice-pres. and Gen. Mgr., Keasbey and Mattison Co.; Vice-pres. Bell Asbestos Mines; Vice-pres. Asbestos Shingle Slate and Sheeting Co.; Ex-pres. Asbestos-Crete Products Co.; Ex-pres. Asbestos Mfg. Co. Mem. numerous engineering and historical societies. Inventor, contributor to technical publications, etc. Mem. Exec. Com. of Asbestos industry under Council of National Defense.  
*Ad.*, Little Lindens Farm, Ambler, Pa.
- Graydon Duncan Mervine, P.D.**  
*Thes.*, Cera Flava.  
 Physician and surgeon. Graduated in medicine, Jeff. Med. College, 1904. Res. Phys. Williamsport Hosp. Surg. Kettle Creek Coal Co. Served in U. S. A. as Capt. Med. Dept. at Ft. Oglethorpe, and Hot Springs, Ark.  
*Ad.*, 204 W. Main Street, Lock Haven, Pa.
- Thomas Morse, Ph.G.**  
*Thes.*, Gossypium.  
*Ad.*, Calgary, Alberta, Canada.
- Joseph Daniel Moury, P.D.**  
*Thes.*, Belladonna.  
 Salesman.  
*Ad.*, 5807 Cedarhurst Street, Phila., Pa.
- Walter Clement Mutty, P.D.**  
*Thes.*, Terebinthina Canadensis.  
 Retail pharmacist. Received P. D. degree 1900.  
*Ad.*, Old Town, Maine.
- David Edward Nicklas, P.D.**  
*Thes.*, Koumiss.
- Otto William Osterlund, P.D.**  
*Thes.*, Cinchona and Its Bast-Fibres.  
 Pres. of P. C. P., 1921. (See page 369.)  
*Ad.*, 4600 Baltimore Avenue, Phila., Pa.
- William Smith Patrick, P.D.**  
*Thes.*, Formaldehyde.  
 Retail pharmacist. Mem. Atlantic City Board of Education; Board of Assessors, Atlantic City, N. J.  
*Ad.*, 2000 Atlantic Avenue, Atlantic City, N. J.
- Elwood Keech Pfiieger, P.D.**  
*Thes.*, Liquor Potassii Arsenitis.  
 Retail pharmacist.  
*Ad.*, 1451 N. 13th Street, Phila., Pa.
- Arthur Chew Price, P.D.**  
*Thes.*, Sponges.  
 Division Purchasing Agt., E. I. DuPont de Nemours and Co.  
*Ad.*, 404 W. 21st Street, Wilmington, Del.
- Robert Hugo Rsdefeld, P.D.**  
*Thes.*, Bismuthi Subnitras.  
 In optical business.  
*Ad.*, 323 S. 58th Street, Phila., Pa.
- David Walter Ranck, P.D.**  
*Thes.*, Valuation of Diluted Hydrobromic Acid.  
 Mfg. Chemist, Finley Acker Co.  
*Ad.*, 6507 N. Park Avenue, Oak Lane, Pa.
- DeWilton Smith Roberts, P.D.**  
*Thes.*, Camphora.
- \*Benjamin Roessner, P.D.**  
*Thes.*, Eugenia Jambolana.  
 Deceased, April 4, 1917.
- Edward Bancroft Rogers, P.D.**  
*Thes.*, Liquor Calcis.  
 Physician. Graduated in medicine, College of Physicians and Surgeons, Baltimore, Md., 1903. Mem. Collingswood Board of Education; N. J. State Med. Soc.; Camden Co. Med. Soc.; Director Collingswood National Bank. Post Commander Tatem Shields Post No. 17, American Legion of N. J. Former Prof. of pharmacology, Temple Univ. Served in U. S. A., Med. Dept., as 1st Lieut., Capt. and Major, Gen. Hosp. No. 5.  
*Ad.*, 814 Haddon Avenue, Collingswood, N. J.
- Deli Noblitt Ross, P.D.**  
*Thes.*, Suppositoria.  
 Retail pharmacist. Engaged in research work.  
*Ad.*, Bryn Mawr, Pa.
- Fred Philip Schwaemmle, Jr., P.D.**  
*Thes.*, Pharmacy as a Profession.  
 Salesman, Drug Products Co. Formerly retail pharmacist.  
*Ad.*, 301 7th Avenue, Haddon Heights, N. J.
- John Alphonsus Seitz, P.D.**  
*Thes.*, Liquor Hydrargyri Nitratis.  
 Mfg. chemist.  
*Ad.*, 205 Third Avenue, New York City.
- Charles Aloysius Seubert, P.D.**  
*Thes.*, Rhus Toxicodendron.  
 Retail pharmacist.  
*Ad.*, 16th and Brown Streets, Phila., Pa.

- Samuel Coward Shannon, P.D.**  
*Thes.*, Yellow Mercuric Oxide.  
 Traveling salesman, Sharp and Dohme. Scout-  
 master Troop 141, Boy Scouts, 5 years.  
*Ad.*, 1427 S. 53rd Street, Phila., Pa.
- \***William Henry Aloysius Sheehan, P.D.**  
*Thes.*, Pepsinum.  
 Deceased, May 10, 1908.
- Orville Ludwig Shirey, P.D.**  
*Thes.*, Valuation of Spiritus Ammonia Aromaticus.  
*Ad.*, Cumberland, Md.,
- Robert Grafton Shoults, (Ph.G.), P.C.**  
*Thes.*, Examination of Acacia.  
 Physician and pharmacist. Received M.D. degree,  
 McCormick Univ., 1910; LL.B. McKinley Univ.,  
 1916. Received P.D. degree, 1901.
- Clarence Leslie Sipes, P.D.**  
*Thes.*, Examination of Distilled Extract of Witch  
 Hazel.  
*Ad.*, Straw and Kendall Avenue, Bellevue, Pa.
- Arthur Nelson Smith, (Ph.G.), P.D.**  
*Thes.*, Value of Tragacanth and Acacia as Emulsi-  
 fying Agents.
- Charles Ellwood Rupert Smith, P.D.**  
*Thes.*, Passiflora Incarnata.  
 Salesman, Sharp and Dohme.  
*Ad.*, 209 S. 37th Street, Phila., Pa.
- Herman Hugo Snyder, P.D.**  
*Thes.*, Confectio Rosae.  
 Retail pharmacist.  
*Ad.*, 4715 5th Street, N. E., Seattle, Wash.
- Robert Nevin Stahle, P.D.**  
*Thes.*, Cod Liver Oil: Its Preparation.
- Peter Stang, P.D.**  
*Thes.*, Valuation of Donovan's Solution.  
 Traveling salesman for Wm. H. Rorer.  
*Ad.*, 1549 N. 58th Street, Phila., Pa.
- Chalmers Alexander Steel, P.D.**  
*Thes.*, The Model Pharmacy.  
 Retail pharmacist.  
*Ad.*, Tyrone, Pa.
- Phillip Samuel Stout, P.D.**  
*Thes.*, Ground-Nut Oil.  
 Physician. Graduated in medicine, Univ. of  
 Penna., 1904. Demonstrator Pathology, Univ. of  
 Penna., 1904-08. Asst. Out-patient Disp., 1908-11.  
 Chief at Rush Hosp., 1911-14, and Phila. Gen.  
 Hosp., 1911-1920. Asst. Post Grad. Sch. Univ. of  
 Penna., 1919-20, and Jeff. Med. College, 1919-20.  
 Mem. numerous med. societies and clubs. Capt.  
 Med. Reserve Corps, U. S. A.  
*Ad.*, 4701 Chester Avenue, Phila., Pa.
- E. Clark Strode, P.D.**  
*Thes.*, Camphor.  
*Ad.*, South Ardmore, Pa.
- Joseph Constant Turner, P.D.**  
*Thes.*, Phytolacca Decandra.
- William Watson Tyler, P.D.**  
*Thes.*, Aristol.
- James Wilber Van Dyke, P.D.**  
*Thes.*, Distilled Water.  
 Supt. Bloomfield Mills Co., drugs and spices.  
*Ad.*, Old Bridge, N. J.
- James Nathaniel Watson, P.D.**  
*Thes.*, Acidum Boricum.  
*Ad.*, 33rd and Powelton Avenue, Phila., Pa.
- William Stair Weakley, P.D.**  
*Thes.*, Crocus and Its Adulterants.  
 Physician. Graduated in medicine, Jeff. Med. Col-  
 lege, 1906. Formerly Instr. Pharmacognosy,  
 P. C. P. (See page 433.)  
*Ad.*, York, Pa.
- Katherine Powell West, P.C.**  
*Thes.*, Carica Papaya.  
*Ad.*, State Hospital, Norristown, Pa.
- Joseph Louis Wiza, P.D.**  
*Thes.*, Essence of Pepsin.  
 Physician.  
*Ad.*, 4420 E. Thompson Street, Phila., Pa.
- Elmer LeRoy Wyckoff, P.D.**  
*Thes.*, Nux Vomica.  
 Poultry breeder.  
*Ad.*, Aurora, N. Y.
- Annie Hawkins Young, P.D.**  
*Thes.*, Chloroform.
- Earl Emanuel Zeller, P.D.**  
*Thes.*, Senna.  
*Ad.*, 2701 Oxford Street, Phila., Pa.
- Chester Winsor Ziegler.**  
*Thes.*, Aqua Hydrogenii Dioxidi.  
 Bullion assayer, U. S. Mint.  
*Ad.*, 1427 Christian Street, Phila., Pa.

## Special Students.

## Calvin Otto Kinzey.

Received Certificate of Proficiency in Chemistry.  
 Supt. Cleveland Fruit Juice Co.  
*Ad.*, 2901 Kuehle Avenue, Cleveland, Ohio.

## Adam Wirth.

Received Certificate of Proficiency in Chemistry.  
 Retail pharmacist. Graduated Tulane Univ.  
 Demonstrator of Pharmacy, Tulane Univ. Mem.  
 A. Ph. A.; N. F. Committee; La. State Board of  
 Pharmacy.  
*Ad.*, 600 St. Charles Street, New Orleans, La.

## 1900

## William Hall Andrews, P.D.

*Thes.*, Toxins, Antitoxins and Serum Therapy.  
 Retail pharmacist.  
*Ad.*, 179 Broadway, Salem, N. J.

## Charles Howard Austin, P.D.

*Thes.*, Pharmacy.  
 Dentist. Graduated Penna. College Dental Surgery,  
 1904. Post grad. course orthodontia, 1917.  
*Ad.*, 50 Glenwood Avenue, E. Orange, N. J.

## \*Laura Alice Barker, P.D.

*Thes.*, Tinctures.  
 Deceased, June, 1906.

## Arthur Bartholomew, P.D.

*Thes.*, Menthol.  
 Mgr. and member of firm of John C. Baker Co.,  
 Cod Liver Oil, Phila., Pa.  
*Ad.*, 1422 N. 56th Street, Phila., Pa.

## John Wyckoff Bayles, P.D.

*Thes.*, The Aniline Dyes.  
*Ad.*, 159 E. Tulpehocken Street, Germantown,  
 Phila., Pa.

## Arthur William Beatty, P.D.

*Thes.*, Lippia Mexicana.  
 Physician. Graduated in medicine, Jeff. Med. Col-  
 lege, 1906.  
*Ad.*, Colver, Pa.

## \*William H. Pancoast Bishop, P.C.

*Thes.*, Medicated or Aromatic Waters.  
 Deceased, 1917.

## Joseph Oscar Blew, P.D.

*Thes.*, Acacia and Preparations.  
 Retail pharmacist.  
*Ad.*, 201 N. Massachusetts Avenue, Atlantic City,  
 New Jersey.

## Walter Brooks, P.D.

*Thes.*, Coto Bark.  
*Ad.*, 2033 Atlantic Avenue, Atlantic City, N. J.

- William Clinton Burchfield, P.D.**  
*Thes.*, Mushrooms.  
 Physician and pharmacist. Graduated in medicine, Univ. of Pittsburgh, 1912. Mem. staff Shenango Valley Hosp. and Instr. to nurses in Mat. Med. Mem. sch. board.  
*Ad.*, 1212 E. Washington Street, New Castle, Pa.
- Harrisa May Carey, P.D.**  
*Thes.*, Two Official Ointments.  
 Served with U. S. N. R. F. as Surgeon.
- \*Henry Lyle Caspersen, P.D.**  
*Thes.*, Syrup of Wild Cherry.
- Francis Joseph Connell, P.D.**  
*Thes.*, Emulsifiers.  
 Retail pharmacist.  
*Ad.*, Masontown, Pa.
- Ernest Fullerton Cook, P.D.**  
*Thes.*, Incompatibility of Alkaloids in Solution.  
 Professor of Operative Pharmacy and Director of Pharm. Lab., P. C. P. (See page 421.)  
*Ad.*, 145 N. 10th Street, Phila., Pa.
- Thomas Clark Corson, P.D.**  
*Thes.*, The Collection of Drugs by the Pharmacist.  
*Ad.*, 16th and Moore Streets, Phila., Pa.
- Roy W. Dentler, P.D.**  
*Thes.*, History of Sassafras.  
 Retail pharmacist.  
*Ad.*, 645 High Street, Pottstown, Pa.
- Edward Allen Desch, P.D.**  
*Thes.*, Amylum.  
 Pharmacist.  
*Ad.*, 240 N. 10th Street, Allentown, Pa.
- Harry Edgar Dietz, P.D.**  
*Thes.*, Malt.  
*Ad.*, 536 N. Queen Street, Lancaster, Pa.
- John Joseph Dooley, P.D.**  
*Thes.*, Iodine.  
 Retail pharmacist, Spec. Life Ins. Agt. Course in life ins.  
*Ad.*, 62 Wilson Street, Larksville, Pa.
- \*Harry Milton Dormau, P.D.**  
*Thes.*, Cocillana.  
 Deceased, November 7, 1918.
- John Thompson Doughty, P.D.**  
*Thes.*, Absorbent Cotton.  
 Pharmacist.  
*Ad.*, 20 Broad Street, Bloomfield, N. J.
- Eugene Henry Eddy, P.D.**  
*Thes.*, Bariit Dioxidum and Aqua Hydrogenii Dioxidum.  
 With R. L. Dollings Co., Investments. Received Certificate of Proficiency in Chemistry, P. C. P., 1900.  
*Ad.*, 1876 E. 31st Street, Lorain, Ohio.
- Manly Bruce Edwards, P.D.**  
*Thes.*, Germination of Seeds.  
 Pharmacist. In charge of Disp. at Harrisburg State Hosp., 5 years.  
*Ad.*, Independence, Iowa.
- William Arthur Eldridge, P.D.**  
*Thes.*, Petroleum Products.  
*Ad.*, Salem, N. J.
- \*Ellia Good Eshleman, P.D.**  
*Thes.*, Mangani Dioxidum.  
 Retail pharmacist, Phila. Deceased, November 8, 1912.
- Aaa Fabian, P.D.**  
*Thes.*, Botany in Pharmacy.  
 Retail pharmacist.  
*Ad.*, Radcliffe and Mulberry Streets, Bristol Pa.
- George Castor Faunce, P.D.**  
*Thes.*, Datura Stramonium.  
 Retail pharmacist.  
*Ad.*, 3473 Frankford Avenue, Phila., Pa.
- John Anthony Flaher, P.D.**  
*Thes.*, Antitoxin.  
*Ad.*, 1462 N. 59th Street, Phila., Pa.
- Harry Terry Fox, P.D.**  
*Thes.*, Oleum Santali.  
 Retail pharmacist.  
*Ad.*, Station No. 2, Zanesville, Ohio.
- Louisa Franke, P.D.**  
*Thes.*, Drug Adulteration.  
 Retail pharmacist. Mayor of Johnstown, 1916-1920. Mem. Local Draft Board, No. 1.  
*Ad.*, 708 Pine Street, Johnstown, Pa.
- Henry James Garritt, P.D.**  
*Thes.*, Potassii Cyanidum.  
 Retail pharmacist.  
*Ad.*, Huron, Ohio.
- Jacob Greenberg, P.D.**  
*Thes.*, A Problem in Chemical Nomenclature.  
*Ad.*, 6th and Reed Streets, Phila., Pa.
- Joseph Taylor Griest, P.D.**  
*Thes.*, The Education of a Pharmacist.  
 Physician. Graduated in medicine, Barnes Med. College, 1908. Prof. of Chemistry and Toxicology, Barnes Med. College, 3 years; later Clinical Prof. of Medicine in same institution, 4 years.  
*Ad.*, Metropolitan Bldg., St. Louis, Mo.
- Wilbert Hillman Guest, P.D.**  
*Thes.*, Pharmacy and Bacteriology.  
 Retail pharmacist. Formerly Secy. Los Angeles Retail Druggists Assn. Now 1st Vice-pres.  
*Ad.*, Huntington Park, Los Angeles, Cal.
- William Harvey Hampson, P.D.**  
*Thes.*, Rhamnus Purshiana.
- \*Wilson Howe Hand, P.C.**  
*Thes.*, The Bettendorf Test for the Limit of Arsenic in Bismuthi Subnitras.  
 Received P.D. degree, 1905.
- Edmund Franklin Harmony, P.D.**  
*Thes.*, The Examination of Chlorinated Lime.  
*Ad.*, Broad Street Station Pharmacy, Phila., Pa.
- Christian Henry Hauber, P.D.**  
*Thes.*, Hypericum Perforatum.  
*Ad.*, 2nd and Laurel Streets, Phila., Pa.
- John George Heckman, P.D.**  
*Thes.*, The Pharmacist as an Analyst.  
 Retail pharmacist.  
*Ad.*, Meadville, Pa.
- George Elmer Heinze, P.D.**  
*Thes.*, Mydriatic Drugs.  
*Ad.*, Ashland, Pa.
- Paul Edward Hemberger, P.D.**  
*Thes.*, Syrupus Ferri Iodidi.  
*Ad.*, 438 W. Queen Lane, Germantown, Phila., Pa.
- John Henry Hilbish, P.D.**  
*Thes.*, Gelatinum.
- William Gustav Hillebrand, P.D.**  
*Thes.*, Rhamnus Purshiana.  
 Retail pharmacist.  
*Ad.*, 1840 Wharton Street, Phila., Pa.
- Harry Wilbert Hughes, P.D.**  
*Thes.*, Glass.  
*Ad.*, 18 E. 88th Street, New York City.
- Moreland Russell Irby, P.D.**  
*Thes.*, Gossypium Herbaceum.



- \*William Charles Jaeger, P.D.**  
*Thes.*, Commercial Amyl Nitrite.  
 Retail pharmacist, Phila. Received Certificate of Proficiency in Chemistry, P. C. P., 1900. Deceased, October 7, 1918.
- Rupen Hagop Kazanjian, P.D.**  
*Thes.*, Pharmacy in Armenia.  
*Ad.*, 5th and Upas Street, San Diego, Cal.
- William Frederick Kiefer, P.D.**  
*Thes.*, History of Vaccine.  
 With Fritzsche Bros., Essential Oils.  
*Ad.*, 420 Bulletin Bldg., Phila., Pa.
- Harry Edward Kilgus, P.D.**  
*Thes.*, Panax Quinquefolium.  
*Ad.*, Toronto, Ohio.
- Raymond Keck Kincaid, P.D.**  
*Thes.*, Glycerin.  
 Retail pharmacist. Mem. B. P. O. E.; Kiwanis Club; Chamber of Commerce. Masonic affiliation.  
*Ad.*, 1518 Chew Street, Allentown, Pa.
- Lloyd Stanley King, P.D.**  
*Thes.*, Asafoetida.  
 Retail pharmacist.  
*Ad.*, Cynwyd, Pa.
- Harry Augustus Kintzer, P.D.**  
*Thes.*, Aristol.
- Oscar Landauer, P.D.**  
*Thes.*, Spiritus Aetheris Nitrosi.  
 Physician.  
*Ad.*, 601 S. 9th Street, Phila., Pa.
- \*Samuel William Lehman, P.D.**  
*Thes.*, Ilydrastis and Its Preparations.
- Joseph Jacob Levy, P.D.**  
*Thes.*, Acidum Sulphuricum Dilutum.  
 Served in U. S. A. Med. Dept., Camp Greenleaf, Georgia.  
*Ad.*, Reedley, Cal.
- \*Ward Boleyn McCaffrey, P.D.**  
*Thes.*, The Practice of Pharmacy in the South.  
 Deceased, 1917.
- Charles Nevin McClure, P.D.**  
*Thes.*, Eriodictyon.  
 Retail pharmacist.  
*Ad.*, Cumberland and Cedar Streets, Phila., Pa.
- William Joseph McDonnell, Ph.G.**  
*Thes.*, Sinapis Nigra.  
*Ad.*, 5415 Market Street, Phila., Pa.
- \*William Thomas McElwain, P.D.**  
*Thes.*, A Sidelight on Pharmacy.  
 Deceased, February 28, 1922.
- Joseph Quarll Mackey, P.D.**  
*Thes.*, The Relation of the Doctor to the Pharmacist.  
 Pharmacist, Strayer Drug Co.  
*Ad.*, 2415 Jefferson Street, Wilmington, Del.
- Frank Joseph Maler, P.D.**  
*Thes.*, The Druggist and Doctor in the Country.  
 Retail pharmacist.  
*Ad.*, Woodbury, N. J.
- Harry Lionel Meredith, P.D.**  
*Thes.*, Practical Pharmacy of Coconut Oil.  
 Clinical and bacteriological lab. City bacteriologist. Pres. Maryland Pharm. Assn.; Pres. Maryland Board of Pharm.; Vice-pres. National Drug Trade Conference; Chm. Com. National Legislation, National Assn. Boards of Pharmacy. Graduated 1919, Univ. of Penna. in Clinical and Sanitary Bact. Pres. Hagerstown Board of Trade. Mem. Maryland Council of Defense; Federal Fuel Commission; Enlistment Bureau, Emergency Fleet Corp.  
*Ad.*, Hagerstown, Md.
- Alfred William Merz, P.D.**  
*Thes.*, Diphtheria Antitoxin.  
 Retail pharmacist. Mem. I. O. O. F.  
*Ad.*, 1401 N. 28th Street, Phila., Pa.
- George Albert Michael, P.D.**  
*Thes.*, Unguentum Aquæ Rosæ.  
 Retail pharmacist.  
*Ad.*, 2900 Germantown Avenue, Phila., Pa.
- Carl Frederick Edward Moeller, P.D.**  
*Thes.*, Emulsions.  
 Retail pharmacist.  
*Ad.*, 200 W. Chelton Avenue, Germantown, Phila., Penna.
- Lulu Annette Morgan, P.C.**  
*Thes.*, Acidum Boricum.  
 Received P.D. degree, 1910.  
*Ad.*, 506 S. Main Avenue, Scranton, Pa.
- William Torrey Morris, 2nd., P.D.**  
*Thes.*, Antimonium Sulphuratum and Antimonii Sulphidum.
- Willard Ohliger, P.D.**  
*Thes.*, Some Preparatory Experiments on Physiological Assay by Means of Plants.  
 Pharmaceutical and chemical mfg. Vice-pres. and Gen. Mgr. Frederick Stearns and Co., Detroit, Mich. Chm. Drug and Chem. Section, Med. Dept., Council of National Defense.  
*Ad.*, Care of Frederick Stearns and Co., Detroit, Michigan.
- William George Peck, Ph.G.**  
*Thes.*, Volatile Oils.  
 Retail pharmacist.  
*Ad.*, Hunting Park and Reese Streets, Phila., Pa.
- \*Arthur Peiffer, P.D.**  
*Thes.*, Improved Suppository Mould.  
 Deceased, October, 1918.
- Daniel Lewis Rectenwald, P.D.**  
*Thes.*, Artificial Digestion and Artificial Digestion Ferments.  
 Physician. Graduated in medicine, Western Univ. of Penna.  
*Ad.*, 747 Warrington Avenue, Pittsburgh, Pa.
- \*Clarence Emerson Ricketts, P.D.**  
*Thes.*, Odorless Iodoform.  
 Deceased, April 23, 1908.
- \*James Spang Saurman, P.D.**  
*Thes.*, Aconite.  
 Retail pharmacist, Norristown, Pa. Deceased, 1904.
- Frank Casper Schad, P.D.**  
*Thes.*, Encalyptus Globulus.  
*Ad.*, 88 Reade Street, New York City.
- John Calvin Scott, P.D.**  
*Thes.*, Commercial Cold Cream.  
 Physician. Graduated in medicine, Medico-Chi. College, 1906. Received honorary degree, Phar.D., Medico-Chi. College, 1911. Director Isaac Ott Research Lab. of Physiology, Medico-Chi., 1906-1913. Now Prof. of Physiology Temple Univ. Med. and Dental Colleges. Mem. of Medical and physiological societies.  
*Ad.*, 614 W. Allegheny Avenue, Phila., Pa.
- \*Levi Scott, P.D.**  
*Thes.*, Ginseng.
- Harry Adam Fahnestock Ssabold, P.D.**  
*Thes.*, Analysis of Hepatica.  
 Retail pharmacist.  
*Ad.*, Annville, Pa.
- Charles Louis Selp, P.D.**  
*Thes.*, The Profession.  
 Retail pharmacist. Pres. Kensington Assn. Retail Druggists. Chm. Exec. Com. Philadelphia Assn. Retail Druggists, 1919; Pres., 1920. Pres. 31st Sectional Sch. Board.  
*Ad.*, 2034 East York Street, Phila., Pa.

**Peter Smith Settle, P.D.**

*Thes.*, Pharmaceutical Ideals.  
*Ad.*, Doylestown, Pa.

**Henry Shapiro, P.D.**

*Thes.*, Capsule Filling Machine.  
*Ad.*, Jewish Hosp., Phila., Pa.

**Herman Christian Slegle, P.D.**

*Thes.*, Syrup Hypophosphites.  
Retail pharmacist.  
*Ad.*, 407 Bigelow Street, Peoria, Ill.

**George Carroll Smith, P.G.**

*Thes.*, Mercury.

**Herbert Arthur Speck, P.D.**

*Thes.*, Requisites of a Druggist.  
*Ad.*, American Annex, St. Louis, Mo.

**Abraham Homer Stacks, P.D.**

*Thes.*, Oleum Ricini.  
Retail pharmacist.  
*Ad.*, 35 E. Cottage Place, York, Pa.

**William Samuel Stinson, P.D.**

*Thes.*, Belladonna.  
Sales Mgr. for George B. Evans.  
*Ad.*, 1106 Chestnut Street, Phila., Pa.

**Louis Stolz, P.D.**

*Thes.*, Extraction of Poisons.  
*Ad.*, Syracuse, N. Y.

**Edward Browning Stone, Jr., P.D.**

*Thes.*, Alkaloids.  
*Ad.*, 1011 Princess Avenue, Camden, N. J

**James Francis Sullivan, P.D.**

*Thes.*, Diphtheria Antitoxin.  
*Ad.*, 829 N. 5th Street, Camden, N. J.

**Carlton Pierce Sunday, P.D.**

*Thes.*, Vaccine Virus.

**Lynwood S. Taylor, P.D.**

*Thes.*, Diphtheria Antitoxin.  
*Ad.*, Spring City, Pa.

**Robert Woodliffe Tucker, P.D.**

*Thes.*, The Art of Compressing Tablets.  
Gen. Mgr. Klondike Imperial Divide Mining Co.  
*Ad.*, 1170 Sutter Street, San Francisco, Cal.

**John LaMonte Werts, P.D.**

*Thes.*, Gentiana.  
With National Aniline and Chemical Co., N. Y.  
Secy-Treas. Board of Pharmaceutical Examiners for the Philippines, 1902-1905. Volunteered, 1917.  
Stationed at Ft. Oglethorpe, Ga.  
*Ad.*, 4837 Walton Avenue, Phila., Pa.

**Charles Daniel Witman, P.D.**

*Thes.*, Quercus Suber.  
*Ad.*, 105 N. 52nd Street, Phila., Pa.

**Samuel David Witmeyer, P.D.**

*Thes.*, Syrupus Ferri Iodidi.  
Mgr., Matthews Bros., Inc. Recruiting Agt. U. S. Merchant Marine.  
*Ad.*, 922 Gibson Street, Scranton, Pa.

**Alexander Young, Jr., P.D.**

*Thes.*, Honey.  
*Ad.*, 6001 Lansdowne Avenue, Phila., Pa.

**Edwin Henry Young, P.D.**

*Thes.*, Sponges.  
Retail pharmacist.  
*Ad.*, Broadway and 4th Street, Bethlehem, Pa.

**Special Student.**

**Ignatz Sness.**

Received Certificate of Proficiency in Chemistry.

**1901**

**Harley Roscoe Alden, P.D.**

*Thes.*, Assay of Spiritus Aetberis Nitrosi.  
Retail pharmacist.  
*Ad.*, 4 Lishon Street, Lewistown, Me.

**Arthur David Anstock, P.D.**

*Thes.*, Substitution in Pharmacopœial Formulæ.  
Mgr. Henry C. Blair's Drug Store. Mem. Sigma. Alpha Epsilon Frat. Served as Pvt. Co. E. 8th Penna. Volunteers, Spanish-American War.  
*Ad.*, 800 Walnut Street, Phila., Pa.

**Eldredge Ewing Barnett, P.D.**

*Thes.*, Liquor Potassii Arsenitis U. S. P.  
*Ad.*, P. O. Box 646, Berkeley, Va.

**Robert Nevens Bell, P.D.**

*Thes.*, Keratinized and Other Enteric Pills.  
*Ad.*, 5140 Chester Avenue, Phila., Pa.

**Arthur Clarence Bender, P.C.**

*Thes.*, The Saponin of the Root of Phytolacca  
Decandra L.  
Received P.D. degree, 1907.

**Frederick James Benner, P.D.**

*Thes.*, Russian and American Pharmacy.  
Clerk, Bethlehem Steel Co.  
*Ad.*, 234 Wall Street, Bethlehem, Pa.

**Theodore Karl Boesch, P.D.**

*Thes.*, Ancient History of Pharmacy.  
*Ad.*, York Road and Haines Street, Phila., Pa.

**Paul Kline Boltz, P.D.**

*Thes.*, Pharmacology of Jaborandi.  
*Ad.*, Girard and Susquehanna Avenue, Phila., Pa.

**George Henry Borrowes, P.D.**

*Thes.*, Pharmacy.  
Physician.  
*Ad.*, 160 N. 20th Street, Phila., Pa.

**Theophilus Henry Boyesen, Jr., P.D.**

*Thes.*, Digitalis.  
Physician and pharmacist. Graduated in medicine, Jeff. Med. College, 1905. Inspector of schools. Examiner County Draft Board.  
*Ad.*, 100 Phila. Avenue, Egg Harbor City, N. J.

**Manlif Lewis Branin, P.D.**

*Thes.*, Cochineal  
Expeditior, N. Y. Shipbuilding Co. Studied law Amer. Correspondence Sch. Masonic affiliation.  
*Ad.*, 339 Northampton Street, Easton, Pa.

**Frederic Arthur Brenner, P.D.**

*Thes.*, Synthetic Remedies.  
Served with Base Hosp., No. 20.  
*Ad.*, Care of Pullman Car Co., Phila., Pa.

**Virginia Cade Brookes, P.C.**

*Thes.*, The Mesquite.  
Received P.D. degree, 1902.  
*Ad.*, Waelder, Texas.

**Frank Leslie Cather, P.D.**

*Thes.*, Disguising the Taste of Castor Oil.

**Lane Verlenden Collins, P.D.**

*Thes.*, Nickel.  
Retail pharmacist.  
*Ad.*, 1801 S. 15th Street, Phila., Pa.

**Earl Hobart Cone, P.D.**

*Thes.*, Bottled Ammouia.  
Pres. and Treas. E. H. Cone, Inc., Retail Druggists. Formerly with Wm. S. Merrell Chemical Co., and Treas. Lamar and Rankin Drug Co. Past officer of Atlanta Retail Merchants Assn.; Atlanta Advertising Club; Atlanta Convention Bureau; Chamber of Commerce; Boy Scouts; Salesmanship Club; Gridiron Club; Atlanta Retail Druggists Assn. Pres. Atlanta Rotary Club; Director Citizens and Southern Bank; Vice-pres. Southeastern Fair Assn.  
*Ad.*, Atlanta, Ga.



- Howard Romaine Converse, P.D.**  
*Thes.*, Strophanthus.  
*Ad.*, Montoursville, Pa.
- William Brown Davis, P.D.**  
*Thes.*, Pimpinella Anisum.  
Retail pharmacist. School director.  
*Ad.*, 535 Main Street, Edwardsville, Pa.
- Chester Clayton Doan, P.D.**  
*Thes.*, Oleum Ricini.  
*Ad.*, 407 Main Street, Coatesville, Pa.
- Edwin Alfred Dunn, P.D.**  
*Thes.*, Magnesium Carbonate.  
*Ad.*, Braddock Avenue, Braddock, Pa.
- Paul Eckels, P.D.**  
*Thes.*, Nicotiana Tabacum.  
Retail pharmacist. Mem. Louisiana State Board of Pharmacy.  
*Ad.*, Crawley, La.
- Roswell Martin Eddy, P.D.**  
*Thes.*, Spiritus Aetheris Nitrosi.  
*Ad.*, Stroudsburg, Pa.
- George Theodore Eppler, P.D.**  
*Thes.*, Sodii Chloridum.  
Retail pharmacist.  
*Ad.*, 1855 N. 20th Street, Phila., Pa.
- Florence Augusta Fegley, P.D.**  
*Thes.*, Official Medicinal Plants of Lehigh County.  
*Ad.*, 544 Front Street, Allentown, Pa.
- \*John Stauffer Fegley, P.D.**  
*Thes.*, Oleum Morrhuæ.
- Adolph Gustave Fischer, P.D.**  
*Thes.*, Tincture of Ferric Chloride.  
Retail pharmacist.  
*Ad.*, 967 N. 5th Street, Phila., Pa.
- George Calvin Fisher, P.D.**  
*Thes.*, Substantial Powder Folder.  
*Ad.*, 526 E. Indiana Avenue, Phila., Pa.
- Samuel Clarkson Fleming, P.D.**  
*Thes.*, Eriodictyon.
- Rolland Hall French, P.D.**  
*Thes.*, Seidlitz Powders.  
Dealer in heavy chemicals, wood alcohol, etc. Pres. Chemical Novelty Works; Vice-pres. Marine Traders Corp.; Mem. N. J. Pharm. Assn. Received Certificate of Proficiency in Chemistry, P. C. P., 1901.  
*Ad.*, 38 Ridgewood Terrace, Maplewood, N. J.
- Elmer Franklin Weaver Garber, P.D.**  
*Thes.*, The Cultivation of Tobacco.  
Retail pharmacist. Recruiting officer U. S. Merchant Marine.  
*Ad.*, Mt. Joy, Pa.
- Harry Jacob Goodyear, P.D.**  
*Thes.*, An Antidote to Gelsemium Sempervirens.  
Retail pharmacist.  
*Ad.*, 5925 Cedar Avenue, Phila., Pa.
- Willard Rice Graham, P.C.**  
*Thes.*, Pumpkin Seed Oil.  
Manager, Smith, Kline & French Co., Laboratory.  
*Ad.*, 35 Poplar Street, Phila., Pa.
- \*John Edward Gruel, P.D.**  
*Thes.*, Gelatin Capsules.  
Deceased, March 14, 1922.
- Kittie Walker Harboard, (Mrs. H. F. Graver), P.D.**  
*Thes.*, Berberis Aquifolium.  
Formerly retail pharmacist, Mem. Oregon State Board of Pharmacy; 3rd Vice-pres. National Assn. Boards of Pharmacy.  
*Ad.*, 606 S. High Street, Salem, Ore.
- William Keuster Garfield Harris, P.D.**  
*Thes.*, Thymol Iodide.  
Retail pharmacist.  
*Ad.*, Flatiron Bldg., Altoona, Pa.
- Samuel Reed Hassinger, P.D.**  
*Thes.*, Analysis of One Thousand Prescriptions.
- Mabelle Haydock, P.D.**  
*Thes.*, A Bacteriological Examination of Some Clinical Thermometers.  
*Ad.*, 2726 W. Somerset Street, Phila., Pa.
- Prestle Milroy Headings, P.C.**  
*Thes.*, Glycerin.  
Retail pharmacist, automobile salesman, garage owner. Received P.D. degree, 1903.  
*Ad.*, Lewistown, Pa.
- Herbert Monroe Highfield, P.D.**  
*Thes.*, Potassa et Calx Sulphurata.  
*Ad.*, 153 Woodlawn Avenue, Zanesville, Ohio.
- George Price Hill, P.D.**  
*Thes.*, Atropa Belladonna.  
Physician. Surgeon for Lehigh Coal and Navigation Co. Mem. P. O. S. of A.; B. P. O. E. Masonic affiliation. Examining phys. Carbon Co. Draft Board.  
*Ad.*, Summit Hill, Pa.
- \*Lewia Moore Hires, P.D.**  
*Thes.*, Vaccine Vitus.  
Retail pharmacist, Burlington, N. J. Deceased, 1920.
- \*Charles Edward Hoffert, P.D.**  
*Thes.*, Milk Sugar and Its Uses in Pharmacy.  
Deceased, 1909.
- Ira Calvin Hoffman, P.D.**  
*Thes.*, Maple Sugar.
- Franklin Faxon Houston, P.D.**  
*Thes.*, Antitoxin.  
*Ad.*, West Grove, Pa.
- Guy Garfield Hubler, P.D.**  
*Thes.*, Phosphorus.  
Retail pharmacist. Registrar of Vital Statistics; Borough Auditor; Mem. Board of Health. Deputy Food Administrator.  
*Ad.*, Gordon, Pa.
- James Stuart Jetton, P.D.**  
*Thes.*, Ginseng.  
*Ad.*, Nunnally Candy Co., Atlanta, Ga.
- Edward Jonathan Klopp, P.D.**  
*Thes.*, Refined Coconut Oil.  
Physician. Graduated in medicine, Jeff. Med. College, 1902. Asst. surg. to Jeff., Penna. and Germantown Hosps. Demonstrator of surgery in Jeff. Med. College. Mem. Medical Advisory Board.  
*Ad.*, 1611 Spruce Street, Phila., Pa.
- Charles George Knerr, P.D.**  
*Thes.*, Potassii Nitras.  
*Ad.*, 927 Turner Street, Allentown, Pa.
- Otto Louisa Kraus, P.D.**  
*Thes.*, Coal Tar.  
Retail pharmacist.  
*Ad.*, 829 N. 26th Street, Phila., Pa.
- Burdett Seldon Lacy, P.D.**  
*Thes.*, Manaca.  
Retail pharmacist.  
*Ad.*, 127 S. 4th Street, Phila., Pa.
- Wilbur John Leib, P.D.**  
*Thes.*, Glonoinum.  
Wholesale and retail pharmacist.  
*Ad.*, 3rd and Washington Streets, Camden, N. J.
- Fielding Otis Lewis, P.D.**  
*Thes.*, Tecoma Radicans.  
Physician.  
*Ad.*, 261 S. 17th Street, Phila., Pa.



- Louis Williams Liebert, P.D.**  
*Thes.*, Rhamnus Purshiana.  
*Ad.*, 27th and Sarah Streets, Pittsburgh, Pa.
- James Darrah Luddy, P.D.**  
*Thes.*, Rhus Toxicodendron.  
*Ad.*, James and Grant Streets, Torresdale, Pa.
- Frederick George Luebert, P.D.**  
*Thes.*, Examination of Commercial Hypochlorites.  
 Retail pharmacist.  
*Ad.*, 1418 N. 4th Street, Phila., Pa.
- Benjamin Hoffer McClurg, P.D.**  
*Thes.*, Emulsions.  
 Salesman, Colgate and Co. In charge of Drug Dept. Penna. Hosp. 2 years.  
*Ad.*, 1031 S. 54th Street, Phila., Pa.
- Robert Joseph McDermott, P.D.**  
*Thes.*, Borax.  
*Ad.*, Malvern, Pa.
- Warren Lester MacFadden, P.D.**  
*Thes.*, A Resin-Free Syrup of Senna.  
 Supt., Lawrence-MacFadden Co.  
*Ad.*, 118 Brookline Blvd., Brookline, Del. Co., Pa.
- John James MacPhee, P.D.**  
*Thes.*, Gossypium Herbaceum.  
*Ad.*, 3000 California Avenue, N. S., Pittsburgh, Pa.
- Harry Fillmen Mauger, P.D.**  
*Thes.*, Liquor Magnesii Citratis.  
 Representative, The Upjohn Co. Mem. Kiwanis Club; B. P. O. E., Clover Club; Commercial Travelers, etc.  
*Ad.*, 1337 Good Street, Reading, Pa.
- Victor Clyde Michels, P.D.**  
*Thes.*, Loss of Moisture in Inorganic Salts.  
 Retail pharmacist and farm manager. Chm. Community Commerce Club; County Chm. Repub. Central Com.; School Treasurer.  
*Ad.*, Albion, Ill.
- Edwin Mason Murphey, P.D.**  
*Thes.*, The U. S. P. Products of the Pine.  
 Retail pharmacist.  
*Ad.*, Macon, Miss.
- Guy Musselman Mueser, P.D.**  
*Thes.*, The Modification of Milk as of Interest to Pharmacists.  
 Physician and surgeon. Graduated in medicine, Jeff. Med. College, 1910. Res. Phys. Jeff. Hosp. Surg. to Punxsutawney Hosp. Served in U. S. A. Med. Dept., Base Hosp. No. 38, as major. With A. E. F. in France.  
*Ad.*, Punxsutawney, Pa.
- George Hill Nauss, P.D.**  
*Thes.*, Acacia.  
*Ad.*, 1425 Diamond Street, Phila., Pa.
- Thomas William Penrose, P.C.**  
*Thes.*, Distilled Water.  
 Received P.D. degree, 1902.  
 Physician.  
*Ad.*, 4833 N. Hutchinson Street, Phila., Pa.
- Adam William Pfeieger, P.D.**  
*Thes.*, Pilocarpus Pennatifolius.  
*Ad.*, Care of United Drug Co., Boston, Mass.
- Jacob Sylvester Picking, Jr., P.D.**  
*Thes.*, Elixir Pyrosphosphas Ferri, Quininæ et Strychninæ.  
*Ad.*, Somerset, Pa.
- Harry George Lomison Pollins, P.C.**  
*Thes.*, The Preparation of Ointments.
- Arthur Edward Post, P.D.**  
*Thes.*, Tinctura Opii Deodorati with Paraffin.
- Robert Clayton Pursel, P.D.**  
*Thes.*, Sanguinaria.  
 Mfr. of pharmaceutical specialties and perfumes.  
*Ad.*, 280 Pearl Street, New York City.
- William Heyl Raser, P.D.**  
*Thes.*, Tinctura Opii Deodorati by Benzine.  
 Retail pharmacist. Served with American Forces in France as Y. M. C. A. Secy.  
*Ad.*, 6th and Walnut Streets, Reading, Pa.
- Clarence Hyatt Reynolds, P.D.**  
*Thes.*, North American Hemlock and Tanning Process.  
 Retail pharmacist. Mem. Penna. Reserve Militia.  
*Ad.*, 110 Redwood Avenue, Warren, Pa.
- Luther K. Rhoads, P.D.**  
*Thes.*, Asafoetida.  
 Division Chief, Internal Revenue Service. Director, Kiwanis Club.  
*Ad.*, 245 N. 5th Street, Reading, Pa.
- William Rinker, P.D.**  
*Thes.*, Rhamnus Purshiana.
- George William Roberts, P.D.**  
*Thes.*, Copaifera Officinalis.  
*Ad.*, 13th and Poplar Streets, Phila., Pa.
- \*Walter Clyde Rogers, P.D.**  
*Thes.*, Relation of Physician and Druggist.  
 Deceased, May 11, 1916.
- Thomas Andrew Ryan, P.C.**  
*Thes.*, Adeps Benzoinatus.  
 Received P.D. degree, 1916.  
*Ad.*, Susquehanna, Pa.
- Gaston St. Jacques, P.D.**  
*Thes.*, Tinctures Common to Both the U. S. P. and the B. P.
- Irvin Ellsworth Saul, P.D.**  
*Thes.*, Unguentum Aquæ Rosæ.  
*Ad.*, 25th and Cambria Streets, Phila., Pa.
- Adolph Alexander Beyer Schmerker, P.D.**  
*Thes.*, Tincture of Myrrh.
- Emil Sebastian Schneider, P.D.**  
*Thes.*, Tannin and Its Extraction.  
 Physician and pharmacist. Graduated in medicine, Jeff. Med. College, 1905.  
*Ad.*, 3050 Frankford Avenue, Phila., Pa.
- Joseph Griggs Schooley, P.D.**  
*Thes.*, Gossypium Herbaceum.  
 Mgr. for Charles H. Scarborough.  
*Ad.*, 849 N. 42nd Street, Phila., Pa.
- Henry William Scott, P.C.**  
*Thes.*, Assay of Zinc Ore.
- \*Clarence Eugene Shafer, P.D.**  
*Thes.*, Malt and Its Preparations.  
 Deceased, April 18, 1915.
- Byron Guest Shannon, P.D.**  
*Thes.*, Perfumes in the Drug Store.
- Lionel Gilliland Skillman, P.D.**  
*Thes.*, Unguentum Hydrargyri Nitratis.
- Charles Eben Slocum, P.D.**  
*Thes.*, Aurum.  
*Ad.*, Lake City, Col.
- Edward Gibson Spears, P.D.**  
*Thes.*, Aqua Hydrogenii Dioxidi.  
*Ad.*, 347 N. 12th Street, Phila., Pa.
- William Forsaith Steever, P.D.**  
*Thes.*, Glyceritum Rhois Glabræ.  
 Retail pharmacist. Secy-treas. Allison Hill Retail Druggists Assn., Harrisburg, Pa.  
*Ad.*, 1324 Walnut Street, Harrisburg, Pa.
- Irwin Sylvester Stoudt, P.D.**  
*Thes.*, Capsules.  
*Ad.*, 9th and Walnut Streets, Reading, Pa.

- Benjamin Franklin Stout, P.D.**  
*Thes.*, The Twentieth Century Pharmacist.  
 Retail pharmacist.  
*Ad.*, 843 Friendship Street, Fox Chase, Phila., Pa.
- Alexander John Strathie, P.D.**  
*Thes.*, Acidum Salicylicum.  
 Retail pharmacist.  
*Ad.*, Newtown, Pa.
- Charles Henry Texter, P.D.**  
*Thes.*, Horse Chestnut.  
 Retail pharmacist.  
*Ad.*, Quakertown, Pa.
- John Beard Tingle, P.D.**  
*Thes.*, Flour Sulphur.  
 Salesman, Norwich Pharmacal Co.  
*Ad.*, 1134 S. Wilton Street, Phila., Pa.
- Samuel Urffer, P.D.**  
*Thes.*, Iron.  
 Retail pharmacist.  
*Ad.*, 2860 N. 5th Street, Phila., Pa.
- Levi Morton VanGilder, P.D.**  
*Thes.*, Diphtheria Antitoxin.  
 Mgr. for J. C. Fitch, 16th and Vine Streets,  
 Phila., Pa.  
*Ad.*, 1454 N. 58th Street, Phila., Pa.
- Herbert James Watson, P.D.**  
*Thes.*, Color Standards of the Vegetable Drugs of  
 the U. S. P.  
 Instr., P. C. P., 1903-04. (See page 435.)  
*Ad.*, Newark, Del.
- Harry Wilkinson, P.D.**  
*Thes.*, Surgical Antiseptics.  
 Retail pharmacist.  
*Ad.*, 147 S. Broad Street, Phila., Pa.
- William Conrad Wolfer, P.D.**  
*Thes.*, Antipyrin.  
 Pharmacist.  
*Ad.*, 4043 Market Street, Phila., Pa.
- John Philip Wolfinger, P.D.**  
*Thes.*, Erythroxyton Coca.  
 Mfr. of hosiery. Treas. and mgr. Wolfinger  
 Knitting Mills. Mem. Mfrs. Club, Phila. and  
 Wyomissing; Univ. Club of Reading, etc.  
*Ad.*, Walnut and Rose Streets, Reading, Pa.
- \***Charles Henry Ziegler, P.D.**  
*Thes.*, Syrupus Ferri Iodidi.  
 Deceased, December 10, 1905.
- Special Students.**
- Frank Arthur Cavanagh.**  
 Received Certificate of Proficiency in Chemistry.  
*Ad.*, 118 Woodlief Street, San Antonio, Texas.
- \***Frank G. D. Smith, Ph.G.**  
 Received Certificate of Proficiency in Chemistry.
- Frederick Walton Staley.**  
 Received Certificate of Proficiency in Chemistry.  
 Chief Engineer Fuel Oil, The Texas Co. Mem.  
 Petroleum War Service Co., Fuel Administration,  
 New York.  
*Ad.*, 75 Hollywood Avenue, East Orange, N. J.
- Olas Earl Winters.**  
 Received Certificate of Proficiency in Chemistry.  
*Ad.*, 1730 Girard Avenue, Phila., Pa.
- 1902
- William Brown Ackerman, P.D.**  
*Thes.*, Some Notes on the Morphology and Culti-  
 vation of Digitalis.  
*Ad.*, 5717 Baltimore Avenue, Phila., Pa.
- William Algernon Alston, P.D.**  
*Thes.*, Cinchona.  
*Ad.*, Hagood, S. C.
- Herbert Oscar Baer, P.D.**  
*Thes.*, Liquor Ferri Chloridi.  
 Retail pharmacist.  
*Ad.*, Wheeling, West Va.
- Daniel Baker, P.C.**  
*Thes.*, Fat-Free Tincture of Strophanthus.
- David Elmer Beegle, P.D.**  
*Thes.*, Suprarenal Glands.  
*Ad.*, New Kensington, Pa.
- \***Joseph Herman Berberlich, P.D.**  
*Thes.*, Morphine with Its Antidotes.
- Arthur Henry Binder, P.D.**  
*Thes.*, Cereus Grandiflorus.  
 Retail pharmacist. Pres. Chamber of Commerce;  
 Director Wellington Realty Co.; Mem. Wellington  
 Council.  
*Ad.*, Wellington, Ohio.
- Robert St. Clair Blew, P.D.**  
*Thes.*, Arsenic and Its Antidote.  
 Retail pharmacist. Lieut. Inf., State Militia of  
 New Jersey.  
*Ad.*, Bridgeton, N. J.
- Elijah Robert Blough, P.D.**  
*Thes.*, Cultivated Hydrastis.  
 Physician. Graduated in medicine, 1907. Served  
 in U. S. A. as 1st Lieut. Med. Dept.  
*Ad.*, 1823 Brownsville Road, Mt. Oliver Station,  
 Pittsburgh, Pa.
- John Alexander Borneman, P.D.**  
*Thes.*, Naturalization of Foreign Medicinal Plants  
 in the United States.  
 Prof. Pharmacy, Hahnemann Med. Coll. Homeo-  
 pathic pharmacist.  
*Ad.*, Norwood, Pa.
- Horsely Pierce Brown, P.D.**  
*Thes.*, Antidiphtheretic Serum.  
 In Accounting Dept., E. I. DuPont de Nemours  
 and Co.  
*Ad.*, 615 W. 25th Street, Wilmington, Del.
- Alice Beatrice Caden, P.D.**  
*Thes.*, The Valuation of Pepsin with Dried Egg  
 Albumen.  
 Retail pharmacist. Mem. Business and Profes-  
 sional Women's Club; Catholic Women's League;  
 Ky. Pharm. Assn.; Univ. of Ky. Alumni Assn.  
*Ad.*, 101 W. Main Street, Lexington, Ky.
- \***Joseph Albert Catlin, P.D.**  
*Thes.*, Cannabis Indica.  
 Deceased, 1910.
- John Krupp Clemmer, P.D.**  
*Thes.*, Aloin.  
 Salesman, H. K. Mulford Co., Phila., Pa.  
*Ad.*, 3438 Walnut Street, Phila., Pa.
- Alfred Young Craven, P.D.**  
*Thes.*, Heroin.  
 Retail pharmacist. Pres. Bridgeport School Board.  
*Ad.*, 408 S. Rita Avenue, Huntington Park, Los  
 Angeles, Cal.
- Thomas Foster Crawford, P.D.**  
*Thes.*, Iodine.  
*Ad.*, Pleasantville, N. J.
- Clarence Croft, P.D.**  
*Thes.*, Aloes.  
 Retail pharmacist.  
*Ad.*, Waynesboro, Pa.
- Anthony Brooks Crothers, P.D.**  
*Thes.*, Kaolin.
- Ralph Brinton Dickinson, P.D.**  
*Thes.*, Cocainæ Hydrochloras.  
 Representative, Sharp and Dohme.  
*Ad.*, Moylan, Pa.
- John Xavier Douglass, P.D.**  
*Thes.*, Smokeless Powder and Its Advantages.  
*Ad.*, N. E. Cor. Green and Hortter Streets, Ger-  
 mantown, Phila., Pa.

- William Joseph Downs, P.D.**  
*Thes.*, Nux Vomica.  
*Ad.*, 61st and Market Streets, Phila., Pa.
- Joseph Field Dulaney, P.D.**  
*Thes.*, Nutrient Gelatin and Agar Media.  
 Oil-land leases. Special courses in microscopical and chemical diagnosis, New York City.  
*Ad.*, McKinney, Texas.
- Nathaniel Ort Eckels, P.D.**  
*Thes.*, Emulsion of Terebene.  
*Ad.*, Carlisle, Pa.
- Thomas John Evans, P.D.**  
*Thes.*, Hydrogenii Dioxidii.  
 Pharmacist.  
*Ad.*, 79 Centre Avenue, Plymouth, Pa.
- Charles Scott Eves, P.D.**  
*Thes.*, The Hypophosphites.  
 Retail pharmacist.  
*Ad.*, Danville, Pa.
- John Joseph Evrard, P.D.**  
*Thes.*, Coal Tar Products.  
 Retail pharmacist. Sec. and Treas. Bethlehem Retail Drug Assn. Past Commander, Univ. Branch, Grand Fraternity.  
*Ad.*, 122 E. 3rd Street, Bethlehem, Pa.
- Clarence Frederick Garfield Fetterolf, P.D.**  
*Thes.*, Xanthium Canadense.
- Walter Theodore Filman, P.D.**  
*Thes.*, Oleum Santali.
- James Clarence Fitch, P.D.**  
*Thes.*, Tincture of Fat-Free Digitalis.  
 Retail pharmacist.  
*Ad.*, 3331 N. 15th Street, Phila., Pa.
- William Paul Fleischer, P.D.**  
*Thes.*, The Ipecacuanhas.  
*Ad.*, 55th and Spruce Streets, Phila., Pa.
- Irvin Berry Fox, P.D.**  
*Thes.*, Economics of a Retail Pharmacist Collecting and Powdering His Own Crude Drugs.  
 Retail pharmacist.  
*Ad.*, 547 N. 8th Street, Phila., Pa.
- Joseph Peter Fox, P.D.**  
*Thes.*, Cascara Sagrada.  
 Retail pharmacist. Course in Veterinary Medicine, Univ. of Penna.  
*Ad.*, 7021 Paschall Avenue, Phila., Pa.
- Percy Fried, P.D.**  
*Thes.*, Urotropin.  
 Retail pharmacist.  
*Ad.*, Aspinwall, Pa.
- Albert Charles C. Gager, P.D.**  
*Thes.*, Public Sanitation.  
 Engaged in cemetery building. Graduated Stanford Univ., Cal.  
*Ad.*, 3319 N. 27th Street, Tacoma, Wash.
- Edwin Franklin Gehringer, P.D.**  
*Thes.*, Sodii Chloridum.  
 Received Certificate of Proficiency in Chemistry, P. C. E., 1904.  
*Ad.*, 1301 Hamilton Street, Allentown, Pa.
- \*Yeatman Geron, P.D.**  
*Thes.*, Ergota (Ergot of Rye).  
 Deceased, January, 1906.
- John Ralph Elsrode Gettel, P.D.**  
*Thes.*, Rhamnus Purshiana.  
*Ad.*, Broad and Rockland Streets, Phila., Pa.
- Harry Charles Gleim, P.D.**  
*Thes.*, Therapeutical Action of Digitalis.  
*Ad.*, 18 W. 3rd Street, Chester, Pa.
- \*Edith Morton Goodman, P.D.**  
*Thes.*, Diphtheria Antitoxin; Its Preparation and Recognition by the Pharmacopœia.  
 Deceased, May 13, 1910.
- Myatt Edward Goring, P.D.**  
*Thes.*, Pepsinum.  
 Retail pharmacist. Formerly postmaster. Wappingers Falls, N. Y. Served in Spanish-American War.  
*Ad.*, Wappingers Falls, N. Y.
- Harry Ross Grove, P.D.**  
*Thes.*, Ergot—Physiological and Therapeutic Uses.  
 Retail pharmacist. Pres. Borough Council.  
*Ad.*, Alexandria, Pa.
- Francis Collins Handwork, P.D.**  
*Thes.*, Official Drug Plants Growing in the Vicinity of Philadelphia.  
 Chemist, Bruce and West Mfg. Co. Received Certificate of Proficiency in Chemistry, P. C. P., 1906.  
*Ad.*, 1594 Elhur Avenue, Cleveland, Ohio.
- William Edward Hefelfinger, P.D.**  
*Thes.*, Administration of Cod Liver Oil.
- Raymond Hendrickson, P.D.**  
*Thes.*, Nutgall Ink.  
 Mgr. Pharmaceutical Dept., Smith, Kline and French Co. Formerly Instr. in Pharmacy, Chemistry and Mat. Med. St. Joseph's Hosp., Phila.  
*Ad.*, 2100 Providence Avenue, Chester, Pa.
- \*Norman Eberly Hertzler, P.D.**  
*Thes.*, Pyroxylinum.  
 Retail pharmacist, Phila. Deceased, July 5, 1915.
- Oliver Henry Hertzler, P.D.**  
*Thes.*, Acetic Acid as a Menstruum in the Manufacture of Fluid Extracts.  
*Ad.*, 627 N. Duke Street, Lancaster, Pa.
- Bayard Hilliard, P.D.**  
*Thes.*, Apomorphine Hydrochlorate.  
*Ad.*, Vincentown, N. J.
- Howard Harlan Jones, P.D.**  
*Thes.*, Acidum Gallicum.  
 Mfg. chemicals and pharmaceuticals with Sharp and Dohme.  
*Ad.*, 3405 Fairview Avenue, Baltimore, Md.
- William Albert Kellar, P.D.**  
*Thes.*, Eucaïne and Its Salts. Eucaïne Hydrochloride.
- \*Frank Hall Kirk, P.D.**  
*Thes.*, Petroleum and Its Therapeutics.  
 Deceased, May 6, 1920.
- Daniel Milton Knabb, P.D.**  
*Thes.*, Syrupus Hypophosphitum.  
*Ad.*, 301 Hamilton Street, Allentown, Pa.
- \*Howard James Knass, P.D.**  
*Thes.*, Acidum Carholicum.
- Christian Bauer Kyle, P.D.**  
*Thes.*, Acetone.  
 Physician.  
*Ad.*, 703 W. Erie Avenue, Phila., Pa.
- Anna Rosalie Lescure, (Mrs. William Herbert Welch), P.D.**  
*Thes.*, Disinfectants and Antiseptics.  
 Formerly pharmacist, Penna. Hosp. for Insane, Phila., Pa.  
*Ad.*, 3830 N. 13th Street, Phila., Pa.
- John Hartranft Levering, P.D.**  
*Thes.*, Liquor Potassii Arsenitis.  
*Ad.*, Episcopal Hosp., Front and Lehigh Avenue, Phila., Pa.
- Herbert Willard Lewis, P.D.**  
*Thes.*, Olive Oil Adulteration.  
*Ad.*, Burbank, Cal.
- Leighton Elba Lide, P.D.**  
*Thes.*, The Manufacture of Cotton Seed Oil.  
 Retail pharmacist and real estate agent.  
*Ad.*, 116 S. 5th Street, Columbus, Miss.
- William Henry McGarragh, Jr., P.D.**  
*Thes.*, The Art of Filling Capsules.



- \*Harry Aloysius McLaughlin, P.D.**  
*Thes.*, Peppermint and Spearmint.  
 Retail pharmacist, Jenkintown, Pa. Deceased,  
 February 9, 1920.
- Albert Dell MacGregor, P.D.**  
*Thes.*, Tests for the Identification of Formaldehyde  
 in Milk and Food.
- Simon Marcus, P.D.**  
*Thes.*, *Phytolacca Radix*.  
*Ad.*, 12th and Wolf Streets, Phila., Pa.
- Fannie Bezman Margolin, P.D.**  
*Thes.*, Petroleum.  
 Physician. Graduated in medicine, Woman's Med.  
 College of Penna. Special courses at Univ. of  
 Penna.
- Charles Edward Martin, P.D.**  
*Thes.*, Kaolin.  
*Ad.*, 821 Haddon Avenue, Camden, N. J.
- Frederick Adam Martin, P.D.**  
*Thes.*, *Acidum Benzoicum*.  
 Received Certificate in Advanced Commercial  
 Training, P. C. P., 1921.  
*Ad.*, 4906 Baltimore Avenue, Phila., Pa.
- Walter Ball Matlack, P.D.**  
*Thes.*, *Digitalis* and Preparations.  
*Ad.*, Vineland, N. J.
- Ira Dale Meals, P.D.**  
*Thes.*, Zinc Oxide.  
 Asst. Resident Clerk, House of Representatives,  
 Harrisburg, Pa. Retail pharmacist until 1907.  
*Ad.*, 275 Briggs Street, Harrisburg, Pa.
- Wilbur Curtis Meredith, P.D.**  
*Thes.*, *Digitalis*.  
 Retail pharmacist.  
*Ad.*, 2326 E. Clearfield Street, Phila., Pa.
- Oscar LeRoy Metzler, P.D.**  
*Thes.*, *Cocillana*.  
 Retail pharmacist.  
*Ad.*, Sellersville, Pa.
- Roy Leonard Miller, P.C.**  
*Thes.*, Assay of *Extractum Nucis Vomicae*.  
 Received P.D. degree, 1904.  
*Ad.*, 1521 W. Lehigh Avenue, Phila., Pa.
- Luther Melancthon Myers, P.D.**  
*Thes.*, *Pepsinum*.  
 Pharmaceutical chemist. Pres. and Gen. Mgr.  
 Logan Drug Co.  
*Ad.*, 5629 Thomas Avenue, Phila., Pa.
- John S. Oberly, P.D.**  
*Thes.*, Ginseng and Its Cultivation.  
 Lawyer. Received degree A.B., Amherst College,  
 1907; LL.B., Brooklyn Law Sch., 1912; LL.B.,  
 Univ. of Penna., Law School, 1915.  
*Ad.*, 205 Keswick Avenue, Glenside, Pa.
- James Heber Parker, P.D.**  
*Thes.*, The Estimation of Formaldehyde.  
 Vice-pres. and metallurgist, Carpenter Steel Co.  
 Received degree A.B., in chem. Cornell Univ.,  
 1905.  
*Ad.*, Wyomissing, Pa.
- Vincent DePaul Quinn, P.D.**  
*Thes.*, *Cinchona*.  
*Ad.*, Lansford, Pa.
- David Wilfong Ramsaur, P.D.**  
*Thes.*, *Serenoa Serrulata*.  
 Vice-pres., Groover Stewart Drug Co., wholesale  
 druggists, since 1917. Mgr. Ackerman-Stewart  
 Drug Co., wholesale and retail druggists, 1902-  
 1917. Mem. Florida State Board of Pharmacy,  
 1905-17; Secy., 1907-17. Vice-pres. Nat'l Assn.  
 Boards of Pharmacy, 1915-16. Pres. Florida State  
 Pharm. Assn., 1906-07. Mem. Rotary Club.  
*Ad.*, 1127 Park Avenue, Jacksonville, Fla.
- Alfred Warffuell Reeve, P.D.**  
*Thes.*, Comparative Solubility of the Chemicals of  
 the U. S. P. and B. P.  
 Retail pharmacist. Masonic affiliation.  
*Ad.*, 229 George Street, New Brunswick, N. J.
- Isaac Stephen Reice, P.D.**  
*Thes.*, Belladonna.  
 Retail pharmacist. Recruiting officer for U. S.  
 Merchant Marine.  
*Ad.*, 919 Girard Avenue, Phila., Pa.
- George Washington Rhodes, P.D.**  
*Thes.*, The Physician and the Pharmacist.  
*Ad.*, Newark, Del.
- David Crogman Robinson, P.D.**  
*Thes.*, *Strophanthus*.
- Thomas Holmes Robinson, Jr., P.D.**  
*Thes.*, *Unguentum Zinci Oxidi*.  
 Retail pharmacist.  
*Ad.*, Donora, Pa.
- Maurice Albert Rosder, P.D.**  
*Thes.*, Syrup of Tolu.  
*Ad.*, York Road and Chelton Avenue, Phila., Pa.
- Harold Clarence Rudolph, P.D.**  
*Thes.*, *Vaccine Virus*.  
 Retail pharmacist. Mem. B. P. O. E.; I. O. O. F.;  
 Chamber of Commerce.  
*Ad.*, 2100 E. Evans Avenue, Pueblo, Colo.
- Oscar Carl Schmidt, P.D.**  
*Thes.*, *Liquor Magnesii Citratis*.  
*Ad.*, 1325 Genesee Street, Hollywood, Cal.
- Albert Philip Shenkle, P.D.**  
*Thes.*, *Gentiana*.  
 Sales Mgr., H. K. Mulford Co., New England  
 District. Formerly City Auditor and School Direc-  
 tor, Phoenixville, Pa.  
*Ad.*, Rutledge, Pa.
- Charles Henry Slobig, P.D.**  
*Thes.*, Petroleum.
- Alfred Homer Smith, P.D.**  
*Thes.*, *Cocina*.  
 Secy. Amer. Drug Mfrs. Assn. Held responsible  
 Government positions during World War.  
*Ad.*, Albee Bldg., Washington, D. C.
- Henry William Smith, P.D.**  
*Thes.*, Copper.  
*Ad.*, R. F. D. 3., Pottstown, Pa.
- \*William David Harris Smith, P.D.**  
*Thes.*, A Comparison of the Several Parts of *Cassia*  
*Marilandica* with the Leaflets of *Cassia Acutifolia*.  
 Deceased, 1908.
- Joseph Louis Soken, P.D.**  
*Thes.*, Argon.  
*Ad.*, 1328 N. 13th Street, Phila., Pa.
- Robert Franklin Strauss, P.D.**  
*Thes.*, *Podophyllum*.  
*Ad.*, 20 E. Gravers Lane, Chestnut Hill, Phila., Pa.
- Henry William Stuver, P.D.**  
*Thes.*, Emulsions of Liquid Petroleum.  
 Physician and surgeon. Graduated in medicine,  
 Univ. of Colo., 1913. Prof. of Mat. Med. Denver  
 Univ. College of Pharmacy. Contract surgeon  
 S. A. T. C., Denver Univ.  
*Ad.*, Majestic Bldg., Denver, Colo.
- William Luther Swartz, P.D.**  
*Thes.*, Pills and Their Excipients.  
 Retail pharmacist.  
*Ad.*, North Avenue, and Federal Street, Pittsburgh,  
 Penna.
- George Carroll Thomas, P.D.**  
*Thes.*, Guarana.
- John Milbourn Toulson, P.D.**  
*Thes.*, *Phytolacca*.  
 Retail pharmacist.  
*Ad.*, Salisbury, Md.

- Ephraim Shaw Tyler, P.D.**  
*Thes.*, The Opium Preparations of the U. S. P.  
 Retail pharmacist.  
*Ad.*, Point Marion, Pa.
- Ralph Thomas Ulrich, P.D.**  
*Thes.*, What Is a Fruit?  
 Chemist, John Wyeth and Bro. Received Certificate of Proficiency in Food and Drug Course, P. C. P., 1910.  
*Ad.*, 5623 Stokes Street, Germantown, Phila., Pa.
- George Buzby Weidemann, B.S., P.D.**  
*Thes.*, Tinctura Opii Deodorati.  
 Retail pharmacist.  
*Ad.*, 2148 Green Street, Phila., Pa.
- Wilson Weigester, P.D.**  
*Thes.*, Gonococcus.  
*Ad.*, Troy, Pa.
- William Herbert Welch, P.D.**  
*Thes.*, Tannic Acid.  
 Pharmacist for George B. Evans.  
*Ad.*, 3830 N. 13th Street, Phila., Pa.
- Morrison Patton Williams, P.D.**  
*Thes.*, Official Plants of the Labiate.  
 Pharmacist, Sheppard Drug Co.  
*Ad.*, Charlotte, N. C.
- Oscar Hermon Wilson, P.D.**  
*Thes.*, Cinchona.  
*Ad.*, 56th and Thomas Avenue, Phila., Pa.
- Max Erwin Winkler, P.D.**  
*Thes.*, An Antidote Cabinet.  
 Retail pharmacist.  
*Ad.*, 1216 W. Wyoming Avenue, Phila., Pa.
- Oscar Kline Wisegarver, P.D.**  
*Thes.*, Biological Products.
- Robert Franklin Woodill, P.D.**  
*Thes.*, Urine Analysis in Pharmacy.
- J. Warren Wolf Worthington, P.D.**  
*Thes.*, Mercury with Chalk.  
 Pharmacist, Jefferson Hosp., Phila., Pa.  
*Ad.*, Glenside, Pa.
- Charles Norman Ziegler, P.D.**  
*Thes.*, Oleum Morrhuæ.  
 Retail pharmacist. Mem. Los Angeles and Southern Cal. Retail Druggists Assn.  
*Ad.*, 836 W. 11th Street, Los Angeles, Cal.
- William Lodge Ziegler, Jr., P.D.**  
*Thes.*, Maltum.
- 1903
- Howard Albert, P.D.**  
*Thes.*, A Critical Examination of the Quality of Crude Vegetable Drugs.  
 Retail pharmacist.  
*Ad.*, Lansford, Pa.
- \*Robert Wallin Allen, P.D.**  
*Thes.*, Drugs Indigenous to China.  
 Retail pharmacist, Phila. Deceased, March 25, 1913.
- Arthur Garfield Ames, P.D.**  
*Thes.*, Amanita Muscaria.  
 Retail pharmacist.  
*Ad.*, West Collingswood, N. J.
- Herbert Spencer Anthony, P.D.**  
*Thes.*, Antitoxin.  
*Ad.*, Ashbourne, Pa.
- Virden Peter Ashmead, P.D.**  
*Thes.*, The Disadvantage of Petroleum Products as Bases for Ointments.  
*Ad.*, 1541 Venango Street, Phila., Pa.
- Charles Wesley Baas, P.D.**  
*Thes.*, Atropine.  
 Retail pharmacist.  
*Ad.*, 567 Bramhall Avenue, Jersey City, N. J.
- Chester Augustus Billetdoux, P.D.**  
*Thes.*, Precipitation in Prescriptions.  
 Physician. Graduated in medicine, Jeff. Med. College, 1910. Formerly surgeon DuPont Hosp., Pennsgrove, N. J.  
*Ad.*, 1723 S. Broad Street, Phila., Pa.
- Guy Stephen Boyd, P.C.**  
*Thes.*, Truss Fitting.  
*Ad.*, East Poplar Street, York, Pa.
- Lloyd Amadore Burkholder, P.D.**  
*Thes.*, Epigaea Repens.  
 Retail pharmacist.  
*Ad.*, 12th and Edgemont Avenue, Chester, Pa.
- Frank Joseph Chambers, P.D.**  
*Thes.*, Cannabis Indica.  
*Ad.*, 1216 Arctic Avenue, Atlantic City, N. J.
- William Fogg Coleman, P.D.**  
*Thes.*, Liquor Ammonii Acetatis.  
 With Valentine H. Smith Co., wholesale druggists.  
*Ad.*, 5110 Carlisle Street, Logan, Phila., Pa.
- Clyde Heaton Cooper, P.D.**  
*Thes.*, Eucalyptus.  
*Ad.*, 145 N. Queen Street, Lancaster, Pa.
- Herbert Solomon Cossaboom, P.D.**  
*Thes.*, Calcium.  
*Ad.*, 336 Atlantic Street, Bridgeton, N. J.
- Samuel Wallace Croesley, P.D.**  
*Thes.*, Cinchona.
- Alva Batten Currinder, P.D.**  
*Thes.*, The Garbling of Commercial Drugs.  
*Ad.*, Christiana, Del.
- Herbert Harry D'Alemberte, P.D.**  
*Thes.*, Phytolacca Decandra.  
 Retail pharmacist. Mem. Florida Board of Pharmacy, 1903-18. Pres. Florida State Pharm. Assn., 1918.  
*Ad.*, 119 S. Palafox Street, Pensacola, Fla.
- Charles Melvin Daub, P.D.**  
*Thes.*, Opium.  
 Retail pharmacist.  
*Ad.*, 1336 W. Main Street, Norristown, Pa.
- Howard Sherman Davis, P.D.**  
*Thes.*, The History of Paregoric.  
*Ad.*, Myerstown, Pa.
- John Dilks, P.D.**  
*Thes.*, Adrenalin.  
 Retail pharmacist and optician.  
*Ad.*, 340 Main Street, Glassboro, N. J.
- James Monroe Ebert, P.D.**  
*Thes.*, Belladonna.  
*Ad.*, Tamaqua, Pa.
- Lawrence Edwards, P.D.**  
*Thes.*, Volatile Oils.  
*Ad.*, Hershey, Pa.
- Bernard Herbert Eichold, P.D.**  
*Thes.*, Ipecacuanha.  
 Secy. Mobile Drug Co.  
*Ad.*, 15 S. Water Street, Mobile, Ala.
- Morris Wayne Fox, P.D.**  
*Thes.*, The Purification of Argols.  
 Retail pharmacist. Mem. K. of G. E.; K. of P.; I. O. O. F.; Bethlehem Chamber of Commerce.  
 Masonic affiliation.  
*Ad.*, 1 West 3rd Street, Bethlehem, Pa.

- John Joseph Fralinger, P.D.**  
*Thes.*, Liquor Magnesii Citratis.  
Physician. Graduated in medicine, Jeff. Med. College, 1912. Med. Examiner 39th Local Draft Board.  
*Ad.*, 1829 S. 2nd Street, Phila., Pa.
- William Henry Galbraith, Jr., P.D.**  
*Thes.*, Bismuthi Subnitras.  
Sales instr., Wales Adding Machine Co.  
*Ad.*, 1294 Ramona Avenue, Lakewood, Cleveland, Ohio.
- Joseph Peter Garvey, P.D.**  
*Thes.*, Salol.  
Physician. Graduated in medicine, Jeff. Med. College, 1914.  
*Ad.*, 3639 Spring Garden Street, Phila., Pa.
- Dora Goldie Gerson, (Mrs. Laskin), P.D.**  
*Thes.*, Cinchona.  
Retail pharmacist.  
*Ad.*, 1640 S. 5th Street, Phila., Pa.
- William Groff, P.D.**  
*Thes.*, Official Digestive Ferments.  
Retail pharmacist.  
*Ad.*, Bryn Mawr, Pa.
- Luis Javier Guier, P.D.**  
*Thes.*, Tobacco.  
Physician. Graduated in medicine, Jeff. Med. College, 1909.  
*Ad.*, Cartago, Costa Rica, C. A.
- Ira Culpepper Guthrie, P.D.**  
*Thes.*, Spiritus Aetheris Nitrosi.
- \*Duncan James Harbaugh, P.D.**  
*Thes.*, Mentha Piperita.  
Deceased July 14, 1904.
- John Tilden Harbold, P.D.**  
*Thes.*, Bacteria and Prevention of Bacterial Growths in Syrups.  
Physician. Formerly Assoc. Prof. Mat. Med. Temple Univ. and Chief Pharmacist, Penna. Hosp., Phila., Pa. Examiner to Draft Board No. 2. Pres. Dallastown Sch. Board, 1912-1915.  
*Ad.*, 7 W. Main Street, Dallastown, Pa.
- Frederick Henry Harmening, P.D.**  
*Thes.*, The Advantages of a Fat-Free Tincture of Digitalis.  
Retail pharmacist. Mem. Kappa Psi Frat.; B. P. O. E. Formerly city councilman.  
*Ad.*, 815 W. Crawford Avenue, Connellsville, Pa.
- Andrew Ned Hecker, P.D.**  
*Thes.*, Coca.  
*Ad.*, 4533 Mervine Street, Phila., Pa.
- \*Henry William Hemmersbach, P.D.**  
*Thes.*, Acidum Boricum.  
Retail pharmacist, Phila., Deceased, October 4, 1918.
- James Norton Crouse Hetherington, P.D.**  
*Thes.*, Commercialism in Pharmacy.  
*Ad.*, 9th and Cumberland Streets, Phila., Pa.
- Oscar Nicholas Hinski, P.D.**  
*Thes.*, Ficus Caricus, Linnaeus.  
Retail pharmacist.  
*Ad.*, Haddon Avenue and Federal Street, Camden, New Jersey.
- John Helsler Holcombe, P.D.**  
*Thes.*, Gossypium Purificatum.  
Pharmacist. Trustee and Financial Secy., Bridgeton M. E. Church.  
*Ad.*, 180 Laurel Street, Bridgeton, N. J.
- George Leon Holstein, P.D.**  
*Thes.*, Syrupus Acidi Hydriodici.  
*Ad.*, 365 N. 9th Street, Lebanon, Pa.
- Robert Adams Hoover, P.D.**  
*Thes.*, Foundation of the Metric System.  
*Ad.*, DuBois, Pa.
- Chauncey Nicholas Johnson, P.D.**  
*Thes.*, Potassii Bitartras.  
*Ad.*, Martinsburg, Pa.
- Clarence E. Jones, P.D.**  
*Thes.*, Cascara Sagrada.  
*Ad.*, Doe Run, Pa.
- \*James Blaine Keener, P.D.**  
*Thes.*, Fuel and Its Metamorphoses.  
Retail pharmacist, Middletown, Pa. Deceased, March 24, 1911.
- \*Martin Luther Keller, P.D.**  
*Thes.*, Spongia.
- Floyd Budd Kempte, P.D.**  
*Thes.*, The Relation of the Pharmacist and the Physician.  
Retail pharmacist. Chemist for U. S. Govt. during World War.  
*Ad.*, Pemberton, N. J.
- Grant Wagner King, P.D.**  
*Thes.*, Cocaine Hydrochlorate.  
*Ad.*, Boston, Pa.
- George Williamson Kisner, P.C.**  
*Thes.*, Opium.
- John Henry Benjamin Leaman, P.D.**  
*Thes.*, Digitalis.  
*Ad.*, Cochranville, Pa.
- Robert Edward Lee, P.D.**  
*Thes.*, The Successful Pharmacist.  
In laboratory of George B. Evans.  
*Ad.*, 219 N. 10th Street, Phila., Pa.
- Charles Augustus Light, P.D.**  
*Thes.*, Encapsulating.  
*Ad.*, Monessen, Pa.
- Marcus Brownson Loyer, P.D.**  
*Thes.*, Suggestions About a Drug Store.  
*Ad.*, 20th and Snyder Avenue, Phila., Pa.
- James Wilson Mader, P.D.**  
*Thes.*, Ceratum Resinae Compositum.  
*Ad.*, 1017 Walnut Street, McKeesport, Pa.
- Westley General Malloy, P.D.**  
*Thes.*, Gossypium Purificatum.  
Pharmacist.  
*Ad.*, 742 N. 38th Street, Phila., Pa.
- \*Howard Overholt Markle, P.D.**  
*Thes.*, Acidum Tannicum.  
Deceased, March 5, 1918.
- James Curtis Mayers, P.D.**  
*Thes.*, Liquor Ferri et Ammonii Acetatis.  
Retail pharmacist.  
*Ad.*, 301 E. Girard Avenue, Phila., Pa.
- Horace Michael, P.D.**  
*Thes.*, Compressed Tablets.  
Retail pharmacist.  
*Ad.*, 1500 Tioga Street, Phila., Pa.
- \*Harold Bertram Morgan, P.D.**  
*Thes.*, Compressed Tablets.  
Junior Mem. of firm Frank E. Morgan and Sons, Phila. Deceased, August 22, 1913.
- Lewis Nathan Moyer, P.D.**  
*Thes.*, Glyceritum Vitelli, U. S. P.  
Retail pharmacist. Recruiting Agt. for U. S. Merchant Marine.  
*Ad.*, Lititz, Pa.
- Katharine Johanna Musson, P.D.**  
*Thes.*, Incompatibilities of Strontium Bromide.  
Pharmacist. Northeastern Hosp., Phila. Director of Laboratory of Pharmacy, Woman's Med. College of Penna., 1904-1920.  
*Ad.*, Northeastern Hosp., Phila., Pa.
- Albert Randolph Reburn, P.D.**  
*Thes.*, Suprarenal Glands and Their Active Principle, Adrenalin.



- James Garfield Reed, P.D.**  
*Thes.*, Oil of Sunflower Seed.  
*Ad.*, 14300 Euclid Avenue, E. Cleveland, Ohio.
- Emil Krieger Roth, P.D.**  
*Thes.*, Digitalis—Its Action and Derivatives.  
*Ad.*, 6th and Cumberland Streets, Phila., Pa.
- Engens Rothwell, P.D.**  
*Thes.*, Rhamnus Purshiana.  
 Retail pharmacist.  
*Ad.*, Willow Grove, Pa.
- Otto Waldemar Schmidt, P.D.**  
*Thes.*, Unguenta.  
 Mfg. pharmacist and dealer in physicians' supplies. Masonic affiliation.  
*Ad.*, 26 Holmes Street, Youngstown, Ohio.
- Stanhope McClellan Scott, P.D.**  
*Thes.*, Uric Acid.  
 Retail pharmacist. Pres. West Va. State Board of Pharmacy.  
*Ad.*, Terra Alta, West Va.
- Chester Belting Szeley, P.D.**  
*Thes.*, Podophyllum.  
 Mgr. for P. S. Rohn, retail pharmacist.  
*Ad.*, 2300 Dickinson Street, Phila., Pa.
- Daisy Rhodes Shiffer (Mrs.), P.D.**  
*Thes.*, Syrupus Tolutanus.
- Charles Emmert Shillito, P.D.**  
*Thes.*, Preparations of the Hypophosphites.  
 Secy. Pacific Bldg. and Loan Assn. City Treas.  
 Culver City, Cal.  
*Ad.*, Culver City, Cal.
- Murray Hamilton Shrenk, P.D.**  
*Thes.*, The History of Sponges.  
 Salesman, Wm. H. Rorer.  
*Ad.*, 4547 Pulaski Avenue, Phila., Pa.
- Clarence Daniel Smith, P.D.**  
*Thes.*, Conium Maculatum.  
 Physician. Graduated in medicine, Jeff. Med. College, 1907. Res. phys. Jeff. Hosp., Phila. Examiner Med. Draft Board. Contract surgeon U. S. A. Camp Dix, N. J. Lieut. U. S. N., 4th Naval District.  
*Ad.*, 741 Spruce Street, Phila., Pa.
- Henry Addison Smith, P.D.**  
*Thes.*, Beet Sugar—History and Manufacture.  
 Retail pharmacist. Masonic affiliation.  
*Ad.*, Endicott, N. Y.
- \*Jacob Schall Smith, P.D.**  
*Thes.*, Sulphur Precipitatum.  
 Deceased, March 2, 1918.
- William Henry Smith, P.D.**  
*Thes.*, Effervescent Magnesium Sulphate.
- \*David Stahl Snyder, P.D.**  
*Thes.*, Business Methods in Pharmacy.  
 Retail pharmacist, Scalp Level, Pa. Deceased, March 12, 1915.
- Walter Edgar Stallsmith, P.D.**  
*Thes.*, Distillation of Oil of Wintergreen and Birch.  
*Ad.*, 7235 Penn Avenue, Homewood, Pittsburgh, Penna.
- Irvin Siegfried Stimmel, P.D.**  
*Thes.*, Heroin.  
*Ad.*, 712 N. 20th Street, Phila., Pa.
- William Earl Stine, P.D.**  
*Thes.*, Cedron.  
 Retail pharmacist.  
*Ad.*, 1 Main Street, Schuylkill Haven, Pa.
- David Stolz, P.D.**  
*Thes.*, The Salt Industry at Syracuse from a Practical Point of View.  
*Ad.*, Warren and E. Genesee Streets, Syracuse, New York.
- Willard Steans Stuck, P.D.**  
*Thes.*, Digestive Ferments.  
 Retail pharmacist.  
*Ad.*, Marysville, Cal.
- Jacob Sutliff, P.D.**  
*Thes.*, Ginseng.  
*Ad.*, Hughesville, Pa.
- \*Walter William Tripmaker, P.D.**  
*Thes.*, Senna.  
 Deceased, 1909.
- James Louis Tuohy, P.D.**  
*Thes.*, Belladonna Versus Scopola.  
*Ad.*, Salem, N. J.
- James Packer Van Dyke, P.D.**  
*Thes.*, Taraxacum.  
 Retail pharmacist.  
*Ad.*, Sunbury, Pa.
- Charles Edward Walmsley, P.D.**  
*Thes.*, The Evolution of Kaolins.  
 Salesman, Parke, Davis and Co.  
*Ad.*, 20 Garland Street, Bangor, Me.
- Ralph Liguori Welsh, P.D.**  
*Thes.*, Gossypium.  
*Ad.*, 1712 12th Street, Altoona, Pa.
- James Walter Wolford, P.D.**  
*Thes.*, Liquor Sodæ Chloratæ.  
*Ad.*, 548 E. 40th Street, N., Portland, Ore.
- Byron Parker Wollaston, P.D.**  
*Thes.*, Eucalyptus.  
 Retail pharmacist.  
*Ad.*, Lambertville, N. J.
- John Montgomery Woodsids, P.D.**  
*Thes.*, Hydrogenii Dioxidum.  
 Retail pharmacist.  
*Ad.*, 2902 Richmond Street, Phila., Pa.
- Charles Sumner Zimmerman, P.D.**  
*Thes.*, Saw Palmetto.  
 Retail pharmacist.  
*Ad.*, 2500 N. 33rd Street, Phila., Pa.

Special Students.

- \*Harry Morris Capwell.**  
 Received Certificate of Proficiency in Chemistry. Graduated in medicine, Temple Univ., 1915. Practiced in Meshoppen, Pa. Mem. Phi Chi Med. Frat. Deceased, September 22, 1917.
- John Austin Roberts.**  
 Received Certificate of Proficiency in Chemistry.  
*Ad.*, 3815 Kate Avenue, Baltimore, Md.

1904

- Samuel Young Althoff, P.D.**  
*Thes.*, Principal Sources of Commercial Drugs.  
 Mgr. and Secy. Owl Drug Co. Formerly Prof. of Bot. and Pharmacognosy at Southern Methodist Univ. and at Baylor Univ.  
*Ad.*, Box 1158, Dallas, Texas.
- Howard Stanislaus Baker, P.D.**  
*Thes.*, Solanum Carolinense, Lin.  
*Ad.*, 2147 Camac Street, Phila., Pa.
- Arthur Demaire Bartholomew, P.D.**  
*Thes.*, The Cotton Plant and Preparations.  
*Ad.*, Front and Wyoming Streets, Phila., Pa.
- William Frederick Bes, P.D.**  
*Thes.*, Soft Capsules and Their Preparation.  
 Retail pharmacist. Pres. Idaho Pharm. Assn., 1917. Pres. Boise Symphony Orchestra.  
*Ad.*, Boise, Idaho.
- Albert Franz Beyer, P.D.**  
*Thes.*, Phenacetin.  
*Ad.*, Egg Harbor City, N. J.

- Furman Brooke Blnder, P.D.**  
*Thes.*, Eucalyptus Globulus.  
*Ad.*, High and Charlotte Streets, Pottstown, Pa.
- \*Charles Halsey Bogert, P.D.**  
*Thes.*, Caoutchouc.  
Retail pharmacist, Phila. Deceased, October 12, 1918.
- Howard Hauer Boltz, P.D.**  
*Thes.*, Spongia.  
Retail pharmacist.  
*Ad.*, 28 Pitman Avenue, Pitman, N. J.
- Howard Johns Boyer, P.D.**  
*Thes.*, Gentian.  
Retail pharmacist.  
*Ad.*, 1228 Lycoming Street, Phila., Pa.
- Martin William Brockman, P.D.**  
*Thes.*, Aloes.  
*Ad.*, 23 State Street, York, Pa.
- Walter Eugene Brown, P.D.**  
*Thes.*, Vanilla.  
Retail pharmacist.  
*Ad.*, 264 Linden Avenue, Brooklyn, N. Y.
- John Henry Cameron, P.D.**  
*Thes.*, The Thyroid Gland.  
*Ad.*, 320 High Street, Burlington, N. J.
- Frances S. Cherry, (Mrs. Rahinovitch), P.D.**  
*Thes.*, Opium.  
*Ad.*, 5318 Baynton Street, Germantown, Phila., Pa.
- \*Jesse Connor Chisholm, P.D.**  
*Thes.*, Sodii Hyposulphis.  
Received Certificate of Proficiency in Chemistry, P. C. P., 1905. Deceased, March 12, 1917.
- Charles Steinmetz Closson, P.D.**  
*Thes.*, Why Syrups Spoil.
- Harry Coombs, P.D.**  
*Thes.*, A Practical Soap Cutter.  
Retail pharmacist.  
*Ad.*, State and South 4th Streets, Salt Lake City, Utah.
- Fredric J. Crafts, P.C.**  
*Thes.*, Strophanthus (Microscopically).
- Eugene Drake Crouse, P.D.**  
*Thes.*, Chloroform.  
Gen. Mgr. chain of drug stores.  
*Ad.*, 434 Washington Street, Haddonfield, N. J.
- Luther Barker Curtis, P.C.**  
*Thes.*, The Commercial Production of Turpentine.  
Received P.D. degree, 1909.
- Elizabeth Davis, (Mrs. Harth), P.D.**  
*Thes.*, Mentha Piperita.
- Horace Tracy Davls, P.D.**  
*Thes.*, Coloring Agents in Pharmacy.  
*Ad.*, Clifton Heights, Pa.
- John Simmonds Davis, P.D.**  
*Thes.*, Solution of Hydriodic Acid.
- Thomas Carroli Davis, P.D.**  
*Thes.*, Succinic Acid and the Succinates.  
Physician. Graduated in medicine, Jeff. Med. College, 1909. Served in U. S. A. as Capt. Med. Dept.  
*Ad.*, 3128 N. Broad Street, Phila., Pa.
- Walter Eugene Dittmeyer, P.D.**  
*Thes.*, The Thyroid Gland and Its Preparations.  
Retail pharmacist. Pres. West Va. Pharm. Assn., 1913. Mem. Harper's Ferry Dist. Board of Education. Director, Bank of Harper's Ferry. Mem. K. of C.  
*Ad.*, Harper's Ferry, West Va.
- William John Doherty, P.D.**  
*Thes.*, Belladonna.  
*Ad.*, 2800 Atlantic Avenue, Atlantic City, N. J.
- William Dulin, P.D.**  
*Thes.*, Petrogen.  
*Ad.*, 2901 Kensington Avenue, Phila., Pa.
- Chester Arthur Duncan, P.C.**  
*Thes.*, Acetic Acid.  
Prof. of Pharmacy, Baylor Univ. College of Pharm. since 1914. Assoc. Prof. of Pharmacy and Director of Pharmacy Lab., 1905-14. Received P.D. degree, 1905.  
*Ad.*, 516 N. Washington Street, Dallas, Texas.
- John Shelly Eberly, P.D.**  
*Thes.*, Cascara Sagrada.
- \*Jamella Fox, P.D.**  
*Thes.*, Acidum Citricum.  
Deceased, September 13, 1920.
- William Henderson Free, Jr., P.D.**  
*Thes.*, Improved Bases for Iodine Ointment.  
Pharmacist and analytical chemist. Received Certificate of Proficiency in Chemistry, P. C. P., 1909.  
*Ad.*, 701 S. 59th Street, Phila., Pa.
- Charles B. Fricke, P.D.**  
*Thes.*, Pharmacognostical Notes.  
Retail pharmacist. Instr. in Pharmacy, Creighton College of Pharm. Omaha, Neb., 6 years.  
*Ad.*, 556 W. Broadway, Council Bluffs, Iowa.
- \*Royston Tupper Fuller, P.D.**  
*Thes.*, Gelsemium.
- James Aloysius Garvey, P.D.**  
*Thes.*, Salicylic Acid.  
General Purchasing Agt., McKesson and Robbins. Formerly retail pharmacist.  
*Ad.*, 8446 108th Street, Richmond Hill, L. I., N. Y.
- Clarence Franklin Gemmill, P.D.**  
*Thes.*, Manufacture of Tablets.
- James Dnnlap Gillan, P.D.**  
*Thes.*, Caroid.  
*Ad.*, 31st and Berks Streets, Phila., Pa.
- Robert Grier, P.D.**  
*Thes.*, Compressed Tablets.
- Lorne Edward Hastings, P.D.**  
*Thes.*, Saccharin.  
Physician. Graduated in medicine, Jeff. Med. College, 1911. Formerly Prof. Pharmacology and Mat. Med., Atlanta Med. College. Also Prof. of Physiology, Baylor Univ. Major, Med. Reserve Corps.  
*Ad.*, 28 Wellington Road, Phila., Pa.
- Stacey Merritt Hay, P.D.**  
*Thes.*, The Production of Borax.  
Vice-pres. Hay Drug Co.  
*Ad.*, 129 E. DuBois Avenue, DuBois, Pa.
- William Buckman Hibbs, P.D.**  
*Thes.*, Camphora.  
Retail pharmacist. Mem. Exec. Com. Phila. Assn. Retail Druggists; Penna. Pharm. Assn.  
*Ad.*, 2229 Spruce Street, Phila., Pa.
- Levi William Samuel Jones, P.D.**  
*Thes.*, Opium.  
Retail pharmacist.  
*Ad.*, 425 DeKalb Street, Norristown, Pa.
- Robert Earle Jones, P.D.**  
*Thes.*, Immunity.  
Ohio representative for Johnson and Johnson. Courses in Ohio State Univ. and Dennison Univ.  
*Ad.*, P. O. Box 805, Newark, Ohio.
- Henry Edgar Keely, P.D.**  
*Thes.*, Disadvantage of Compressed Tablets.  
Surgeon, U. S. Army. Graduated in medicine, Jeff. Med. College, 1908. Served in British and U. S. Army in France and Germany. Wounded.  
*Ad.*, Station Hospital. Headquarters 6th Corps Area, Fort Sheridan, Ill.

- Rebecca Elizabeth Kilion, (Mrs. Steiner), P.D.**  
*Thes.*, Digitalis.
- Leshner Wenner Klotz, P.D.**  
*Thes.*, Cryptogamous Plants.  
*Ad.*, 1051 Hamilton Street, Allentown, Pa.
- John Albert Klucher, P.D.**  
*Thes.*, Cinchona.  
*Ad.*, 3rd and Broad Streets, Harrisburg, Pa.
- Ralph Edward Knouse, P.D.**  
*Thes.*, Extemporaneous Capsule Filling.  
Pharmacist, U. S. Pub. Health Service.
- Yocum Andrew Kopp, P.D.**  
*Thes.*, Charta Sinapis.  
Retail pharmacist.  
*Ad.*, 431 22nd Avenue, Altoona, Pa.
- Georga Brenner Kumpf, P.D.**  
*Thes.*, Fixed Oils.  
*Ad.*, Main and Green Streets, Tuckerton, N. J.
- William Leroy Lafesn, P.D.**  
*Thes.*, Stains for Pathological Work.  
Retail pharmacist. Secy. and Treas. Naugle Pole and Tie Co., Chicago, Ill.  
*Ad.*, West Hotel, Minneapolis, Minn.
- Mary Jennie Lauter, (Mrs. Bellak), P.D.**  
*Thes.*, Antitoxin.  
*Ad.*, 8th and Moore Streets, Phila., Pa.
- Richman Garrison Lewin, P.D.**  
*Thes.*, Formaldehyde.
- William David Lithgow, P.D.**  
*Thes.*, Ichthylol.  
Physician. Graduated in medicine, Temple Univ., 1908. Formerly pharmacist and radiographer, Methodist Episcopal Hosp., Phila. Instr. in Pharmacy and Mat. Med., Temple Univ.  
*Ad.*, 301 W. 7th Street, Chester, Pa.
- Henry Clay Long, Jr., P.D.**  
*Thes.*, Chlorotone.  
*Ad.*, 1427 N. 56th Street, Phila., Pa.
- Michael Richard Long, P.D.**  
*Thes.*, Quercus.  
Physician. Graduated in medicine, Medico-Chi. College, 1910. Res. phys. Leith War Hosp., Edinburgh, Scotland. Served as Capt. Med. Dept. in France, Belgium, and Germany.  
*Ad.*, Galeton, Pa.
- James Sidney Lovatt, P.D.**  
*Thes.*, Pepper.  
Retail pharmacist.  
*Ad.*, 8 W. Main Street, Norristown, Pa.
- Alexander Newton McCausland, P.D.**  
*Thes.*, Vanilla Grass.  
Pharmacist, State Hosp., Warren, Pa.  
*Ad.*, Conewango Avenue, Warren, Pa.
- William McDevitt, P.D.**  
*Thes.*, Natural and Synthetic Salicylic Acid.  
*Ad.*, 632 W. Allegheny Avenue, Phila., Pa.
- John Harvey Mauger, P.D.**  
*Thes.*, Convallaria Majalis.  
Retail pharmacist.  
*Ad.*, 1931 N. 3rd Street, Chester, Pa.
- John Swift Montgomery, Jr., P.D.**  
*Thes.*, Estimation of Guaiacol in Creosote.  
*Ad.*, Thomasville, Ga.
- Julius Sheppard Moore, P.D.**  
*Thes.*, Ginseng.
- Wilbert Jacob Moore, P.D.**  
*Thes.*, Salicylic Acid—Its Action on Fermentation.  
Retail pharmacist. Recruiting agt. U. S. Merchant Marine.  
*Ad.*, Paulsboro, N. J.
- Matthias Drostan Morgan, P.D.**  
*Thes.*, Formaldehyde.  
Retail pharmacist.  
*Ad.*, 805 58th Street, Eldorado, Pa.
- William Edward Moul, P.D.**  
*Thes.*, Dentifrices.  
Pharmacist for George B. Evans.  
*Ad.*, 5110 Whitby Avenue, Phila., Pa.
- William Mackie Neiler, P.D.**  
*Thes.*, Vaccine.  
*Ad.*, 239 S. 11th Street, Phila., Pa.
- Walter Washington Nofer, P.D.**  
*Thes.*, The Manufacture of Corks.  
*Ad.*, 6054 Delancy Street, Phila., Pa.
- \*John William Pearman Outerbridge, P.D.**  
*Thes.*, Bermuda Arrow-Root.  
Deceased, 1906.
- Irwin Isaac Peiffer, P.D.**  
*Thes.*, A Study of the Micro-Organisms in Deteriorated Kino Preparations.
- David DaSilva Pereirs, P.D.**  
*Thes.*, Value-Determination of Drugs and Their Preparations.  
*Ad.*, 300 W. Coulter Street, Germantown, Phila., Penna.
- Joseph Aloysius Quinn, P.D.**  
*Thes.*, Vaccines and Antitoxins.  
Retail pharmacist.  
*Ad.*, Jermyn, Pa.
- Millicent Saxon Renshaw, (Mrs. Charles H. LaWall), P.D.**  
*Thes.*, Boiling Points.  
Assisted in revision of U. S. P. VIII. Secy., Com. on Foods and Home Economics, Civic Club, Phila. Also Vice-chm., 1919-20. Mem. Women's Fair Price Com., 1919. Chm. Com. on Papers and Queries, Penna. Pharm. Assn.; Vice-pres. Local Branch, A. Ph. A.; Life Mem. Penna. Pharm. Assn. Life Mem. Maintenance Fund of Alumni Assn., P. C. P. Mem. Board of Directors of Alumni Assn., P. C. P. Director Pharmaceutical Lab. Woman's Med. College of Penna. Dept. Editor of Board Questions and Answers of Amer. Druggist.  
*Ad.*, 636 S. Franklin Square, Phila., Pa.
- Joseph Albert Rider, P.D.**  
*Thes.*, Should a Pharmacist Be a College Graduate? Salesman, for E. L. Patch Co., Boston, Mass.  
*Ad.*, 1381 Narragansett Street, Phila., Pa.
- Walter Henry Robeck, P.D.**  
*Thes.*, Malt Extract—Its Preparation and Analysis.  
Chemist, U. S. Engineering Experiment Station, Annapolis, Md.  
*Ad.*, 90 Franklin Street, Annapolis, Md.
- Milton Eugene Rohrbangh, P.D.**  
*Thes.*, Crystallization.  
Asst. Sales Mgr. Amer. Druggists Syndicate.  
*Ad.*, Care of American Druggists Syndicate, New York City.
- William Smith Ross, P.D.**  
*Thes.*, Ointment Vehicles.
- Frank Louis Schmidt, P.C.**  
*Thes.*, Sodii Phosphas.  
Received P.D. degree, 1907.  
*Ad.*, 1208 Market Street, Wheeling, West Va.
- Frederick William Shaffer, P.D.**  
*Thes.*, Radium.  
Physician.  
*Ad.*, 324 N. 6th Street, Camden, N. J.
- Ralph Clarence Sharadin, P.D.**  
*Thes.*, Cod Liver Oil and Its Adulterations.  
Received Certificates in Bacteriology and in Clinical Chemistry, P. C. P., 1920, and in Physiological Assaying, P. C. P., 1921.  
*Ad.*, Ardmore, Pa.



- John Culp Shelly, P.D.**  
*Thes.*, Camphor.  
Traveling representative for H. K. Mulford and Company.
- David Franklin Shull, Jr., P.D.**  
*Thes.*, Petroleum.  
*Ad.*, 3928 Market Street, Phila., Pa.
- George Anthony Siegrist, P.D.**  
*Thes.*, Hypericum Perforatum.  
*Ad.*, 115½ High Street, Utica, N. Y.
- Harry Albert Spangler, P.D.**  
*Thes.*, Galla.  
*Ad.*, 162 W. Sharpnack Street, Germantown, Phila., Penna.
- Howard Abraham Stonesifer, P.D.**  
*Thes.*, Modern Pharmacy.  
Retail pharmacist.  
*Ad.*, Littlestown, Pa.
- Edward Josiah Strunk, P.D.**  
*Thes.*, Olea Volatilia.
- Frank Arthur Stump, P.D.**  
*Thes.*, Emulsions.  
Retail pharmacist. In U. S. Pub. Health Service during war, serving in Boston and Cleveland Marine Hospitals.  
*Ad.*, 1800 N. 6th Street, Harrisburg, Pa.
- Thomas Jefferson Turner, P.C.**  
*Thes.*, Nitroglycerin.  
*Ad.*, 7042 Torresdale Avenue, Phila., Pa.
- Leo Michael Wachtel, P.D.**  
*Thes.*, Cyrilla Racemiflora.  
Hospital and physicians' supplies.  
*Ad.*, 410 Bull Street, Savannah, Ga.
- George Frederick Wagner, P.D.**  
*Thes.*, Sodii Bicarbonas.  
*Ad.*, 4312 Germantown Avenue, Phila., Pa.
- Charles Arthur Walter, P.D.**  
*Thes.*, Rhus Glabra.  
Physician. Graduated in medicine, Jeff. Med. College, 1910. Res. phys. St. Francis Hosp., Trenton, New Jersey.  
*Ad.*, Glenside, Pa.
- Reuben Warshawsky, (Now R. W. Warner), P.D.**  
*Thes.*, Urine Analysis and Its Advantages to the Pharmacist.  
*Ad.*, 155 Springfield Avenue, Newark, N. J.
- Charles Berenda Weinberg, P.D.**  
*Thes.*, The Opium Habit.  
Physician. Graduated in medicine, Jeff. Med. College, 1909. Res. phys. Mt. Sinai Hosp., Phila. Served in U. S. A. as 1st Lieut.  
*Ad.*, 22 S. Illinois Avenue, Atlantic City, N. J.
- Harry Elmer Wertz, P.D.**  
*Thes.*, An Examination of Various Pilocarpus Leaves.  
Retail pharmacist.  
*Ad.*, Main and Clinton Streets, Johnstown, Pa.
- David MacGowan West, P.D.**  
*Thes.*, Sodii Boras.  
*Ad.*, Ardmore, Pa.
- Jose Antonio Zeledon, P.D.**  
*Thes.*, Copal and Chiraca.  
*Ad.*, San Jose, Costa Rica, C. A.
- Special Students.**
- Albert States Carwithen.**  
Received Certificate of Proficiency in Chemistry.  
*Ad.*, 1634 Wakeling Street, Phila., Pa.
- Ralston Sanford Hirst.**  
Received Certificate of Proficiency in Chemistry.  
With Carpenter Milk Products Co.  
*Ad.*, 1610 H Street, Modesto, Cal.
- Norman Boore Hoffman.**  
Received Certificate of Proficiency in Chemistry.  
Chemist and Metallurgist, Colonial Steel Co. Mem. Amer. Soc. Testing Materials; Amer. Steel Treaters Soc.  
*Ad.*, 446 Wilson Avenue, Beaver, Pa.
- Charles Franklin Keller.**  
Received Certificate of Proficiency in Chemistry.
- Elmer E. Wyckoff.**  
Received Certificate of Proficiency in Chemistry.  
Instr. P. C. P., 1902-04. (See page 434.)  
*Ad.*, 530 Mansfield Place, Brooklyn, N. Y.
- 1905**
- Raymond Albanus Acuff, P.D.**  
*Thes.*, Epinephrin.  
*Ad.*, Langhorne, Pa.
- Joseph Landis Althouse, P.D.**  
*Thes.*, Opium.  
*Ad.*, 1840 N. 3rd Street, Harrisburg, Pa.
- Irvin Milton Anspach, P.D.**  
*Thes.*, Ergot.  
Retail pharmacist. Mem. York Haven Town Council and school director.  
*Ad.*, York Haven, Pa.
- Clyde Kreider Baer, P.D.**  
*Thes.*, Aloes.  
Retail pharmacist.  
*Ad.*, 4315 Baltimore Avenue, Phila., Pa.
- Seth Arden Bardwell, P.C.**  
*Thes.*, Kola.  
*Ad.*, 358 Leader News Bldg., Cleveland, Ohio.
- Walter Westbrook Bauder, P.D.**  
*Thes.*, Uric Acid.  
*Ad.*, So. Williamsport, Pa.
- Raymond Clyde Becker, P.D.**  
*Thes.*, Solution and Its Theory.  
Dentist. Graduated in dentistry, Medico-Chi. College, 1909.  
*Ad.*, 2451 N. 19th Street, Phila., Pa.
- George Mahlon Beringer, Jr., P.D.**  
*Thes.*, The Pharmacognosy and Pharmacy of Galega Officialis.  
Retail pharmacist. Ex-pres. N. J. Pharm. Assn. Mem. N. J. Board of Pharmacy.  
*Ad.*, 501 Federal Street, Camden, N. J.
- \*Lewis Edmund Boesser, P.D.**  
*Thes.*, Olive Oil and Its Alterations.  
Deceased, June 14, 1916.
- John Edward Bonner, P.D.**  
*Thes.*, Unguentum Zinci Oxidi.  
*Ad.*, Juniata, Pa.
- Clarence LaBue Bonta, P.D.**  
*Thes.*, Advertising or "A Made-to-Order Reputation."  
In advertising business. Graduated Hanover College, 1899, degrees B.S. and M.A. Lecturer on advertising, P. C. P. and Temple Univ. Now in charge of production for M. P. Gould and Co. Mem. Sigma Chi and Phi Delta Chi Frats. Masonic affiliation.  
*Ad.*, Care of M. P. Gould and Co., New York City.
- Karl Leander Bosch, P.D.**  
*Thes.*, Strophanthus.  
*Ad.*, 1314 Parade Street, Erie, Pa.
- Benjamin Franklin Bowersox, P.D.**  
*Thes.*, Cascara Sagrada.  
Retail pharmacist. Attended lectures at Jeff. Med. College.  
*Ad.*, Millheim, Pa.
- Walter Taggart Butler, P.D.**  
*Thes.*, Granular Effervescent Salts.  
*Ad.*, 4342 Lancaster Avenue, Phila., Pa.

**William DuBois Buzby, P.D.**

*Thes.*, Suppositories.  
*Ad.*, Care of Marvin (Florist), Wilkesbarre, Pa.

**Clarence Cathers Csrhart, P.D.**

*Thes.*, Ergot.  
*Ad.*, 2026 S. 66th Street, Phila., Pa.

**\*Frank William Csst, P.D.**

*Thes.*, Dry Distillation of Wood.  
Deceased, March 4, 1908.

**Arthur Cohen, P.D.**

*Thes.*, Resin of Podophyllum.  
*Ad.*, Main and Franklin Streets, Johnstown, Pa.

**William Jasper Cott, P.D.**

*Thes.*, Pharmacopœical Tinctures.  
Retail pharmacist.  
*Ad.*, Miners Mills, Pa.

**Dean Burton Crawford, P.D.**

*Thes.*, Solution of Hydrogen Dioxide.  
Retail pharmacist.  
*Ad.*, Pacific and Florida Avenues, Atlantic City, New Jersey.

**Howell Guy Crothers, P.D.**

*Thes.*, Chloral Hydrate.  
*Ad.*, Care of A. H. Zullinger, 40th and Locust Sts., Phila., Pa.

**Katie Minerva Dsavidowitch, (Mrs. Samuel Juresco), P.D.**

*Thes.*, Olive Oil.  
*Ad.*, 6th and Moore Streets, Phila., Pa.

**George Bertram Davies, P.D.**

*Thes.*, Eucalyptus Globulus.  
Retail pharmacist.  
*Ad.*, 958 Market Street, San Francisco, Cal.

**Charles Maclay Diller, P.D.**

*Thes.*, Aloes.  
Retail pharmacist.  
*Ad.*, Lansdowne, Pa.

**William Howard Dodds, P.D.**

*Thes.*, Milk and Its Food Products.

**Harry Wilson Dundore, P.D.**

*Thes.*, Ptomaines.  
Retail pharmacist.  
*Ad.*, Emaus, Pa.

**Harry Frederick Eckhardt, P.D.**

*Thes.*, Wild Celery (Apium Graveolens).  
Fruit grower. Course in agriculture at Univ. of California.  
*Ad.*, 190 8th Avenue, San Francisco, Cal.

**William King Ehrenfeld, P.D.**

*Thes.*, Liquor Magnesii Citratis.  
*Ad.*, 407 E. Pittsburgh Street, Greensburg, Pa.

**Harry Elsenhardt, P.D.**

*Thes.*, Cinchona.  
*Ad.*, 4501 N. 19th Street, Phila., Pa.

**Francis Theodors Elliot, P.D.**

*Thes.*, Estimation of Lime in Syrupus Calcis.  
Physician. Graduated in medicine, Jeff. Med. College, 1911. Mem. Vol. Med. Service Corps.  
*Ad.*, Taneytown, Md.

**Charles Palm Eves, P.D.**

*Thes.*, Oleum Ricini.  
Pharmacist.  
*Ad.*, 60th and Lansdowne Avenue, Phila., Pa.

**Joseph Harry Fekula, P.C.**

*Thes.*, Drug Abuses.  
Retail pharmacist. Received P.D. degree, 1907.  
*Ad.*, Olyphant, Pa.

**Juan Diego Fernandez, P.D.**

*Thes.*, Snake Weed.

**Leslie Steckel Freeman, P.D.**

*Thes.*, Coffee.  
Retail pharmacist.  
*Ad.*, 2441 Brown Street, Phila., Pa.

**Frank Morton Garton, P.D.**

*Thes.*, Pepsinum and Its Preparations.  
*Ad.*, Old York Road and Haynes Street, Phila., Pa.

**John Isaac Gerhardt, (now Gerhard), P.D.**

*Thes.*, Glucose.  
With Aschenbach and Miller, wholesale druggists, as buyer and city representative.  
*Ad.*, 1247 W. Allegheny Avenue, Phila., Pa.

**Ray Dill Gilliland, P.D.**

*Thes.*, Diphtheria Antitoxin.  
Retail pharmacist.  
*Ad.*, 104 College Avenue, State College, Pa.

**Horace Ware Given, P.D.**

*Thes.*, American Grown Belladonna.  
Physician and pharmacist.  
*Ad.*, 3401 Wharton Street, Phila., Pa.

**Joseph Anthony Glenn, P.D.**

*Thes.*, Nutgall.  
*Ad.*, 23rd and Morris Streets, Phila., Pa.

**William Andrew Glenn, P.D.**

*Thes.*, Belladonna.  
*Ad.*, 2200 N. Lambert Street, Phila., Pa.

**Frank Eliwood Goulden, P.D.**

*Thes.*, Phosphorus.  
Pharmacist.  
*Ad.*, 23 Wayne Street, Wilkesbarre, Pa.

**Thomas Lawrence Gravell, P.D.**

*Thes.*, Eucalyptus.  
*Ad.*, Care of N. B. Danforth, Wilmington, Del.

**\*John Henry Gross, P.D.**

*Thes.*, Asbestos.  
Retail pharmacist, Phila., Pa. Deceased, March, 1920.

**Lendis R. Hahn, P.D.**

*Thes.*, Drug Store Economy.  
Salesman.  
*Ad.*, 421 S. 13th Street, Harrisburg, Pa.

**Powell Hampton, P.D.**

*Thes.*, Copaiba.  
Received Certificate of Proficiency in Chemistry, P. C. P., 1907.  
*Ad.*, 503 DeKalb Street, Bridgeport, Pa.

**David Morris Hassman, P.D.**

*Thes.*, Borax and the Analysis of Commercial Samples.  
Physician.  
*Ad.*, 30 Kenwood Street, Brookline, Mass.

**Edwin Cowes Hathaway, P.D.**

*Thes.*, Methyl Alcohol.  
With Penna. State Dept. of Health.  
*Ad.*, 228 E. Farnance Street, Norristown, Pa.

**Lewis Henry Hausmann, Jr., P.D.**

*Thes.*, Picraena Excelsa.  
Retail pharmacist.  
*Ad.*, 117 S. Vermont Avenue, Atlantic City, N. J.

**Mary Margaretta Hodge, P.D.**

*Thes.*, Camphor.  
Pharmacist, Presbyterian Hosp., Phila., Pa.  
*Ad.*, Presbyterian Hosp., Phila., Pa.

**Frank Hohmeler, P.D.**

*Thes.*, Vaccine Virus.  
Retail pharmacist.  
*Ad.*, 613 Ocean Avenue, Jersey City, N. J.

**Eugene M. Holroyd, P.D.**

*Thes.*, Cocainæ Hydrochloras.  
Retail pharmacist. Masonic affiliation.  
*Ad.*, 29th and Reed Streets, Phila., Pa.



# 598 First Century of the Philadelphia College of Pharmacy

- Frank Herman Holzschuh, P.D.**  
*Thes.*, Liquid Air, A Preservative.  
 Retail pharmacist.  
*Ad.*, 1549 Thompson Street, Phila., Pa.
- Joseph Howard Houk, P.D.**  
*Thes.*, Unguentum Aquæ Rosæ.  
 Retail pharmacist. Mem. Indiana Educational Board.  
*Ad.*, Indiana, Pa.
- Leonard Hughes, P.D.**  
*Thes.*, Suppositories.  
*Ad.*, 3136 N. 8th Street, Phila., Pa.
- Robert Joseph Hunt, P.D.**  
*Thes.*, The Drug Clerk.  
 Pres. Hunt Sundries Co., Inc., wholesale drug sundries.  
*Ad.*, 706 First Avenue, N., Minneapolis, Minn.
- Walter Hamilton Joerg, P.D.**  
*Thes.*, The Scaled Salts of Iron.  
 Mgr. for Palma and Co. Corporal Co. I, 65th, N. Y. State National Guard.  
*Ad.*, 161 N. Main Street, Olean, N. Y.
- Charles Herbert Johnson, P.D.**  
*Thes.*, Alcohol.  
*Ad.*, 966 S. 8th Street, Camden, N. J.
- Bertram Kahnweiler, P.C.**  
*Thes.*, A Design of a Prescription Department.  
 Department store. Mem. Chamber of Commerce; N. Y. Advertising Club.  
*Ad.*, Orangeburg, S. C.
- Harry Clifford Karns, P.D.**  
*Thes.*, Substitution and Adulteration.  
 Control chemist, E. I. DuPont de Nemours and Co. Received Certificate of Proficiency in Chemistry, P. C. P., 1914.  
*Ad.*, 5316 Haverford Avenue, Phila., Pa.
- William Kennedy, P.D.**  
*Thes.*, Antitoxins and Vaccine.
- Samuel Benjamin Kern, P.D.**  
*Thes.*, Strophanthus.  
 Retail pharmacist. Secy. and Treas., Slatington Gun Club. Mem. Slatington Motor Club.  
*Ad.*, 920 Main Street, Slatington, Pa.
- John Phaon Krause, P.D.**  
*Thes.*, Practical Education of Pharmacy.  
*Ad.*, 226 S. 53rd Street, Phila., Pa.
- LeRoy William Kurtzman, P.D.**  
*Thes.*, Commercial Malt Extract.  
*Ad.*, 14 Park Avenue, Winchester, Mass.
- John Christopher Lehman, P.D.**  
*Thes.*, Immunity.  
 Retail pharmacist.  
*Ad.*, 28th and Poplar Streets, Phila., Pa.
- Philip Marlon Hutchins LeNoir, P.D.**  
*Thes.*, Curare.  
 Served as Gen. Secy. New Mexico Council of Defense. Also engaged in Y. M. C. A. work, Ft. Bliss, El Paso, Tex. during war. Author.  
*Ad.*, Sunmount Sanatorium, Santa Fe, N. M.
- Eugene Eicker Littlefield, P.D.**  
*Thes.*, Milk.  
 Retail pharmacist.  
*Ad.*, Belmont, N. H.
- Harry Lawrence McEntire, P.D.**  
*Thes.*, Thermometers.  
 With Foco Oil Co. Retail pharmacist until 1919.
- Charles Henry McLaughlin, P.D.**  
*Thes.*, Retail Pharmacy Commodities.  
 Retail pharmacist.  
*Ad.*, 2064 McKean Street, Phila., Pa.
- Frederick William McNess, P.D.**  
*Thes.*, Ferrum Reductum.  
 Secy., Buyer and director of production, Furst-McNess Co., Freeport, Ill.  
*Ad.*, 175 Pleasant Street, Freeport, Ill.
- Charles Maier, P.D.**  
*Thes.*, Gossypium Purificatum.  
 Retail pharmacist.  
*Ad.*, Gloucester City, N. J.
- \*Gilbert March, P.D.**  
*Thes.*, Sinapis.  
 Deceased, March 9, 1911.
- Wilbert Mathis, P.D.**  
*Thes.*, Pepsinum.  
 Retail pharmacist.  
*Ad.*, Orange and Washington Streets, Media, Pa.
- \*George Washington Miller, P.D.**  
*Thes.*, The Aniline Dyes.  
 Deceased, May, 1914.
- Edwin Royer Mohler, P.D.**  
*Thes.*, Benzoinum.  
 Retail pharmacist. Masonic affiliation. Vice-pres. Kiwanis Club.  
*Ad.*, 245 Clymer Street, Reading, Pa.
- George Lohman Nevins, P.D.**  
*Thes.*, Cascara Sagrada.  
 Retail pharmacist.  
*Ad.*, 226 Allegheny Street, Jersey Shore, Pa.
- Edwin Leigh Newcomb, P.D.**  
*Thes.*, Specimen Case: Herbarium: Purification of Water.  
 Asst. in Botany and Pharmacognosy, 1905-10. (See page 437.)  
*Ad.*, 527 5th Avenue, Minneapolis, Minn.
- Samuel Snyder Newcomer, P.D.**  
*Thes.*, Honey.  
 Retail pharmacist.  
*Ad.*, Kane, Pa.
- John Bayer Oellig, P.D.**  
*Thes.*, Extractum Sennæ Fluidum.  
 Retail pharmacist.  
*Ad.*, 1116 State Street, Coraopolis, Pa.
- Richard Henry Ottmann, P.D.**  
*Thes.*, Uva Ursi.  
 Retail pharmacist.  
*Ad.*, Lead, South Dakota.
- David Owens, P.D.**  
*Thes.*, Gentiana.
- Lloyd Preston Palmer, P.D.**  
*Thes.*, Formaldehyde in Witch-Hazel.  
 Gen. Mgr. of Henry R. Palmer and Sons' chain of drug stores.  
*Ad.*, 105 Clayton Street, Athens, Ga.
- William J. Phillips, P.D.**  
*Thes.*, Soluble Iron.  
*Ad.*, Care of Home Drug Co., Windber, Pa.
- Harry Freeman Plum, P.D.**  
*Thes.*, Cod Liver Oil.  
*Ad.*, Atlantic City, N. J.
- Ralph McDonnell Beahard, P.D.**  
*Thes.*, Tincture of Iodine.  
 Supt. Pharmaceutical Mfg., Eli Lilly and Co.  
*Ad.*, Care of Eli Lilly and Co., Indianapolis, Ind.
- Joseph Percy Remington, P.D.**  
*Thes.*, The Specific Gravity of Iodoform.  
 Consulting Engineer and Pres. Remington Mfg. Co. Graduated, Univ. of Penna., 1898; degree B.S. in Chemistry. Associate Editor 6th Ed., Remington's Practice of Pharmacy. Mem. Racquet; Mask and Wig; Merion Cricket; Engineers Clubs. During World War acted as consulting engineer with Wright Martin Corp., mfg. aviation motors.  
*Ad.*, 1513 Walnut Street, Phila., Pa.
- Clarence Hall Renfrew, P.D.**  
*Thes.*, Acacia.



**George Henry Retzer, P.D.**

*Thes.*, Tannin.  
In laboratory of Paramount Aircraft Picture Corp.  
Masonic affiliation. Served in 4th Inf., Co. A,  
National Guards, U. S. A. Mem. B. P. O. E.;  
I. O. O. F.  
*Ad.*, Walla Walla, Wash.

**Wilmer Beaver Rhoads, P.D.**

*Thes.*, Acidum Salicylicum.  
Pharmacist.  
*Ad.*, 319 Boulevard, Norristown, Pa.

**Hervey Taylor Richards, P.D.**

*Thes.*, Cerium Oxalate.  
Retail pharmacist.  
*Ad.*, 523 Chestnut Street, Coatesville, Pa.

**John Ross Rippetoe, P.D.**

*Thes.*, The Purification of Water for Pharma-  
ceutical and Other Purposes.  
With Schieffelin and Co., Mfrs. of Pharma-  
ceuticals. Mem. A. Ph. A.; Amer. Chem. Soc.  
*Ad.*, 570 East 133rd Street, New York City.

**Estrick Aloysius Roan, P.D.**

*Thes.*, Aloe.  
*Ad.*, 159 E. Main Street, Plymouth, Pa.

**John Shelly Saurman, P.D.**

*Thes.*, Abstracts.

**Frederick William Schimpf, P.D.**

*Thes.*, Methyl Alcohol.  
*Ad.*, Orwigsburg, Pa.

**Henry Joseph Schlitzer, P.D.**

*Thes.*, Opium.  
*Ad.*, 621 W. Market Street, Pottsville, Pa.

**Carl Emil Schmidt, P.D.**

*Thes.*, Ceratum Resinæ Compositum.  
Retail pharmacist.  
*Ad.*, 238 Market Avenue, S., Canton, Ohio.

**George Ralph Schrader, P.D.**

*Thes.*, Kaolin.  
*Ad.*, Johnstown, Pa.

**Walter Edward Scott, P.D.**

*Thes.*, U. S. P. Preparations of Opium.  
Retail pharmacist.  
*Ad.*, 37 West Gay Street, West Chester, Pa.

**Samuel Arthur Shiffer, P.D.**

*Thes.*, Strophanthus.  
Retail pharmacist.  
*Ad.*, 1101 S. Main Avenue, Scranton, Pa.

**\*William Styers Shugars, P.D.**

*Thes.*, Syrup of Hydriodic Acid.

**Clement Jerome Sihila, P.D.**

*Thes.*, Lemon Syrup.  
*Ad.*, 2418 6th Street, S. W., Canton, Ohio.

**Hannah Wilson Slifer, P.D.**

*Thes.*, Iron.  
*Ad.*, 4250 N. Broad Street, Pbil., Pa.

**Jay Fisk Smith, P.D.**

*Thes.*, Casein and Some of Its Uses.

**\*Stanley Gleninger Smith, P.D.**

*Thes.*, The Adulterations of Spiritus Frumenti.  
Retail pharmacist, Harrisburg, Pa. Deceased, Janu-  
ary 1, 1911.

**Frederick Maurice Snyder, P.D.**

*Thes.*, Cola (Kola).  
*Ad.*, 25th and Brown Streets, Pbil., Pa.

**Maud Sollenberger, P.D.**

*Thes.*, A Polariscopic Study of Reserve Starch  
Grains.  
Received Certificate in Bacteriology, P. C. P., 1919.  
*Ad.*, 1306 Pine Street, Asbury Park, N. J.

**Andrew Eston Spalding, P.D.**

*Thes.*, Acidum Salicylicum.  
Mgr. Central Drug Store. Mem. B. P. O. E.  
Masonic affiliation.  
*Ad.*, Oil City, Pa.

**Franklin Pierce States, Jr., P.D.**

*Thes.*, Gossypium.  
Pharmacist, Phila. Dispensary. Retail pharmacist  
until 1908.  
*Ad.*, 657 Haddon Avenue, Collingswood, N. J.

**Nellie Jane Stevenson, P.D.**

*Thes.*, Strophanthus.  
Chief pharmacist, Presbyterian Hosp., Pbil.  
*Ad.*, 51 N. 39th Street, Pbil., Pa.

**\*John Edward Sweeney, P.D.**

*Thes.*, Acacia.  
Deceased, December 17, 1907.

**John Francis Swoesey, P.C.**

*Thes.*, Antitoxin.  
*Ad.*, Bartram and Atlantic Avenues, Atlantic City,  
New Jersey.

**Howard George Sylvester, P.D.**

*Thes.*, Acidum Tannicum.  
*Ad.*, 319 Cattell Street, Easton, Pa.

**James Callanan Van Antwerp, P.D.**

*Thes.*, An Inferior Grade of White Mustard.  
Pres. Van Antwerp's Drug Corp.; Pres. Van  
Antwerp Wholesale Drug Co.; Vice-pres. Mobile  
Chamber of Commerce; Director, People's Bank  
of Mobile.  
*Ad.*, 250 State Street, Mobile, Ala.

**Joseph Louis Wade, P.D.**

*Thes.*, Incompatibilities of Icbthylol.  
Chemist, Aberfoyle Mfg. Co. Formerly Instr.  
Analyt. Chemistry P. C. P. (See page 439.)  
*Ad.*, 6632 Elmwood Avenue, Phila., Pa.

**Canby Paul Warnick, P.D.**

*Thes.*, Liqueur Plumbi Subacetatis.  
With John Wyeth and Bro., Coated Tablet Mfg.  
Dept.  
*Ad.*, 160 W. 97th Street, New York City.

**Clinton Robert Weiser, P.D.**

*Thes.*, Nux Vomica and Its Alkaloids.  
Mgr. for C. K. Baer, retail pharmacist.  
*Ad.*, 91 S. Wycombe Avenue, Lansdowne, Pa.

**Louis Joseph Frederick Welch, P.D.**

*Thes.*, Uimus.

**Harry Nason Whitney, P.D.**

*Thes.*, Cinchona and Its Alkaloids.  
*Ad.*, Presque Isle, Me.

**Eugene J. Wipf, P.D.**

*Thes.*, Wood Alcohol.  
*Ad.*, Hackensack Avenue, Ridgefield Park, N. J.

**Paul DeLancey Witmer, P.D.**

*Thes.*, The Differentiation of Hyoscyamus Niger,  
Atropa Belladonna and Datura Stramonium.  
*Ad.*, 4314 Germantown Avenue, Phila., Pa.

**Edward Elias Woodland, P.D.**

*Thes.*, Mesquite Gum.  
Physician.  
*Ad.*, 125 W. 58th Street, New York City.

**Nelaeon Lewis Yeakel, P.D.**

*Thes.*, Zizania Aquatica.  
Retail pharmacist.  
*Ad.*, Nazareth, Pa.

**Special Students.**

**Joshua Evans Eckman.**

Received Certificate of Proficiency in Chemistry.  
Chemist, National Drug Co.  
*Ad.*, 5620 Spruce Street, Pbil., Pa.

**Charles Dunning French.**

Received Certificate of Proficiency in Chemistry.  
Sales Mgr., Samuel H. French and Co. Mem.  
Union League Club.  
*Ad.*, 5130 Newhall Street, Germantown, Phila., Pa.

1906

**John Harvey Allen, P.D.**

*Thes.*, Glyceritum Boroglycerini.  
Retail pharmacist. Served in U. S. A. with 59th  
Pioneer Int.  
*Ad.*, 405 Delaware Avenue, Wilmington, Del.

**Robert Bunn Anawalt, P.D.**

*Thes.*, The Soda Fountain.  
Retail pharmacist. Mem. Board of Trade; Mer-  
chants Club.  
*Ad.*, Ellwood City, Pa.

**Joseph Colson Andrews, P.D.**

*Thes.*, The Marvels of Coal Tar.  
Retail pharmacist.  
*Ad.*, Woodstown, N. J.

**Wilmot Ayres, P.D.**

*Thes.*, The Pharmacist and His Specialties.  
Physician. Graduated in medicine, Jeff. Med. Col-  
lege, 1910. Res. Phys. Pottsville Gen. Hosp.  
Served on Western Front as Medical Officer to  
5th Border Reg. (British).  
*Ad.*, Bedford, Pa.

**Ancy Lonza Baakin, P.D.**

*Thes.*, The Art of Making Compressed Tablets.  
Retail and wholesale pharmacist.  
*Ad.*, 250 Montford Street, Asheville, N. C.

**Frances Roae Bell (Mrs.), P.D.**

*Thes.*, Brown Mixture.  
Retail pharmacist.  
*Ad.*, 5th and Jackson Streets, Phila., Pa.

**William Laurence Bender, P.D.**

*Thes.*, Cod Liver Oil.  
Retail pharmacist.  
*Ad.*, 2143 N. 18th Street, Phila., Pa.

**John Alvin Betts, P.D.**

*Thes.*, Hydrastis.

**Peter Thomas Blenkowaki, P.D.**

*Thes.*, Spiritus Ammonia Aromaticus.  
Retail pharmacist. Mem. City Board of Health,  
Wilmington, Del.  
*Ad.*, 500 S. Van Buren Street, Wilmington, Del.

**Frederick John Blinzig, P.D.**

*Thes.*, Lignor Magnesii Citratis.  
Retail pharmacist. Mem. I. O. O. F. Masonic  
affiliation.  
*Ad.*, 412 N. Martin Street, Titusville, Pa.

**Clarence Eugene Bragdon, P.D.**

*Thes.*, The Paper Industry.  
Retail pharmacist. Masonic affiliation.  
*Ad.*, North Wales, Pa.

**George Harold Broadbelt, P.C.**

*Thes.*, Adulteration and Substitution.  
Received P.D. degree, 1907.

**Elam Bruhaker, P.D.**

*Thes.*, Oleum Theobromatis.

**William David Burgeon, P.D.**

*Thes.*, Formaldehyde.

**Helen Ritz Burns, P.D.**

*Thes.*, A Pessimistic vs. An Optimistic View of  
Pharmacy.  
Retail pharmacist.  
*Ad.*, Lewistown, Pa.

**Samuel Sumter Butler, P.D.**

*Thes.*, Fluidextracts.  
*Ad.*, 1100 Kaighn Avenue, Camden, N. J.

**Franklin Alfred Butter, P.D.**

*Thes.*, Sodii Boras and Acidum Boricum.  
Retail pharmacist.  
*Ad.*, 1411 Encinal Avenue, Alameda, Cal.

**Walter Samuel Camp, P.C.**

*Thes.*, Cotton Root Bark.  
Retail pharmacist. Mayor of Monroe, Wash., and  
Pres. Monroe Commercial Club. Received P.D.  
degree, 1908.  
*Ad.*, Monroe, Wash.

**Frank William Carl, P.D.**

*Thes.*, Hydrastis and Its Cultivation.

**Frank Lester Cheney, P.D.**

*Thes.*, Extemporaneous Sulphurous Acid.  
Traveling salesman for H. K. Mulford and Co.  
*Ad.*, 176 Chestnut Street, Albany, N. Y.

**Clawson Samuel Coles, P.D.**

*Thes.*, India Rubber—Its Origin and Preparations.  
*Ad.*, 2 N. Victoria Avenue, Atlantic City, N. J.

**Elliott Daniel Cook, P.D.**

*Thes.*, Shall the Drug Store Close on Sunday?  
Pharmacist. Spent one year in Korea as head of  
drug dept., Severance Hosp. Registered in Japan.  
*Ad.*, Yardley, Pa.

**George Francis Creuse, P.D.**

*Thes.*, Sodii Sulphis and Sodii Bisulphis.  
Retail pharmacist. Tax collector for Borough of  
Smithton.  
*Ad.*, Smithton, Pa.

**Milton Hart Cunningham, P.D.**

*Thes.*, Cod Liver Oil.  
Retail pharmacist.  
*Ad.*, Hightstown, N. J.

**George Covell Davy, P.D.**

*Thes.*, Water.  
Retail pharmacist. Received Certificate of Pro-  
ficiency in Chemistry, P. C. P., 1908.  
*Ad.*, Coatesville, Pa.

**John Douglas Dawaou, P.D.**

*Thes.*, Disinfection.

**George Stanley DuBois, P.D.**

*Thes.*, Magnesii Carbonas.  
Mgr. for L. S. DuBois Son and Co., wholesale  
druggists.  
*Ad.*, Paducah, Ky.

**Erma Delia Eadle, P.D.**

*Thes.*, Cascara Sagrada.  
Pharmacist. Germantown Hosp., Germantown, Pa.  
*Ad.*, Germantown Hosp., Germantown, Phila., Pa.

**Franklin Wallace Earl, P.D.**

*Thes.*, The Aromatic Medicated Waters, U. S. P.  
*Ad.*, 2341 Cleveland Avenue, Phila., Pa.

**Charles William Eckenroth, P.D.**

*Thes.*, Acidum Tannicum.  
*Ad.*, Myerstown, Pa.

**Charles Wilson Evana, P.D.**

*Thes.*, India Rubber—Its Origin and Preparation.  
Retail pharmacist. Deputy food inspector.  
*Ad.*, Ludlow, Pa.

**Harry Miller Fahr, P.D.**

*Thes.*, Suppositories.  
In Med. Dept. U. S. A. Served in France with  
1st Div. Wounded.  
*Ad.*, Post Hosp., Garden City, L. I., N. Y.

**Harvey Peter Feigley, P.D.**

*Thes.*, Magnesium Sulphate.  
Physician. Graduated in medicine, Jeff. Med. Col-  
lege, 1911.  
*Ad.*, 32 S. 10th Street, Quakertown, Pa.

**Manuel Fernandez, P.D.**

*Thes.*, History of the Zinc Industry.

**Herbert Louisa Flack, P.D.**

*Thes.*, Cataplasma Kaolini.  
Retail pharmacist.  
*Ad.*, 52nd and Haverford Avenue, Phila., Pa.

**Frank Carroll Fogg, P.D.**

*Thes.*, Tablet Manufacture.

- Frank Garfield Fogg, P.D.**  
*Thes.*, Mercurial Ointment.  
 Wholesale and retail druggist.  
*Ad.*, 30 Walnut Street, Salem, N. J.
- Ralph Anderson Forrest, P.D.**  
*Thes.*, The European Source of Drugs.  
 Retail pharmacist.  
*Ad.*, 7 Broadway, Concord, N. H.
- William Wetherill Foster, Jr., P.D.**  
*Thes.*, Suppositories.  
 Retail pharmacist.  
*Ad.*, 7910 Germantown Avenue, Phila., Pa.
- Wilbur Bair Goodyear, P.D.**  
*Thes.*, Tinctura Cardamomi Composita.  
 Retail pharmacist. Tres. Allison Hill Retail Drug-  
 gists Assn. Local Secy. Penna. Pharm. Assn.  
*Ad.*, 1901 Derry Street, Harrisburg, Pa.
- Lloyd Esrl Goss, P.D.**  
*Thes.*, Sodium Phosphate.  
 Retail pharmacist.  
*Ad.*, 15th and Master Streets, Phila., Pa.
- Charles Roy Grammer, P.D.**  
*Thes.*, Kaolinum.  
 Retail pharmacist.  
*Ad.*, Asbury Park, N. J.
- Francis Green, P.D.**  
*Thes.*, Asbestos.  
 Retail pharmacist.  
*Ad.*, Pemberton, N. J.
- Charles Peyton Greyer, P.D.**  
*Thes.*, Jalapa.  
 Pres. and Mgr. Burke Drug Co. Mem. North  
 Carolina Board of Pharmacy.  
*Ad.*, Morganton, N. C.
- Herman Charles Grim, P.D.**  
*Thes.*, Strophanthus Kombé.  
 Physician. Graduated in medicine, Jeff. Med. Col-  
 lege, 1910. Served in U. S. A. as 1st Lieut., Med.  
 Department.  
*Ad.*, Trumbauersville, Pa.
- William Henry Haines, P.C.**  
*Thes.*, Pills in General.
- George Benjamin Haley, P.D.**  
*Thes.*, Tem-Piab-Ute.  
*Ad.*, 1001 State Street, Boise, Idaho.
- Godfrey Olin Hancock, P.D.**  
*Thes.*, Ferri Carhonas Saccharatus.  
 Pharmacist.  
*Ad.*, 2708 Harrison Street, Wilmington, Del.
- \*James William Haws, P.D.**  
*Thes.*, Hydrargyrum.  
 Deceased, May 18, 1917.
- Harvey Abner Henry, P.D.**  
*Thes.*, Zea Mays.  
 Pharmacist, Owl Drug Co. Conducts a review  
 course in pharmacy.  
*Ad.*, 4300 S. Western Avenue, Los Angeles, Cal.
- Jason Adam Herr, P.D.**  
*Thes.*, Use of Glycerin in Pharmaceutical Prepara-  
 tions.  
 Retail pharmacist.  
*Ad.*, 2924 Girard Avenue, Phila., Pa.
- John Calvin Hoenstine, P.D.**  
*Thes.*, Glycerite of Phenol.  
 Chemist and Metallurgist, Penna. R. R. Co. In  
 charge of heat treating lah.  
*Ad.*, 1521 2nd Avenue, Altoona, Pa.
- William Christopher Hoffman, P.D.**  
*Thes.*, Cannabis Indica.  
 Retail pharmacist.  
*Ad.*, Phillipsburg, N. J.
- Harry Caswell Hughes, P.D.**  
*Thes.*, Elixir Ferri, Quinina et Strychnina Phos-  
 phatum.  
 Retail pharmacist.  
*Ad.*, 36 Centre Avenue, Plymouth, Pa.
- Benjamin Russell Hurst, P.D.**  
*Thes.*, Liquor Magnesii Citratis.  
*Ad.*, 129 E. Mt. Pleasant Avenue, Mt. Airy, Phila.,  
 Penna.
- Samuel Miles Irvin, P.D.**  
*Thes.*, Mercury.  
 Retail pharmacist.  
*Ad.*, Logan Avenue and 10th Street, Tyrone, Pa.
- James Franklin Irwin, P.D.**  
*Thes.*, Aqua Acidi Carbolic.  
 Retail pharmacist.  
*Ad.*, Hagerstown, Md.
- Benjamin Herr Jenkins, P.D.**  
*Thes.*, Sacrose and Its Detection.  
 Retail pharmacist.  
*Ad.*, 2300 N. 6th Street, Harrisburg, Pa.
- Walter Jessup, P.D.**  
*Thes.*, Digestive Ferments and Their Uses.  
 Retail pharmacist.  
*Ad.*, Lansdowne, Pa.
- Evan Albert Jones, P.D.**  
*Thes.*, Rhubarb.  
 Mgr. for Baer and Snyder, retail pharmacists.  
*Ad.*, 1539 Federal Street, Phila., Pa.
- Frederick Brauns Kelty, P.D.**  
*Thes.*, Thymol Iodide.  
 Mgr. for L. K. Liggett Co. Chief pharmacist,  
 Penna. Hosp., 1911-1914.  
*Ad.*, 1504 N. 19th Street, Phila., Pa.
- Robert Michael Kettl, P.D.**  
*Thes.*, Tests for the Detection of Rosin.  
 Retail pharmacist.  
*Ad.*, 107 Crawford Avenue, Altoona, Pa.
- Edwin John Lanbach, P.D.**  
*Thes.*, Zinc and Its Official Salts.  
*Ad.*, 64th and Vine Streets, Phila., Pa.
- Harry Ashton Lloyd, P.D.**  
*Thes.*, Antitoxin.  
 Retired. Formerly retail pharmacist.  
*Ad.*, 200 N. 35th Street, Phila., Pa.
- Oliver Becket McClements, P.D.**  
*Thes.*, Olive Oil.  
 Retail pharmacist.  
*Ad.*, Conshohocken, Pa.
- \*Charles Mann, P.D.**  
*Thes.*, Rhamnus Purshiana.  
 Deceased, August 22, 1911.
- Joaquin H. Medrano Polsnco, P.D.**  
*Thes.*, Micropharmacy.  
*Ad.*, P. O. Box 175, Guantanamo, Cuba.
- Charles Augustus Mehring, P.D.**  
*Thes.*, Shall Physicians Dispense?  
*Ad.*, 4th and Pepper Streets, Harrisburg, Pa.
- John Bowman Metz, P.D.**  
*Thes.*, Scopolamine.  
 Retail pharmacist.  
*Ad.*, 43 N. Potomac Street, Waynesboro, Pa.
- Charles Aloysius Monaghan, P.D.**  
*Thes.*, A Modern Drug Label.  
 Retail pharmacist. Served in U. S. A., Ordnance  
 Dept.  
*Ad.*, Wyndmoor, Pa., Care of Chestnut Hill, P. O.
- James Kulp Moore, P.D.**  
*Thes.*, Emergency Antidotes for Poisons.



602 First Century of the Philadelphia College of Pharmacy

- George Irvine Olewiler, P.D.**  
*Thes.*, Eucalyptus.  
 Pharmacist.  
*Ad.*, 5128 Parrish Street, Phila., Pa.
- Walter Harper Orrick, P.D.**  
*Thes.*, Belladonna.  
 Chemist, H. K. Mulford and Co.  
*Ad.*, 1625 N. 12th Street, Phila., Pa.
- Harold Frederick Peters, P.D.**  
*Thes.*, Vegetable Digestive Ferments.  
*Ad.*, 733 Walnut Street, Allentown, Pa.
- George Loula Pfeiffer, P.D.**  
*Thes.*, Diphtheria Antitoxin.  
 Retail pharmacist.  
*Ad.*, 5601 Girard Avenue, Phila., Pa.
- George Hilyard Platt, P.D.**  
*Thes.*, Hydrastis.  
 Pharmacist for George B. Evans.  
*Ad.*, 221 8th Avenue, Haddon Heights, N. J.
- Jose Augustin Portugal E., P.D.**  
*Thes.*, Incompatibility of Quinine Sulphate with  
 the Liberation of Hydrogen Sulphide.  
*Ad.*, Arequipa, Peru, S. A.
- Charles Hoffman Reese, P.D.**  
*Thes.*, Gossypium Purificatum and Its Uses.  
*Ad.*, 5745 Baltimore Avenue, Phila., Pa.
- William Henry Reisch, P.D.**  
*Thes.*, Is Pharmacy a Profession or a Trade?  
*Ad.*, Kulpmont, Pa.
- Henry George Reuwer, Jr., P.D.**  
*Thes.*, Refills.  
 Retail pharmacist.  
*Ad.*, 11 S. 2nd Street, Harrisburg, Pa.
- Herbert Leonard Richards, P.D.**  
*Thes.*, Coca.
- William Guy Riley, P.D.**  
*Thes.*, Serum Antidiphthericum.  
*Ad.*, Monroe, Wash.
- Jeremiah Thomas Roach, P.D.**  
*Thes.*, Lactnarium—Its Production and Uses.  
 Retail pharmacist. Recruiting officer for U. S.  
 Merchant Marine.  
*Ad.*, 2901 Girard Avenue, Phila., Pa.
- \*Paul Patton Robinson, P.D.**  
*Thes.*, Cinchona.
- Hamilton Russell, P.D.**  
*Thes.*, Liqueur Magnesii Citratis.  
 Retail pharmacist. Mem. Kiwanis Club.  
*Ad.*, Pensacola, Fla.
- Elmer Ellsworth Scatchard, P.D.**  
*Thes.*, Glycerinated Gelatin Suppositories.  
 Farmer. Retail pharmacist until 1919.  
*Ad.*, Milford, N. Y.
- William Frank Schlitzer, P.D.**  
*Thes.*, Phosphorus.  
 Secy. and Treas., Kabisch and Co., manufacturers  
 of bouillon cubes.  
*Ad.*, 5601 Haverford Avenue, Phila., Pa.
- Charles Cornelius Schomo, P.D.**  
*Thes.*, Sodii Phosphas.  
*Ad.*, Hamburg, Pa.
- Curtis Fink Schrader, P.D.**  
*Thes.*, Phenol.
- Carl Wilhelm Schwenzer, P.D.**  
*Thes.*, The Improved Spatula.  
 In coal mining business.  
*Ad.*, Mulus, Ky.
- Harry Seidman, P.C.**  
*Thes.*, Acidum Aceticum Dilutum.  
 Received P.D. degree, 1907.  
*Ad.*, Franklin Street and Columbia Avenue, Phila.,  
 Penna.
- Raymond Sharp, P.D.**  
*Thes.*, Vaccine Virus.  
 Pharmacist.  
*Ad.*, Mauricetown, N. J.
- Lewis Maurice Shear, P.D.**  
*Thes.*, Ergota.  
*Ad.*, 601 Manor Street, Lancaster, Pa.
- William Reuben Shearer, P.D.**  
*Thes.*, Liqueur Chlori Compositus.  
 Retail pharmacist.  
*Ad.*, 22 West High Street, Carlisle, Pa.
- Abraham Milton Shiffer, P.D.**  
*Thes.*, Liqueur Magnesii Citratis.  
 Mgr. of W. C. Kelly Estate. Formerly retail  
 pharmacist.  
*Ad.*, R. D. No. 1, Lancaster, Pa.
- Arthur Enos Shirer, P.D.**  
*Thes.*, Dried Sulphate of Iron.  
 Retail pharmacist.  
*Ad.*, Ordway, Colo.
- Joseph Alexander Shrom, P.D.**  
*Thes.*, The History of Antitoxin.  
*Ad.*, Black Lick, Pa.
- \*Edmund Elliott Slayton, P.D.**  
*Thes.*, Maple Sugar Industry.
- Edward Wilson Slifer, P.D.**  
*Thes.*, Shop and Show Fixtures.  
*Ad.*, 4250 N. Broad Street, Phila., Pa.
- Guy Staver, P.D.**  
*Thes.*, Vanillinum.  
 Retail pharmacist. Recruiting officer for U. S.  
 Merchant Marine.  
*Ad.*, 52 East King Street, Shippensburg, Pa.
- James Cochran Stouffer, P.D.**  
*Thes.*, Cascara Sagrada.  
*Ad.*, 6711 McPherson Street, Pittsburgh, Pa.
- Harvey James Sunday, P.D.**  
*Thes.*, Berberis.  
 Representative, Wm. H. Rorer, Phila., Pa.  
*Ad.*, 911 Haverford Avenue, Brookline, Pa.
- Frank Cochran Taylor, P.D.**  
*Thes.*, History of Pharmacy.  
*Ad.*, 11th and South Streets, Phila., Pa.
- Edward Sutton Thomas, P.D.**  
*Thes.*, The History of Cinchona.  
 Retail pharmacist.  
*Ad.*, 151 Brighton Avenue, Rochester, Pa.
- Frederick William Thomas, P.D.**  
*Thes.*, Antiseptics.
- Wilfred Steadman Thompson, P.D.**  
*Thes.*, Liqueur Plumbi Subacetatis.  
 Retail pharmacist. Recruiting officer for U. S.  
 Merchant Marine. Masonic affiliation.  
*Ad.*, Presque Isle, Me.
- Samuel Early Thorley, P.D.**  
*Thes.*, Ammonia Water.  
 Retail pharmacist.  
*Ad.*, 708 N. 6th Street, Harrisburg, Pa.
- \*Glenwood Elmo Traul, P.D.**  
*Thes.*, Creosote.  
 A number of years in employ of Smith-Fans  
 Drug Co., Salt Lake City, later with Chicago  
 Flexible Shaft Co. Deceased, February, 1920.
- Raymond Joseph Walther, P.D.**  
*Thes.*, Perfume.  
*Ad.*, Union City, Pa.

**Berta Wbaland, P.C.**

*Thes.*, The Rancidity of Fats.  
Physician. Graduated in medicine, Woman's Med. College of Penna., 1910. Received P.D. degree, 1908.  
*Ad.*, 117 Atlantic Street, Bridgeton, N. J.

**Henry Woolman Whitacre, P.D.**

*Thes.*, The Pharmacist.  
*Ad.*, 302 E. Second Street, Moorestown, N. J.

**Edwin Elmer Wilkins, P.D.**

*Thes.*, A Practical and Inexpensive Prescription Cabinet.  
Retail pharmacist.  
*Ad.*, Pottstown, Pa.

**Harry Darnell Wilkinson, P.D.**

*Thes.*, Coca.  
*Ad.*, Moorestown, N. J.

**Raymond John Wolf, P.D.**

*Thes.*, Selling Own Preparations.  
Retail pharmacist.  
*Ad.*, 4307 Locust Street, Phila., Pa.

**Frederick Randolph Yost, P.D.**

*Thes.*, A Non-Refillable Bottle.  
Wholesale and retail pharmacist. Vice-pres. Morris Drug Co.  
*Ad.*, York, Pa.

**Special Students.**

**Joseph C. Carlin.**

Received Certificate of Proficiency in Chemistry. Course in mechanical engineering. Technical Director, Norwich Pharmacal Co.  
*Ad.*, 12 Elm Street, Norwich, N. Y.

**Merrill Baird Hile.**

Received Certificate of Proficiency in Chemistry. Supt. of Prospect Street Plant, Citizens Gas Co.  
*Ad.*, Citizens Gas Co., Prospect Street Plant, Indianapolis, Ind.

**William Henry King.**

Received Certificate of Proficiency in Chemistry.

**John E. McCambridge, Jr.**

Received Certificate of Proficiency in Chemistry. Proprietary Pharmaceutical Mfg., Waterbury Chemical Co., Supt. and mem. of firm.  
*Ad.*, 1312 41st Street, Des Moines, Iowa.

**John Griffith Roberts.**

Received Certificate of Proficiency in Chemistry. Chemist, Smith, Kline and French Co. Mem. A. Ph. A.; Penna. Pharm. Assn.  
*Ad.*, Springfield, Delaware Co., Pa.

**Frederick William Steigerwalt.**

Received Certificate of Proficiency in Chemistry. Mgr. Lancaster Drug Co., Wholesale Druggists. Mem. Nat'l Assn. Wholesale Druggists.  
*Ad.*, Lancaster, Pa.

1907

**William Moore Armstrong, P.D.**

*Thes.*, Food and Drug Act.  
Retail pharmacist.  
*Ad.*, 2167 E. Cumberland Street, Phila., Pa.

**Mark Heikes Arnold, P.D.**

*Thes.*, Syrupus Acidi Citrici.  
Retail pharmacist.  
*Ad.*, Blossburg, Pa.

**Samuel Axilbund, P.D.**

*Thes.*, Miscible Fluidextract of Grindelia.  
Physician. Graduated in medicine, Temple Univ. Mem. City Club of Phila.; Amer. Med. Assn.; State Med. Soc. of Penna.; Pathological Soc.; Obstetric Soc.; West Phila. Med. Assn.  
*Ad.*, 5802 Cedar Avenue, Phila., Pa.

**Ralph John Bailey, P.D.**

*Thes.*, Benzozulphinidum.  
Pharmacist for James A. Ferguson. Masonic affiliation.  
*Ad.*, Howard and Thompson Streets, Phila., Pa.

**Schafer Bowers Balr, P.D.**

*Thes.*, Antiseptics and Cermicides.  
Retail pharmacist. Served in U. S. A. as pharmacist and bacteriologist with A. E. F. in France.  
*Ad.*, 5145 Cedar Avenue, Phila., Pa.

**William Thomas Beam, P.D.**

*Thes.*, Compound Syrup of Hypophosphites.  
Retail pharmacist. Mem. Rotary Club. State Pres. Rexall Club.  
*Ad.*, 263 Jefferson Avenue, Moundsville, West Va.

**\*John Decator Bear, P.D.**

*Thes.*, Glycerin Suppository Container.

**Maxwell Montefiore Becker, P.D.**

*Thes.*, Cold Cream.  
Received Certificate of Proficiency in Food and Drug Course, P. C. P., 1909.  
*Ad.*, 110 S. Chickasaw Avenue, Bartlesville, Okla.

**Vasco Sastrano Belaval, P.C.**

*Thes.*, Cellulose and Its Industries.  
*Ad.*, Ponce, Porto Rico.

**Oliver George Billings, P.D.**

*Thes.*, Acidum Nitrohydrochloricum.  
Retail pharmacist. Mem. N. J. Pharm. Assn. Director Mt. Holly Bldg. and Loan Assn. Masonic affiliation.  
*Ad.*, Collingswood, N. J.

**Jesse Nelson Blalock, P.D.**

*Thes.*, Acacia.  
Retail pharmacist. Mem. B. P. O. E.  
*Ad.*, 1431 4th Avenue, Seattle, Wash.

**Harry Clayton Bolch, P.D.**

*Thes.*, Urinalysis.  
Retail pharmacist. Served in France, Germany and Belgium during World War.  
*Ad.*, Mt. Carmel, Pa.

**Harry Jennings Bomberger, P.D.**

*Thes.*, Cod Liver Oil.  
*Ad.*, 2726 W. 3rd Street, Chester, Pa.

**John Terry Wellington Bonner, P.D.**

*Thes.*, Nux Vomica and Its Alkaloid Strychnine.  
Retail pharmacist. Served in U. S. A. Med. Dept., 809th Inf. with A. E. F. in France.  
*Ad.*, 2427 7th Avenue, New York City.

**Oscar Anthony Bosch, P.D.**

*Thes.*, The Estimation of Camphor in Spirit of Camphor.  
*Ad.*, 1314 Parade Street, Erie, Pa.

**Irving Daniel Bramer, P.D.**

*Thes.*, The Manufacture of Milk Sugar.  
Retail pharmacist.  
*Ad.*, Fairport, N. Y.

**Peter Ray Brown, P.D.**

*Thes.*, Castor Oil.  
*Ad.*, 18th and Fairmount Avenue, Phila., Pa.

**Roy Hastings Browne, P.D.**

*Thes.*, Products of the Destructive Distillation of Wood.  
Retail pharmacist. Served in Med. Corps, Canadian Army, in France.  
*Ad.*, Lansdowne, Pa.

**Jesse George Cable, P.D.**

*Thes.*, Methyl Alcohol.  
*Ad.*, 4633 Chestnut Street, Phila., Pa.

**Charles Robert Carrington, P.D.**

*Thes.*, Cornus Circinata.  
Retail pharmacist.  
*Ad.*, Susquehanna, Pa.

604 First Century of the Philadelphia College of Pharmacy

- \*Katherine Ella Cliffe, P.C.**  
*Thes.*, The Cohesion Figure of Fixed Oils.  
 For a number of years connected with a New York Hosp. Deceased, February 4, 1919.
- Frank Arthur Coleman, P.D.**  
*Thes.*, Rhamnus Purshiana.  
 Retail pharmacist.  
*Ad.*, 11 Kings Highway, Haddonfield, N. J.
- Percy Arthur Coles, P.D.**  
*Thes.*, The Need and Testing of Drugs.  
 Retail pharmacist.  
*Ad.*, Mansfield, Pa.
- James O'Brien Condra, P.D.**  
*Thes.*, Drugs Found Around Philadelphia.  
*Ad.*, Corry, Pa.
- James Bearl Cranston, P.D.**  
*Thes.*, Althaea.
- Joseph Matthew Devine, P.D.**  
*Thes.*, Antiseptics.  
 Lieut. (j. g.) U. S. N. Served on U. S. S. Kearsarge and U. S. S. Wyoming.  
*Ad.*, 745 Monroe Avenue, Scranton, Pa.
- Joseph Thomas Dougherty, P.D.**  
*Thes.*, The Progress of Chemistry.  
 Retail pharmacist.  
*Ad.*, Portage, Pa.
- Henry Winfield Eberhart, P.D.**  
*Thes.*, The Action of a Bacteria Ferment on Starch.
- Frank Eldam, P.D.**  
*Thes.*, Infusions.  
 Retail pharmacist. Mem. P. O. S. of A.  
*Ad.*, 1712 Centre Avenue, Reading, Pa.
- James S. D. Eisenhower, P.D.**  
*Thes.*, Rubber.  
 Pharmacist. Courses in biology and languages, Dickinson College.  
*Ad.*, 3761 N. Bouvier Street, Phila., Pa.
- John Carl Emerson, P.D.**  
*Thes.*, Zincum.  
*Ad.*, 20th and Main Streets, Joplin, Mo.
- Samuel Haimon Feldman, P.D.**  
*Thes.*, Acidum Hydrochloricum.  
*Ad.*, 228 S. 56th Street, Phila., Pa.
- Susan Eleanor Ferguson (Mrs. Rowand), P.D.**  
*Thes.*, Glycyrrhiza.  
 Pharmacist, Paterson Hosp., 1907-08, and Manhattan Eye, Ear, Nose and Throat Hosp., 1908-12.  
*Ad.*, 1041 Princess Avenue, Camden, N. J.
- Benjamin Louis Fuser, P.D.**  
*Thes.*, Deterioration and Preservation of Chemicals.  
 Traveling salesman.  
*Ad.*, 231 N. Scraper Street, Vinita, Okla.
- Ira George Gasser, P.D.**  
*Thes.*, Ferric Scale Salts of the Pharmacopœia.  
 Pharmacist, the Moxham Pharmacy.  
*Ad.*, 602 Park Avenue, Johnstown, Pa.
- Raymond Newhard Graeff, P.D.**  
*Thes.*, Milk.  
*Ad.*, 750 Mifflin Street, Lebanon, Pa.
- William Ellsworth Gregory, P.D.**  
*Thes.*, Emulsum Phenylis Salicylatis.  
 Served in U. S. A. as Capt. with 3rd Div., 30th Inf., A. E. F.  
*Ad.*, Port Carbon, Pa.
- Otto Arthur Gruenwald, P.D.**  
*Thes.*, Industrial Alcohol.  
*Ad.*, 238 Franklin Street, Phila., Pa.
- Justice Black Guest, P.D.**  
*Thes.*, Sugar.  
*Ad.*, 38th and Long Beach Avenue, Los Angeles, California.
- Lionel Wayne Hall, P.D.**  
*Thes.*, Physical and Systematic Botany.  
 Retail pharmacist.  
*Ad.*, Mifflinburg, Pa.
- Charles William Hansen, P.D.**  
*Thes.*, Corks.  
 Representative for Burroughs, Wellcome and Co.  
*Ad.*, 304 Richey Avenue, Pittsburgh, Pa.
- William John Harrison, P.D.**  
*Thes.*, Natural and Artificial Alkaloids of Cinchona.  
 Physician. Graduated in medicine, Medico-Chi. College, 1911. Served in U. S. A. as Major with A. E. F. in France.  
*Ad.*, 3452 Kensington Avenue, Phila., Pa.
- Alvah James Hay, P.D.**  
*Thes.*, Chemistry of the Gums.  
*Ad.*, DuBois, Pa.
- Norris Hepburn Hilton, P.D.**  
*Thes.*, Capsules.
- George Edward Hitzelberger, P.D.**  
*Thes.*, The Bunsen Burner.
- George Samuel Holland, P.D.**  
*Thes.*, Compound Solution of Cresol and Compound Solution of Sodium Phosphate.  
*Ad.*, Malvern, Pa.
- Daniel Jefferson Houser, P.D.**  
*Thes.*, Pharmacy.
- Charles Francis Kennedy, P.D.**  
*Thes.*, Coal Tar.  
*Ad.*, 4214 Parkside Avenue, Phila., Pa.
- Floyd Carroll Kinney, P.D.**  
*Thes.*, Cascara Sagrada.  
*Ad.*, 1028 Lindley Avenue, Logan, Phila., Pa.
- Jacob Frank Koebert, P.D.**  
*Thes.*, Drug Store Packages.  
*Ad.*, 2437 E. Allegheny Avenue, Phila., Pa.
- Arthur Glenn Koehler, P.D.**  
*Thes.*, Tobacco.
- Fernando Lamas, Jr., P.D.**  
*Thes.*, Carica Papaya.  
*Ad.*, Sagua la Grande, Cuba.
- Paul Stewart Lane, P.D.**  
*Thes.*, Syrupus Acidi Hydriodici.
- Martin Joseph Lawless, P.D.**  
*Thes.*, Disinfection.  
*Ad.*, 52 N. 10th Street, Phila., Pa.
- Frank Clayton Lebo, P.D.**  
*Thes.*, Iron—Its Uses.  
*Ad.*, Front and Ontario Streets, Phila., Pa.
- Abraham Wolf Lever, P.D.**  
*Thes.*, Energy as Related to Solution and Chemical Affinity.  
*Ad.*, 43rd and Fairmount Avenue, Phila., Pa.
- Eli Lilly, P.C.**  
*Thes.*, The Comparative Physiological Effects of Several Varieties of Cannabis Sativa.  
 Manufacturing pharmacist. 2nd Vice-pres. and Gen. Supt. Eli Lilly and Co., Indianapolis, Ind.  
*Ad.*, Care of Eli Lilly and Co., Indianapolis, Ind.
- Malcolm Kenneth Linton, P.D.**  
*Thes.*, The Dispensing Physician.  
*Ad.*, Care of Arthur H. Thomas and Co., W. Washington Square, Phila., Pa.
- Lawrence Layton Longfellow, P.D.**  
*Thes.*, Stramonium Leaves.  
 Retail pharmacist.  
*Ad.*, Fostoria, Ohio.
- Charles Smith Lyter, P.D.**  
*Thes.*, Ptomaines.  
*Ad.*, 13 S. Centre Avenue, Pottsville, Pa.



- Jamas Criswell McAllister, P.D.**  
*Thes.*, Cataplasma Kaolini.  
 Retail pharmacist.  
*Ad.*, 1401 N. 21st Street, Phila., Pa.
- Clarence Minor McClure, P.D.**  
*Thes.*, Magnesii Carbonas.  
*Ad.*, Care of Frederick Stearns and Co., Detroit, Michigan.
- John Fraser Mackay, P.D.**  
*Thes.*, The Pharmacist's Own Preparations.  
 Retail pharmacist.  
*Ad.*, Clayton, N. J.
- Garfield March, P.D.**  
*Thes.*, White Lead—Its Manufacture.  
 Mgr., Churchman Drug Co.  
*Ad.*, 239 W. North Street, Springfield, Ohio.
- Frank Florance Marah, P.D.**  
*Thes.*, Camphora Monobromata.  
 Retail pharmacist. Mem. Greensburg City Council.  
*Ad.*, 1305 Broad Street, Greensburg, Pa.
- Lyman Cleveland Martin, P.D.**  
*Thes.*, Antiseptic Properties of the Cinchona Alkaloids.  
*Ad.*, Clemson College, S. C.
- Roy Edgar Martin, P.D.**  
*Thes.*, Lime Water.  
 Retail pharmacist. Served in U. S. A., Med. Dept., during World War.  
*Ad.*, Shippensburg, Pa.
- Eugene William Messmer, P.D.**  
*Thes.*, Acidum Sulphuricum.  
*Ad.*, 230 E. Johnson Street, Germantown, Phila., Penna.
- Hobart Bird Meyer, P.D.**  
*Thes.*, Aloes.  
*Ad.*, Care of Vulcan Iron Works, Wilkesbarre, Pa.
- Homer Pattison Middlekauff, P.D.**  
*Thes.*, Aloes.  
 Retail pharmacist.  
*Ad.*, 31 N. Potomac Street, Hagerstown, Md.
- Henry Keller Mohler, P.D.**  
*Thes.*, The Culture of Tobacco.  
 Physician. Graduated in medicine, Jeff. Med. College, 1912. Med. Director of Jeff. Med. College. Served in U. S. A. as Capt., Med. Dept., with Base Hosp., No. 38, in France.  
*Ad.*, 319 S. 16th Street, Phila., Pa.
- \*Fontaine Bruce Moore, P.D.**  
*Thes.*, Cinchona.  
 Physician. Graduated in medicine, Univ. of Penna., 1911. Served in U. S. A. as Lieut. Med. Dept. Mem. Amer. Acad. of Ophthalmology and Oto-Laryngology. Deceased, November 27, 1920.
- Fressley Leland Morehead, P.D.**  
*Thes.*, The Oxidation of Essential Oils.  
 Pharmacist, Oxford Drug Co.  
*Ad.*, 1600 17th Street, Denver, Colo.
- Ralph Vincent Muldoon, P.D.**  
*Thes.*, The Action of Drugs in Heart Disease.  
 Wholesale and commission produce.  
*Ad.*, 874 S. 15th Street, Newark, N. J.
- William Cramer O'Brien, P.D.**  
*Thes.*, The Estimation of Free Ammonium in Drinking Water.  
 Representative for H. K. Mulford and Co.  
*Ad.*, 417 W. Jefferson Street, Butler, Pa.
- Albert Henry Owens, P.D.**  
*Thes.*, Fluidextract of Senna, U. S. P.  
*Ad.*, 5th and Indiana Avenue, Phila., Pa.
- Alexander Eberhardt Pfau, P.D.**  
*Thes.*, Tinctura Iodi.  
 Minister of the Gospel.  
*Ad.*, Chilton, Wis.
- William S. Powell, P.D.**  
*Thes.*, The Toxicology of Aconite.
- Martin Francis Powers, P.D.**  
*Thes.*, Camphora.  
*Ad.*, 1933 Tioga Street, Phila., Pa.
- John Lester Ranson, P.D.**  
*Thes.*, Aqua Hamamelidis, U. S. P., 1900.  
 Physician. Graduated in medicine, 1911. Post Grad. work in N. Y. Post Grad. Hosp. Medical examiner of Mecklenburg Co., N. C. Mem. Medical Service Corps.  
*Ad.*, 204 N. Tryon Street, Charlotte, N. C.
- Robert Garland Reynolds, P.D.**  
*Thes.*, Oil of Lemon and Its Preservation.  
 Retail pharmacist.  
*Ad.*, Bryn Mawr, Pa.
- Howard Payne Ruhl, P.D.**  
*Thes.*, Piper.  
 Pharmacist.  
*Ad.*, 2514 N. 18th Street, Phila., Pa.
- Finlay Page Seibert, P.D.**  
*Thes.*, Recovery of Iodine from Decomposed Syrup of Ferrous Iodide.  
*Ad.*, 40th and Chestnut Streets, Phila., Pa.
- Edward Frederick Shaefer, P.D.**  
*Thes.*, Analysis of Tincture of Iodine.  
 Retail pharmacist. Councilman, North York Borough.  
*Ad.*, 1100 N. George Street, York, Pa.
- Horace Roy Shiffer, P.D.**  
*Thes.*, A Criticism of the National Formulary.  
 Pharmacist for Clyde H. Cooper.  
*Ad.*, 405 W. Orange Street, Lancaster, Pa.
- Herbert Elmer Slough, P.D.**  
*Thes.*, Terpin Hydrate.  
*Ad.*, 2nd and Tioga Streets, Phila., Pa.
- James Vogelsang Smith, P.D.**  
*Thes.*, Scopol.  
*Ad.*, 3154 Euclid Avenue, Phila., Pa.
- Anra Estea Snook, P.D.**  
*Thes.*, Physostigma.  
 Retail pharmacist. Mem. Penna. Pharm. Assn.  
*Ad.*, Middleburg, Pa.
- Clair Shaffer Stine, P.D.**  
*Thes.*, Mercury.
- Franklin Lewis Tallman, P.D.**  
*Thes.*, Essence of Pepsin.
- Charles Frederick William Walter, P.D.**  
*Thes.*, Serum Antidiphthericum.  
*Ad.*, 320 S. 11th Street, Phila., Pa.
- John Dahney Weaver, P.D.**  
*Thes.*, Official Troches.  
 With Jayne Drug Co., mfg. chemists.  
*Ad.*, 809 4th Street, Spokane, Wash.
- Edyth Wynn Williams (Mrs. Fitz-Gerald), P.D.**  
*Thes.*, Pure Food and Drugs Act as Applied to Pharmacy.  
 Retail pharmacist.  
*Ad.*, 51 S. Parkway, East Orange, N. J.
- Harry Ellsworth Wilt, P.D.**  
*Thes.*, The Eastern Druggist.
- Frederick Ehrhart Winand, P.D.**  
*Thes.*, Ointments.  
 Retail pharmacist.  
*Ad.*, 6th and Main Streets, Darby, Pa.
- Edward Stanley Wright, P.D.**  
*Thes.*, Assay of Benzaldehyde.  
*Ad.*, 540 Morris Street, Albany, N. Y.

**Harry Charles Zeisig, P.D.**

*Thes.*, The Pharmacist's Windows.  
Retail pharmacist. Received Certificate in Advanced Commercial Training, P. C. P., 1921.  
*Ad.*, Harrison and Oakland Streets, Phila., Pa.

**Special Students.****Raymond D. Black,**

Received Certificate of Proficiency in Chemistry.

**George W. Lord, Jr.**

Received Certificate of Proficiency in Chemistry. Water purifying chemicals. Completed three years' course Spring Garden Inst. Masonic affiliation. With Geo. W. Lord Co., Boiler Compounds.

**Joseph Frank Oesterle.**

Received Certificate of Proficiency in Chemistry. Metallurgist, U. S. Bureau of Standards. Served in U. S. A. as Sgt. Chemical Warfare Service.  
*Ad.*, Lansdowne, Pa.

**Waldo J. Williams.**

Received Certificate of Proficiency in Chemistry.  
*Ad.*, 235 Second Street, Slatington, Pa.

## 1908

**Kelso Carter Ackley, P.D.**

*Thes.*, Glycerinum.  
Retail pharmacist.  
*Ad.*, Illinois and Atlantic Avenues, Atlantic City, New Jersey.

**Clyde M. Allen, P.D.**

*Thes.*, The Manufacture of Sodium Chloride in New York State.  
*Ad.*, 12 Main Street, Cortland, N. Y.

**James Henry Allen, P.C.**

*Thes.*, Lime Tablets.  
Research chemist, Southern Cotton Oil Co. Pres. Chemists and Engineers Club. Received Certificate of Proficiency in Chemistry, P. C. P., 1911.  
*Ad.*, P. O. Box 280, Savannah, Ga.

**Gustave G. Anderson, P.D.**

*Thes.*, Liquid Medication Versus Pills. Representative for Richard Hudnut. Served in U. S. N., as Chief Pharmacist's Mate.  
*Ad.*, 518 Second Street, Titusville, Pa.

**John Ayres, P.D.**

*Thes.*, Disinfection.  
Mgr. for Wm. H. Rorer, Mfg. Chemist.  
*Ad.*, 1334 N. 54th Street, Phila., Pa.

**Howard Jacob Baer, P.D.**

*Thes.*, Magma Magnesiae.  
Retail pharmacist.  
*Ad.*, 336 S. 2nd Street, Phila., Pa.

**Charles Hampton Baldwin, P.D.**

*Thes.*, Ergota.  
Retail pharmacist.  
*Ad.*, 20th and Edgmont Avenue, Chester, Pa.

**Reeve Leslie Ballinger, P.D.**

*Thes.*, Liqueur Calcis.  
Physician and surgeon. Graduated in medicine, at Jeff. Med. College, 1913. Attending phys. West Hudson Hosp. and West Hudson Tuberculosis Clinic, Kearney, N. J. Clinic surg. Women's and Children's Hosp., Newark, N. J.  
*Ad.*, 659 Kearney Avenue, Arlington, N. J.

**Samuel Joseph Bannan, P.D.**

*Thes.*, Cataplasma Kaolinii.  
Retail pharmacist. Vice-pres. Chamber of Commerce. Mem. Board of Health. School director.  
*Ad.*, Shickshinny, Pa.

**Edson Jay Barrett, P.D.**

*Thes.*, A Practical Container for the Distribution of Liquid Soap.  
*Ad.*, Susquehanna, Pa.

**Eugene Cecil Beam, P.D.**

*Thes.*, The Preservation of Volatile Oil of Lemon. Physician. Graduated in medicine at Univ. of Pittsburgh, 1912. Fellow Amer. Med. Assn.; Columbus Acad. of Med.; Ohio State Med. Soc.; General Practitioner's Soc. Mem. Phi Alpha Sigma Frat. Served in U. S. A. as 1st Lieut. Med. Dept.  
*Ad.*, 2005 Summit Street, Columbus, Ohio.

**Edgar Fortune Carroll Beecham, P.D.**

*Thes.*, Digitalis.  
Retail pharmacist.  
*Ad.*, 545 Mississippi Street, Memphis, Tenn.

**Howard Homer Bell, P.C.**

*Thes.*, Digitalis.  
Physician. Graduated in medicine at Univ. of Penna., 1912. Formerly instr. in Pathology and Bact. in Univ. of Ala., and in Washington Univ. Served in U. S. A. Med. Dept., in Base Hosp. organized by Washington Univ. Later served with A. E. F. Div. of Laboratory, and still later with the Hoover Food Mission in the Balkans. Received P.D. degree, 1909.  
*Ad.*, School of Medicine, Washington Univ., St. Louis, Mo.

**Allen Paul Bethel, P.D.**

*Thes.*, Circulatory Displacement.  
*Ad.*, 330 E. 2nd Street, Oklahoma City, Okla.

**Frank Sumner Bonnell, P.C.**

*Thes.*, Liqueur Antisepticus.  
Physician. Graduated in medicine, Jeff. Med. College, 1913. Res. phys. Iowa Methodist Hosp., Des Moines, Ia. Post grad. courses in Chicago and St. Louis. Mem. Iowa State Med. Soc.; Amer. Med. Assn.; Iowa State Pharm. Assn. Secy. and Treas. Jefferson Co. Med. Soc. and of Southeastern Iowa Med. Soc. Teacher in Jefferson Co. Hosp. Masonic affiliation. Mem. B. P. O. E. Received P.D. degree, 1909.  
*Ad.*, Fairfield, Iowa.

**James Frank Bourne, P.D.**

*Thes.*, Microscopic Study of Crude Drugs.  
*Ad.*, 1801 Arctic Avenue, Atlantic City, N. J.

**Roy Carson Bower, P.D.**

*Thes.*, Rhamnus Purshiana.

**John Joseph Bridgeman, P.D.**

*Thes.*, A Microscopical Examination of Exhausted Ginger.  
Asst. in Botany and Pharmacognosy, P. C. P., 1908-12. (See page 454.)  
*Ad.*, Rosemont, Pa.

**James Christopher Brigadell, P.D.**

*Thes.*, Turpentine—New Process.  
Manufacturer of Camphorole. Formerly retail pharmacist.  
*Ad.*, 3201 Atlantic Avenue, Atlantic City, N. J.

**William Henry Burt, P.D.**

*Thes.*, Opium.  
*Ad.*, 158 E. Sterner Street, Phila., Pa.

**Edgar Robert Buzzell, P.D.**

*Thes.*, Glycerite of Bismuth.  
Retail pharmacist.  
*Ad.*, Philipsburg, Pa.

**Charles Corss Church, P.D.**

*Thes.*, Ginseng—The Chinese Specific.  
Retail pharmacist.  
*Ad.*, 63 Pringle Street, Kingston, Pa.

**Silvio Ciancarelli, P.D.**

*Thes.*, Ipecacuanha.  
Retail pharmacist.  
*Ad.*, 711 S. 7th Street, Phila., Pa.

**Milton Benn Clark, P.D.**

*Thes.*, Ointment Containers.  
*Ad.*, 61st and Elmwood Avenue, Phila., Pa.

**Arthur Bard Coldren, P.D.**

*Thes.*, Ergot.  
Served in U. S. N. as Chief Pharmacist's Mate.  
*Ad.*, 5228 Chancellor Street, Phila., Pa.

**\*Roy Thomas Cope, P.D.**

*Thes.*, Arseni Trioxidum.  
Retail pharmacist, Irwin, Pa. Deceased, December, 1915.

**George William Copella, P.D.**

*Thes.*, Liquor Magnesii Citratis.

**Clarence Henry Corp, P.D.**

*Thes.*, Oleum Terebinthinæ Rectificatum.  
Manufacturing pharmacist. Vice-pres. and secy.  
Walker, Corp and Co., Inc.  
*Ad.*, 27 William Street, Auburn, N. Y.

**Ralph Cutler, P.D.**

*Thes.*, Bookkeeping as Essential to the Retail Pharmacist.

**Forrest Whitney Dauphinee, P.D.**

*Thes.*, Iodine.  
*Ad.*, 840 S. Allison Street, Phila., Pa.

**Chester Stanley Davies, P.D.**

*Thes.*, Elixir Ferri, Quininae et Strychninae, N. F.  
Manufacturer of ampoules and sterile solutions.  
Masonic affiliation  
*Ad.*, 205 Empire Bldg., Denver, Colo.

**J. Atlee Dean, P.D.**

*Thes.*, Iodine.  
Chemist and bacteriologist. Pres. of Dean Laboratories, Inc. Mem. A. A. A. S.; Amer. Chem. Soc.; A. Ph. A.; Amer. Pub. Health Assn.; Soc. Amer. Bacteriologists. Secy. of Post Grad. Sch. and in charge of laboratories of Amer. Hosp. for Diseases of the Stomach.  
*Ad.*, 614 S. 48th Street, Phila., Pa.

**\*Harry Lee DeLaney, P.D.**

*Thes.*, Essentia Pepsini, N. F.  
Mgr. Mt. Vernon Pharmacy, Phila. Deceased, March 7, 1916.

**Oscar Artus Delle, P.D.**

*Thes.*, Pepsin, Its Importance as a Standard Liquid Preparation.  
Physician. Graduated in medicine, Medico-Chi. College, 1912. Res. Phys. York Hosp., York, Pa.  
Asst. surg. West Side Sanatorium, York, Pa.  
*Ad.*, York New Salem, Pa.

**LeRoy Victor Dillon, P.D.**

*Thes.*, Pharmacy.  
Retired. Formerly retail pharmacist.  
*Ad.*, 550 N. 11th Street, Reading, Pa.

**\*Paul Revere Donmoyer, P.D.**

*Thes.*, Linimentum Camphoræ.  
City chemist and supt. of sewers, Lebanon, Pa.  
Deceased, February 20, 1916.

**William Reddig Dry, P.D.**

*Thes.*, Benzoinum.  
*Ad.*, Kutztown, Pa.

**Francis Charles Duntze, Jr., P.D.**

*Thes.*, The Castor Oil Plant and Bean.

**\*Clarence Howard Eldon, P.D.**

*Thes.*, Sambucus.  
Deceased, April 4, 1918.

**Paul Roberts England, P.D.**

*Thes.*, Boron and Its Compounds.  
Retail pharmacist.  
*Ad.*, Park and Main Streets, Alliance, Ohio.

**Michael Antoine Etch, P.C.**

*Thes.*, Labarraque's Solution.  
Served in U. S. A. at Camp Dix, N. J.  
*Ad.*, 519 Cherry Street, Helena, Ark.

**Rose Feuerstein (Mrs. Finkel), P.D.**

*Thes.*, Microscopical and Chemical Study of Digitalis.  
*Ad.*, 4042 Market Street, Phila., Pa.

**Richard P. Fitzpatrick, P.D.**

*Thes.*, Oil of Wintergreen.  
Retail pharmacist. Mem. B. P. O. E.

**\*John Merle Fleming, P.D.**

*Thes.*, Vaccine Virus.

**Jesae A. Fowler, P.D.**

*Thes.*, Mel.  
Retail pharmacist.  
*Ad.*, 806 Fifth Avenue, Asbury Park, N. J.

**Clarence Roy Fox, P.D.**

*Thes.*, Liquor Magnesii Citratis.  
Pharmacist for Joseph L. Lemberger. City bacteriologist and chemist. Special course in bact. at P. C. P.  
*Ad.*, 32 N. 7th Street, Lebanon, Pa.

**William Otterbein Frasley, Jr., P.D.**

*Thes.*, A New Pharmaceutical Appliance.  
Retail pharmacist.  
*Ad.*, 113 S. Marshall Street, Lancaster, Pa.

**Robert Samuel French, P.C.**

*Thes.*, Micro-Chemical Tests and the Physiological Testing of Drugs.  
*Ad.*, Cove, Oregon.

**Rose I. Gabriel, P.D.**

*Thes.*, Lime Water.  
*Ad.*, 1100 Brown Street, Phila., Pa.

**William Wallace Geety, P.D.**

*Thes.*, Powdered Tragacanth.  
Retail pharmacist.

**Amos Chester Glise, P.D.**

*Thes.*, Alcohol.  
Pharmacist for Jacob M. Baer.  
*Ad.*, 5132 DeLancey Street, Phila., Pa.

**Pedro Prudencio Golcouria, P.D.**

*Thes.*, A Comparative Study of a Number of Species of Datura from Puerto Rico.  
*Ad.*, Guantanamo, Cuba.

**Claude Conner Graeff, P.D.**

*Thes.*, Thyroidectin.  
*Ad.*, Boyertown, Pa.

**Charles Wenger Greeninger, P.C.**

*Thes.*, Elixir Ferri, Quininae et Strychninae Phosphatum.  
Retail pharmacist. Received P.D. degree, 1911.  
*Ad.*, 6733 N. 8th Street, Oak Lane, Phila., Pa.

**Amos Leopold Hamaker, P.D.**

*Thes.*, Mucilage of Myrrh.  
Retail pharmacist.  
*Ad.*, 22 W. King Street, Lancaster, Pa.

**Charles Nelson Harr, P.D.**

*Thes.*, Ointment Bases.  
In charge of laboratories, Dill Company, manufacturing chemists.  
*Ad.*, 1321 Locust Street, Norristown, Pa.

**George Hering, P.C.**

*Thes.*, Tincture of Strophanthus.  
Retail pharmacist. Received P.D. degree, 1918.  
Special Recruiting Officer for U. S. Merchant Marine. Mem. Woodmen; Sons of Veterans; I. O. O. F.; F. O. Eagles.; B. P. O. E.; N. J. Pharm. Assn.; Millville Repub. League. Masonic affiliation.  
*Ad.*, Millville, N. J.

**Frank Stanley Hillegass, P.D.**

*Thes.*, American Hellebore.  
*Ad.*, Tennessee and Pacific Avenues, Atlantic City, N. J.



- John Oliver Hopkins, P.D.**  
*Thes.*, Opium.  
Retail pharmacist. Mem. Wilmington City Council.  
*Ad.*, 1010 French Street, Wilmington, Del.
- Maxwell Hopkins, P.D.**  
*Thes.*, Apis Mellifera and Its Products.  
*Ad.*, 320 W. 4th Street, Williamsport, Pa.
- \*Walter Frederick Huebner, P.D.**  
*Thes.*, Iodoform and Iodoform Ointment.  
Secy. Treas. and Gen. Mgr. Keystate Drug and Chemical Co. Secy. Lovett Machine and Foundry Co. Deceased, 1922.
- Ralph Rupp Johnston, P.D.**  
*Thes.*, Aromatic Elixir.  
With Frederick Stearns and Co., manufacturing chemists. Mem. Board of Health, Bucyrus, Ohio.  
*Ad.*, 6140 Lawton Avenue, Detroit, Mich.
- Elisha Roy Jones, P.C.**  
*Thes.*, Examination of Substances for Poison.  
Retail pharmacist. Received P.D. degree, 1909.  
*Ad.*, Elgin, Texas.
- Thomas Joseph Kelly, P.D.**  
*Thes.*, Copaiba.  
*Ad.*, 247 S. 44th Street, Phila., Pa.
- Harry Martin Knight, P.D.**  
*Thes.*, Commercial Vanilla Bean.  
*Ad.*, 528 W. Walnut Street, Lancaster, Pa.
- William Kraemer, P.D.**  
*Thes.*, Liqueur Magnesii Citratis.  
*Ad.*, 3463 Montrose Avenue, Chicago, Ill.
- Triantaphyllo Constantine Ladakis, P.D.**  
*Thes.*, Pharmacy in Turkey.  
Professor of Theory and Practice of Pharmacy and of Analytical Chemistry in American Schools of Medicine and Pharmacy, Beirut, Syria.  
*Ad.*, American College, Beirut, Syria.
- Harry L. LaDow, P.C.**  
*Thes.*, Urinary Analysis.
- Roy Albert Lambert, P.D.**  
*Thes.*, Digitalis and Its Action.  
Retail pharmacist.  
*Ad.*, Roaring Spring, Pa.
- Frederick Samuel Landis, P.D.**  
*Thes.*, Powder Folders.  
Salesman for Wm. H. Rorer, Phila., Pa.  
*Ad.*, 1715 Regina Street, Harrisburg, Pa.
- Thomas Davis Laws, P.D.**  
*Thes.*, Tinctura Strophanthi.  
Retail pharmacist.  
*Ad.*, 1070 Broadway, Long Beach, Cal.
- Albert Abraham Light, P.D.**  
*Thes.*, Cocoa Bean and Its Relation to Pharmacy.  
Manufacturer shipping boxes. Retail pharmacist until 1912.  
*Ad.*, 148 S. 62nd Street, Phila., Pa.
- Mandell Light, P.D.**  
*Thes.*, Liqueur Magnesii Citratis.  
Retail pharmacist. Served in U. S. A. as Hosp. Sgt. with 20th Engineers. With A. E. F. in France.  
*Ad.*, 103 W. Raynor Avenue, Syracuse, N. Y.
- John William Link, P.D.**  
*Thes.*, Vetiver.  
*Ad.*, 12th and Robeson Street, Reading, Pa.
- Clement Wakelin Lowe, P.D.**  
*Thes.*, Prescription Economics.  
Maintenance electrician for Kimble Glass Co., Vineland, N. J. Courses in engineering and drafting with International Correspondence Schools and Chicago Technical College.  
*Ad.*, 21 Howard Street, Vineland, N. J.
- John Francis McNulty, Jr., P.D.**  
*Thes.*, Crystallization.
- David Gregory McElroy, P.D.**  
*Thes.*, Cod Liver Oil.  
*Ad.*, Coaldale, Pa.
- \*John Francis McGovern, P.D.**  
*Thes.*, Glandulæ Thyroidæ.  
With Valley Drug Co., Johnstown, Pa. Deceased, March 1, 1915.
- Daniel Webster McMichsel, P.D.**  
*Thes.*, Silver.
- William Stewart Maltman, P.D.**  
*Thes.*, Myristica.
- William Mathewson, P.C.**  
*Thes.*, Desiccated Suprarenal Gland.  
Received P.D. degree, 1909.  
*Ad.*, Coatesville, Pa.
- Lee Fillmen Mauger, P.D.**  
*Thes.*, Fluidextracts of the National Formulary, Third Edition.  
*Ad.*, Pottstown, Pa.
- Franklin Peter Miller, P.D.**  
*Thes.*, Acidity of Arisaemea Triphyllum.  
Retail pharmacist.  
*Ad.*, Bethlehem, Pa.
- Eugene Faunce Morton, P.D.**  
*Thes.*, Liqueur Magnesii Citratis.  
Secy. and Mgr. Charles F. Dare and Son, Inc.  
*Ad.*, Bridgeton, N. J.
- Joseph Leo Murray, P.D.**  
*Thes.*, The Relative Size of the Drops of a Saturated Solution of Potassium Iodide.  
*Ad.*, 3954 Terrace Street, Wissahickon, Phila., Pa.
- Kissag Marookh Nahkian, P.C.**  
*Thes.*, The Use of the Microscope as an Adjunct to the Pharmacist.  
Chemist and salesman with Brewer and Co. Graduated, Worcester Polytech. Inst., 1910.  
*Ad.*, 228 Highland Street, Worcester, Mass.
- Clark Neal, P.C.**  
*Thes.*, Theobroma Cacao.  
Received P.D. degree, 1911.  
*Ad.*, Clymer, Pa.
- Ralph Neiden, P.D.**  
*Thes.*, The Thalleioquin Reaction.  
Supt. Laboratories, Smith Faus Drug Co. Mem. Utah Pharm. Assn.; Secy., 1911-12.  
*Ad.*, 1568 Garfield Avenue, Salt Lake City, Utah.
- Asher J. Odenwelder, Jr., P.D.**  
*Thes.*, Leguminosæ and Their Influence on Agriculture.  
*Ad.*, 46 S. 4th Street, Easton, Pa.
- Harry W. Ohming, P.D.**  
*Thes.*, Acetphenetidinum.  
*Ad.*, Michigan City, Ind.
- Henry Edwin Parson, P.D.**  
*Thes.*, The Twentieth Century Pharmacist.  
*Ad.*, 1162 S. Cameron Street, Harrisburg, Pa.
- Feliciano Paterno I. Ygnacio, P.D.**  
*Thes.*, Phyllanthus Niruri, L. ("Sampalucan").  
*Ad.*, 73 S. Roque Street, Sta Cruz, Manila, P. I.
- Joseph L. Pennock, P.D.**  
*Thes.*, Acacia.
- Hugh Henry Rather, P.D.**  
*Thes.*, Sapo Liquidus.  
*Ad.*, Holly Springs, Miss.
- \*David Henry Reighter, P.D.**  
*Thes.*, Elixirs of the National Formulary, Third Edition.  
Retail pharmacist, Phila. Deceased, October 4, 1918.

**John Elgg, P.C.**

*Thes.*, Phenol.  
Retail pharmacist. Received P.D. degree, 1909.  
*Ad.*, 308 High Street, Burlington, N. J.

**Jose Roman, P.D.**

*Thes.*, Cassia Foetida.  
Chemist. Formerly food and drugs inspector and asst. chemist Insular Govt. Laboratories, Porto Rico.  
*Ad.*, Loiza Street, 200, San Juan, P. R.

**Hendric Arnold Ross, P.D.**

*Thes.*, Oleum Gossypii Seminis.  
Physician. Graduated in medicine, Jeff. Med. College, 1912. Phys. to Penna. Hosp. for Insane, Phila., Pa. City Health Officer of Arkadelphia, Ark. Chairman Medical Advisory Board.  
*Ad.*, Arkadelphia, Ark.

**Boyd Arthur Santee, P.D.**

*Thes.*, Conium Maculatum.  
*Ad.*, Marietta, Pa.

**George Milton Saul, P.D.**

*Thes.*, Greaseless Creams.  
Retail pharmacist.  
*Ad.*, 3437 G Street, Phila., Pa.

**\*Frank Warren Schaffer, P.D.**

*Thes.*, Animal Diastase.  
Mgr. Keiper Drug Store, Allentown, Pa. Deceased, April 20, 1916.

**Martin Charles Schuehle, P.D.**

*Thes.*, Juniperus Nana.  
Traveling salesman for Powers-Weightman-Rosengarten Co.  
*Ad.*, Room 1134, Old South Bldg., Boston, Mass.

**Edwin Fay Shields, P.D.**

*Thes.*, Camphora.

**Stowe Shoemaker, P.D.**

*Thes.*, Prunus Virginiana.  
Served in U. S. A. Med. Dept., 153rd Depot Brigade, Camp Dix, N. J.  
*Ad.*, 60th and Market Streets, Phila., Pa.

**John Morton Simpson, P.D.**

*Thes.*, Stearic Acid.

**Edward Gibbon Smith, P.D.**

*Thes.*, Manufacture of Pig Iron.  
*Ad.*, Sykesville, Pa.

**Harry Aaron Stetler, P.D.**

*Thes.*, The Cultivation and Industry of Gossypium.  
*Ad.*, 133 Woodlawn Avenue, Buffalo, N. Y.

**\*Charles Henry Stevens, P.D.**

*Thes.*, Some Cultivated Varieties of Capsicum.  
Retail pharmacist, Girardville, Pa. Deceased, October 30, 1918.

**Edward Verry Stokes, P.D.**

*Thes.*, Malt Extracts.  
Pres. and Gen. Mgr. E. V. Stokes Drug Co. and Eves Mfg. Co. Mem. Council of National Defense for Maryland.  
*Ad.*, 1016 Druid Hill Avenue, Baltimore, Md.

**Harman Albert Stover, P.D.**

*Thes.*, Syrup of Tolu.  
*Ad.*, New Freedom, Pa.

**Robert Strauch, P.D.**

*Thes.*, Liqueur Magnesii Citratis.  
Retail pharmacist. Received Certificate of Proficiency in Chemistry, P. C. P., 1912.  
*Ad.*, 1931 Van Stork Avenue, Scranton, Pa.

**Lester Eldridge Stucker, P.D.**

*Thes.*, Petrolatum Saponatum Liquidum.  
*Ad.*, 1038 35th Street, Des Moines, Iowa.

**Edwin Lever Study, P.D.**

*Thes.*, Olive Oil and Adulteration as Found and Shown in Drug Stores.  
Coal dealer and broker. Pres. of Benington Coal Mining Co. and Treas. of Burton Clay Products Company.  
*Ad.*, Sylvan Hills, Hollidaysburg, Pa.

**Louisa Adolph Suter, P.D.**

*Thes.*, Spiritus Ammonie Aromaticus.  
*Ad.*, 1801 Orthodox Street, Phila., Pa.

**\*Edward James Sweeney, P.D.**

*Thes.*, Distribution of Mucilage in Sassafras.  
Deceased, October, 1918.

**Claude Jacob Teter, P.D.**

*Thes.*, Iodine and Its Antiseptic Properties.  
Analyst for New Jersey Zinc Co. Served as pharmacist for American Red Cross Sanitary Detachment, No. 1.  
*Ad.*, 640 Lafayette Avenue, Palmerton, Pa.

**Frank DeWight Titus, P.D.**

*Thes.*, Camphor Estimation in Spirit of Camphor.

**Maurice Winfield Trainer, P.D.**

*Thes.*, Diphtheria Antitoxin.  
Pharmacist for E. W. Allison. Served in U. S. A., as Sgt. Med. Dept., at Parkview Hosp., Pittsburgh, Penna.  
*Ad.*, Indiana, Pa.

**Chester Arthur True, P.D.**

*Thes.*, Cinchona and Its Alkaloids.  
Pharmacist for George B. Evans.  
*Ad.*, 34 E. Seymour Street, Phila., Pa.

**Harry Jacob Umlauf, P.D.**

*Thes.*, Sandalwood.  
Retail pharmacist.  
*Ad.*, Kulpmont, Pa.

**John George Wagner, P.D.**

*Thes.*, Iodine.  
*Ad.*, Delanco, N. J.

**Herbert Tustin Watson, P.D.**

*Thes.*, The Production of Olive Oil.  
Mgr. Dunbar Drug Co.  
*Ad.*, Monaca, Pa.

**Samuel Weinberg, P.D.**

*Thes.*, Cannabis Indica.  
*Ad.*, Richard and Ventnor Avenues, Atlantic City, New Jersey.

**Paul Herman Wendel, P.D.**

*Thes.*, The Microscopical Examination of Powdered Drugs.  
Attorney at law. Admitted to the bar in 1917.  
*Ad.*, 17 E. State Street, Trenton, N. J.

**Charles Edmund Richardson Wheeler, P.D.**

*Thes.*, Agaricus Campestris.  
Retail pharmacist.  
*Ad.*, North Wales, Pa.

**Robert Maphis Wisman, P.D.**

*Thes.*, Sodium Phosphate.  
*Ad.*, Box 51, Bala, Pa.

**Joseph Albert Wolfe, P.D.**

*Thes.*, Aqua Hydrogenii Dioxidi.  
Mgr. Norfolk, Va., branch D. A. Stickell and Sons, Merchant Millers. Formerly with U. S. Pub. Health Service.  
*Ad.*, Sewell's Point, Norfolk, Va.

**Charles David Woodman, P.D.**

*Thes.*, The Microscopical Study of Sassafras Medulla.  
Mgr. for B. E. Blankenbush.  
*Ad.*, 5815 Pemberton Street, Phila., Pa.

**Walter Aultman Wyss, P.D.**

*Thes.*, Ginseng—Its Culture, Preparation for Market and Investigation of Its Active Constituents.  
Retail pharmacist. Mem. Rotary Club; Chamber of Commerce  
*Ad.*, New Philadelphia, Ohio.

**Edgar Joseph Young, P.D.**

*Thes.*, Pharmacy a Profession.  
Asst. Mgr. L. K. Liggett Co.  
*Ad.*, 5530 Upland Street, Phila., Pa.

**Joseph Bartholomew Young, Jr., P.D.**

*Thes.*, A Microscopical Examination of Several Varieties of Opium.

**Herman Stanley Zahn, P.C.**

*Thes.*, Fluid Glycerate of Krameria.  
Retail pharmacist. Vice-pres. and Treas. Bieg's Mfg. Co., Inc. Director, Phoenix Trust Co., Phila., Pa. Received P.D. degree, 1909.  
*Ad.*, 2701 W. Somerset Street, Phila., Pa.

**Charles Bruce Boyle Zeller, P.D.**

*Thes.*, Saleratus.  
Retail pharmacist. Served in U. S. A., Med. Dept., at Fort Slocum.  
*Ad.*, 111 N. Lafayette Avenue, Ventnor, N. J.

**John William Zelt, P.D.**

*Thes.*, Asbestos—Preparation and Products.  
Retail pharmacist.  
*Ad.*, E. Mauch Chunk, Pa.

**Special Students.****Elmer Jay Fry.**

Received Certificate of Proficiency in Chemistry.

**Charles Raymond Keiser.**

Received Certificate of Proficiency in Chemistry.

**1909****\*James Hugh Allan, P.D.**

*Thes.*, Caryophyllus.  
Retail pharmacist, Baltimore, Md. Deceased, October 16, 1918.

**William Ernest Andrew, P.D.**

*Thes.*, Atropa Belladonna.  
Physician and surgeon. Graduated in medicine from Medico-Chi, 1913. Served in U. S. A. as 1st Lieut. Med. Corps.  
*Ad.*, Stroudsburg, Pa.

**Humphrey Mosher Beaman, P.D.**

*Thes.*, Manna.  
*Ad.*, Care of Schieffelin and Co., 170 William Street, New York City.

**Frederick Cowden Beck, P.D.**

*Thes.*, Linum.  
Retail pharmacist.  
*Ad.*, 601 Pacific Avenue, Atlantic City, N. J.

**Mitchell Bernstein, P.D.**

*Thes.*, Liquor Sodii Phosphatis Compositus.  
Instr. Mat. Med. P. C. P., 1917-1921. (See page 448.)  
*Ad.*, 1437 S. Broad Street, Phila., Pa.

**Anna Elizabeth Bigert (Mrs. W. S. Rice), P.C.**

*Thes.*, Examination of Rhus Glabra and Rhus Hirta.  
*Ad.*, 4626 Market Street, Phila., Pa.

**Fred Lewis Black, P.D.**

*Thes.*, Olive Oil.  
*Ad.*, Care of Standard Drug Co., Williamsport, Pa.

**Jennie Block, P.D.**

*Thes.*, Incompatibilities and How to Deal with Them.

**Zera Exley Bolin, P.D.**

*Thes.*, Tinctura Arnica.  
Physician. Graduated in medicine, Jeff. Med. College, 1910. Supt. Pottsville Hosp. Taught in Army Med. Sch. Mem. Army and Navy Club; Amer. Med. Assn.; A. A. A. S.; Amer. Bact. Soc. At present in U. S. Army, 1st Lieut. Med. Corps.  
*Ad.*, Tripler Gen. Hosp., Honolulu, H. I.

**Myron Adam Bossert, P.D.**

*Thes.*, Methods of Manufacture of Unguentum Aquæ Rosæ.  
*Ad.*, 41 N. 7th Street, Allentown, Pa.

**Ernest G. Brown, P.D.**

*Thes.*, Cataplasma Kaolini.  
Retail pharmacist.  
*Ad.*, Gap, Pa.

**Russell Luther Bush, P.D.**

*Thes.*, Tests for Adulteration of Oil of Peppermint.  
*Ad.*, 35 Montclair Avenue, Paterson, N. J.

**Murch Robinson Cady, P.D.**

*Thes.*, The Cultivation of Hydrastis.  
*Ad.*, 53 E. Main Street, Norristown, Pa.

**Philp Cantor, P.D.**

*Thes.*, Goulard's Extract.  
*Ad.*, 854 N. 10th Street, Phila., Pa.

**George Joseph Coleman, P.D.**

*Thes.*, Belladonna, Scopola and Phytolacca.  
Bacteriologist and chemist. Director of Coleman Laboratories, City chemist and bacteriologist for Wheeling, West Va., since 1918.  
*Ad.*, City Bank Bldg., Wheeling, West Va.

**William Franklin Cramer, Jr., P.D.**

*Thes.*, Pancreatin.

**Richard Williams Cuthbert, Jr., P.D.**

*Thes.*, A Pill Machine and a Plate for Cutting a Plaster Model.  
With John Wyeth and Bro. Retail pharmacist until 1917.  
*Ad.*, 3803 Chestnut Street, Phila., Pa.

**Gustave Adolph Dapp, P.D.**

*Thes.*, Antitoxin and Oponins.  
*Ad.*, 1827 N. 3rd Street, Harrisburg, Pa.

**Harry Ivan Darr, P.D.**

*Thes.*, Linimentum Camphoræ.  
Retail pharmacist. Mem. Nat'l Assn. Retail Drugists; I. O. O. F. Masonic affiliation.  
*Ad.*, 3rd and Highland Avenue, Chester, Pa.

**Jacob Davidowitch, P.D.**

*Thes.*, Sarsaparilla.  
*Ad.*, 1800 S. 6th Street, Phila., Pa.

**\*Harry Cardeza Davis, P.D.**

*Thes.*, Plaster of Paris.  
Deceased, May 29, 1913.

**Percy Mason Davis, P.D.**

*Thes.*, Calx Sulphurata.  
Retail pharmacist.  
*Ad.*, 1402 Washburn Street, Scranton, Pa.

**John Franklin Dettrey, P.D.**

*Thes.*, Liquor Magnesi Citratis.  
Mgr. for L. K. Liggett Co. Recruiting officer Merchant Marine.  
*Ad.*, 1150 Wayne Avenue, Logan, Phila., Pa.

**Philip Christ Doach, P.D.**

*Thes.*, Zinc Stearate.  
Retail pharmacist.  
*Ad.*, Somerset, Pa.

**Guy Sinclair Dunbar, P.D.**

*Thes.*, Tinctura Arnica.  
Retail pharmacist. Representative, Burroughs Wellcome and Co. Served in U. S. A. Med. Dept. Div. of Infectious Diseases.  
*Ad.*, 41 Bennett Avenue, New York City.

**Homer Willis Eakle, P.D.**

*Thes.*, Stramonium and the Alkaloidal Strength of Various Tinctures.  
Retail pharmacist.  
*Ad.*, Hagerstown, Md.



**Frank Gannon Ebner, P.D.**

*Thes.*, Syrups from Fluidextracts.  
With Parke, Davis and Co., in Art and Publicity  
Dept. Formerly Instr. in Highland Park College,  
Des Moines, Iowa.  
*Ad.*, 442 St. Clair Avenue, Detroit, Mich.

**LaVerne English, P.D.**

*Thes.*, Paraffin.  
Retail pharmacist. Served in U. S. N. R. F. Hosp.  
Corps.  
*Ad.*, 4th and Long Street, Columbus, Ohio.

**Chester Evans, P.D.**

*Thes.*, Kola.  
*Ad.*, 4811 Woodland Avenue, Phila., Pa.

**Anna Feinstein (Mrs. Levitzky), P.C.**

*Thes.*, Microscopical Examination of Powdered  
Rhubarb.  
Received P. D. degree, 1910.  
*Ad.*, 5th and Fairmount Avenue, Phila., Pa.

**William Ewart Ferron, P.D.**

*Thes.*, Study of Smelting of Lead.  
Retail pharmacist. Mayor of Las Vegas, Nev.  
*Ad.*, Las Vegas, Nevada.

**J. Robert Fulton, P.D.**

*Thes.*, Suppositories.  
Retail pharmacist. Recruiting officer for Merchant  
Marine.  
*Ad.*, Everett, Pa.

**Clifton Brown Gallant, P.D.**

*Thes.*, Nux Vomica and Its Alkaloid, Strychnine.

**George Roy Gallinger, P.D.**

*Thes.*, The Industrial and Preservative Uses of  
Formaldehyde.  
Retail pharmacist.  
*Ad.*, Herkimer, N. Y.

**Henry Stites Godshall, P.D.**

*Thes.*, A Study of Ganththeria Procumbens and Its  
Volatile Oil.  
With Valentine H. Smith and Co., Wholesale  
Druggists.  
*Ad.*, 5318 Pine Street, Phila., Pa.

**John Ambrose Gorry, P.D.**

*Thes.*, Vanillinum.  
Retail pharmacist.  
*Ad.*, London, Ohio.

**Howard Milton Greim, P.D.**

*Thes.*, The Economic Trend of Business and Its  
Relation to Individual Proprietorship of Pharmacy.  
Post office clerk.  
*Ad.*, 921 W. Marshall Street, Norristown, Pa.

**\*Roland Bismarck Grom, P.C.**

*Thes.*, The Evolution in Pharmacy.  
Received P. D. degree 1910. Employed in labora-  
tory of Virginia State Dept. of Agriculture.  
Veteran of World War. Deceased, December, 1919.

**Arthur Louis Guerra, P.C.**

*Thes.*, The Micropolariscopic Examination of  
Chemicals.  
Served as Lieut. U. S. A., Med. Dept.

**Doane Herring Hage, P.D.**

*Thes.*, Prescription Difficulties.  
Manager, N. Y. office Arthur H. Colton and Co.  
Served in U. S. A., Chemical Warfare Service,  
during the World War.  
*Ad.*, 949 Broadway, New York City.

**Brooks Collina Haines, P.D.**

*Thes.*, Oleum Ricini.  
Served in U. S. A., Med. Dept.  
*Ad.*, 541 Wilkesbarre Street, Easton, Pa.

**Kirk Faust Haines, P.D.**

*Thes.*, Liquor Calcis.

**Arthur Monroe Hall, P.D.**

*Thes.*, Unguentum Resorcini Compositum.  
Retail pharmacist.  
*Ad.*, Williamsport, Pa.

**Donald Eckel Haller, P.D.**

*Thes.*, Preparations of Crude Carbolic Acid.  
Retail pharmacist.  
*Ad.*, Chambersburg, Pa.

**Jeremiah Ralph Harner, P.D.**

*Thes.*, Syrupus Ferri Saccharati Solubilis.  
*Ad.*, Willamstown, Pa.

**George C. Harvey, P.D.**

*Thes.*, Manufacture of Tincture of Vanilla.  
*Ad.*, 90 Susquehanna Avenue, Lock Haven, Pa.

**Charles Selburn Herron, P.D.**

*Thes.*, Elixir Ferri, Quinina et Strychnina Phos-  
phatum.  
Salesman. Served as Corporal in U. S. A. during  
World War.  
*Ad.*, 19th and Tasker Street, Phila., Pa.

**Clifford Seltzer Hersh, P.D.**

*Thes.*, The Active Principle of the Suprarenal  
Glands.  
Chemist and Supt. of Production, United Fruit  
Co., Cuba.  
*Ad.*, Willow Grove, Pa.

**John Eliaa Faison Hicks, P.C.**

*Thes.*, Quinine.  
Retail pharmacist.  
*Ad.*, Goldsboro, N. C.

**Charles Elbert Hoffman, P.D.**

*Thes.*, Zinci Stearas.  
*Ad.*, 19th and Arch Streets, Phila., Pa.

**David Lee Houck, P.D.**

*Thes.*, Sassafras.  
Retail pharmacist. Recruiting officer for U. S.  
Merchant Marine.  
*Ad.*, Pitcairn, Pa.

**Jesse Thornley Hughes, P.D.**

*Thes.*, Gossypium Purificatum.  
Retail pharmacist. Mem. K. of P. Past Pres.  
Young Men's Progressive League; Vice-pres.  
Board of Education; Pres. Boy Scouts Council.  
Mem. Lodge of Red Men. Masonic affiliation.  
*Ad.*, 819 Wesley Avenue, Ocean City, N. J.

**Ralph Thomas Hunter, Jr., P.D.**

*Thes.*, Anatomy of the Stem of Phoradendron  
Flavescens.  
Mgr. Kettl's Drug Store. Mem. K. of C.; B. P.  
O. E.  
*Ad.*, 711 3rd Avenue, Altoona, Pa.

**Albert Hutson, P.D.**

*Thes.*, Tablet Making for the Retail pharmacist.  
Retail pharmacist.  
*Ad.*, Oneonta, N. Y.

**Sinclair Sartorius Jacobs, P.C.**

*Thes.*, Some Points of Difference Between Wood  
and Gum Turpentine.  
Vice-pres. Jacobs Pharmacy Co. Served in U. S.  
A. as Sgt. 1st Class, Med. Dept., with A. E. F. in  
France. Received P.D. degree, 1912.  
*Ad.*, Care of Jacobs Pharmacy, Atlanta, Ga.

**Allen Christian Keim, P.D.**

*Thes.*, Natural Salicylic Acid and Sodium Salicylate.  
Retail pharmacist.  
*Ad.*, 2400 N. 26th Street, Phila., Pa.

**Frederick John Keim, Jr., P.D.**

*Thes.*, Benzinum Purificatum.  
Pharmacist. Served in U. S. A. as Sgt. Ambulance  
Corps. Masonic affiliation.  
*Ad.*, P. O. Box 307, Honolulu, T. H.

**Earl Leslie Kelly, P.D.**

*Thes.*, Armoracae Radix.

## 612 First Century of the Philadelphia College of Pharmacy

**William Kenneth Kinnear, P.D.**

*Thes.*, Stearic Acid.

**Solomon Klechner, P.D.**

*Thes.*, Hydrogen Dioxide.

**William Raymond Klopp, P.D.**

*Thes.*, Tinctura Galla.  
*Ad.*, Womelsdorf, Pa.

**Harry Daniel Kresge, P.C.**

*Thes.*, Official and Unofficial Troches.  
Retail pharmacist. Masonic affiliation. Mem.  
B. P. O. E.  
*Ad.*, East Stroudsburg, Pa.

**Harry James Krum, P.D.**

*Thes.*, Tinctura Gentianæ Composita.  
City Chemist and bacteriologist. Acting Milk Inspector for Allentown during World War. Special course in serology at Harvard, and in water chemistry at Univ. of Penna. Mem. Allentown Chamber of Commerce; Amer. Chem. Soc. Masonic affiliation.  
*Ad.*, Allentown, Pa.

**Arthur Walter LaVan, P.D.**

*Thes.*, Hydrastis.  
*Ad.*, Parkesburg, Pa.

**George Monroe Levan, P.D.**

*Thes.*, Saffron.  
*Ad.*, 3751 N. Park Avenue, Phila., Pa.

**Ivan Lichtenstein, P.D.**

*Thes.*, The Difficulties of Tablet Making.  
Wholesale candy business. Formerly retail pharmacist. Served in U. S. A. during World War.  
*Ad.*, Cumberland, Md.

**Helen Francea Loughlin, P.D.**

*Thes.*, Tincture of Cinchona, U. S. P.  
Retail pharmacist.  
*Ad.*, Norwood, Pa.

**Joseph Augustus McCann, P.D.**

*Thes.*, The Manufacture of Linen Thread.  
Retail pharmacist.  
*Ad.*, Hudson Falls, N. Y.

**John Leo McMahon, P.D.**

*Thes.*, Emulsions.  
*Ad.*, 316 Noxon Street, Syracuse, N. Y.

**Joseph Robert Mahoney, P.D.**

*Thes.*, Microscopical Examination of Massa Hydrargyri.  
*Ad.*, Northport, Long Island, N. Y.

**\*Lena Levien Mandelbaum, P.D.**

*Thes.*, Ceratum Cantharidis.

**\*Edward Analem May, P.D.**

*Thes.*, Caffeine.  
Deceased, January 24, 1922.

**John Earnest Michael, P.D.**

*Thes.*, Elixir Ferri, Quininae et Strychninae, U. S. P. and N. F.  
*Ad.*, 4947 N. Warnock Street, Logan, Phila., Pa.

**Reinhart Julius Moeachlin, P.D.**

*Thes.*, Yeast Culture.  
*Ad.*, 738 N. 4th Street, Sunbury, Pa.

**Robert Henry Mooney, P.D.**

*Thes.*, Bees Wax.  
Salesman, Parke Davis and Co.  
*Ad.*, Hudson and Vestry Streets, New York City.

**John Moser, Jr., P.D.**

*Thes.*, The Commercial Varieties of Pilocarpus.  
Pharmacognocist and mfg. pharmacist with Sharp and Dohme.  
*Ad.*, 2804 Hilldale Avenue, Baltimore, Md.

**Russell Lowell Mundhenk, P.D.**

*Thes.*, Ricinus Communis.  
Biological chemist, Abbott Laboratories. Served in U. S. N., 1909-1913. Received degree of D.V.M. from Ohio State Univ., 1916. Instr. and Prof. Ohio State Univ., 1913-1916. Served in U. S. A. as 1st Lieut. Inf. to Lieut.-Colonel, Signal Corps, with A. E. F. in France and Belgium.  
*Ad.*, Care of Abbott Laboratories, Chicago, Ill.

**Edward Anthony Murray, P.D.**

*Thes.*, Ash Determination of Cloves and Allspice.  
*Ad.*, 132 E. Pomona Terrace, Germantown, Phila., Penna.

**Ernest Amiel Noedel, P.D.**

*Thes.*, Tinctura Iodi.

**\*Walter Herman Obergh, P.D.**

*Thes.*, Color Reactions of Synthetics.  
Deceased, November 9, 1916.

**\*Harold William Ott, P.D.**

*Thes.*, Methods of Making Unguentum Hydrargyri Nitratis.  
Deceased, 1912.

**Samuel Appleton Pearson, P.D.**

*Thes.*, Percolation in Pharmacy.  
Pharmacist. Mem. B. P. O. E.  
*Ad.*, 242 Wood Street, Bristol, Pa.

**Leah Perzlin (Mrs. Rosin), P.D.**

*Thes.*, Mercury and Its Compounds Used in Medicine.  
*Ad.*, 1208 Windrim Avenue, Phila., Pa.

**Frederick August Pfeiffer, P.D.**

*Thes.*, A Few Alkaloids of Cinchona.  
Retail pharmacist.  
*Ad.*, 5401 Cedar Avenue, Phila., Pa.

**Roland Chapin Pittainger, P.C.**

*Thes.*, Arsenic Trioxide.

**Addiaon Atkins Platt, P.D.**

*Thes.*, Acidum Nitrohydrochloricum Dilutum.

**William Henry Pond, P.D.**

*Thes.*, Tincture of Ferric Chloride.  
*Ad.*, Essex, Conn.

**John Kandle Prickitt, P.C.**

*Thes.*, Aqua Hydrogenii Dioxidi.  
*Ad.*, 136 N. 2nd Street, Phila., Pa.

**Rudolph Henry Quering, P.D.**

*Thes.*, Hydrastis.  
*Ad.*, Arlington, N. J.

**Ludwig William Reudelhuber, P.D.**

*Thes.*, Oleum Olivæ.  
*Ad.*, Parsons, Pa.

**Frederick Eli Riagner, P.D.**

*Thes.*, Liquor Magnesii Citratis.  
Mgr. Prickitt's Pharmacy.  
*Ad.*, 929 Glenbrook Avenue, Bryn Mawr, Pa.

**\*Samuel Rosenberg, P.C.**

*Thes.*, Camphor Cream.  
Retail pharmacist. Phila. Received P.D. degree, 1911. Deceased, October 15, 1918.

**Claude Edward Schlenker, P.D.**

*Thes.*, Pancreatin.  
*Ad.*, 805 Atlantic Avenue, Atlantic City, N. J.

**Warren Reuben Seidell, P.D.**

*Thes.*, Benzoin.  
Retail pharmacist.  
*Ad.*, Ilamburg, Pa.

**William Herman Siemon, P.D.**

*Thes.*, Elixir of the Phosphates of Iron, Quinine and Strychnine.  
Served in U. S. A., Med. Dept., with A. E. F.  
*Ad.*, 2223 N. 2nd Street, Phila., Pa.

**Jay Scott Simpers, P.D.**

*Thes.*, Tincture of Opium.  
Retail pharmacist.  
*Ad.*, 1634 Columbia Avenue, Phila., Pa.

**John William Smith, P.D.**

*Thes.*, Determination of Boric Acid in Talcum Powders.  
*Ad.*, Coudersport, Pa.

**Norman W. Sollenberger, P.C.**

*Thes.*, Drug Store Notes.  
Served in U. S. A., 28th Div.

**Mabel Charlotte Starr, P.D.**

*Thes.*, Hamamelis.  
Pharmacist, Buffalo Homeopathic Hosp. Formerly asst. pharmacist at Howard Hosp., Phila., Pa. Pharmacist at Methodist Hosp. and at Univ. of Penna. Hosp., Phila., Pa. Received Certificate in Bacteriology, P. C. P., 1914.  
*Ad.*, Buffalo Homeopathic Hosp., Buffalo, N. Y.

**Benjamin Steiner, P.D.**

*Thes.*, Antimonii et Potassii Tartras.  
Retail pharmacist.  
*Ad.*, 1547 S. 7th Street, Phila., Pa.

**Raymond Arthur Stofflet, P.D.**

*Thes.*, Linimentum Saponis.  
Retail pharmacist. Served in U. S. A., Med. Dept., 311th F. A., with A. E. F.  
*Ad.*, Lansford, Pa.

**Clarence Stoner, P.D.**

*Thes.*, Glycerin.  
*Ad.*, Mill Hall, Pa.

**Herbert Emamuel Straus, P.D.**

*Thes.*, Combination Rolling-Pin for Lozenge Making.  
*Ad.*, 3825 N. Bonvier Street, Phila., Pa.

**Gny Smith Tregellaa, P.D.**

*Thes.*, Choralum Hydratum.  
*Ad.*, 1217 Daly Street, Phila., Pa.

**John Franklin Tripple, P.D.**

*Thes.*, Pepsin.  
*Ad.*, Lancaster, Pa.

**Maurice Elmer Trout, P.D.**

*Thes.*, Antitoxin.  
*Ad.*, 250 N. 5th Street, Phila., Pa.

**Frank P. VanInwegen, P.C.**

*Thes.*, Hamamelis Folia.  
Retail pharmacist. Prop. Lawrence Drug Co., mfg. and wholesale business. Received P.D. degree, 1911.  
*Ad.*, Sussex, N. J.

**John Alexander Logan Vink, P.D.**

*Thes.*, Semen Carduus Marianus.  
Pharmacist. Served in U. S. A., Med. Dept., Camp Dix, N. J.  
*Ad.*, 600 De Kalb Street, Norristown, Pa.

**Raymond B. Abbott Wisaler, P.D.**

*Thes.*, Coal Analysis.  
*Ad.*, 7144 Germantown Avenue, Phila., Pa.

**Roland Jacob Wotring, P.D.**

*Thes.*, Phenylis Salicylas.  
*Ad.*, 308 W. Broad Street, Bethlehem, Pa.

**Joseph Edward Wright, P.D.**

*Thes.*, Hydrastis Canadensis.

**Walter Atwood Yeakle, P.D.**

*Thes.*, Apocynum Cannabinum.  
*Ad.*, 600 De Kalb Street, Norristown, Pa.

**Howard Eakle Young, P.D.**

*Thes.*, Cinchona and Its Bast Fibers.  
*Ad.*, 1100 Druid Hill Avenue, Baltimore, Md.

**Special Students.**

**Horace J. Hallowell.**

Received Certificate of Proficiency in Chemistry.  
Chemist, Powers-Weightman-Rosengarten Co.  
*Ad.*, 4609 Springfield Avenue, Phila., Pa.

**Martin Luther Hartwig.**

Received Certificate of Proficiency in Chemistry.  
Chemist, Southern Agric. Chem. Co., Atlanta, Ga. During World War, foreman General Laboratories, Muscle Shoals, Ala.  
*Ad.*, Poplar Street, Queens, Long Island, N. Y.

**David J. Jones.**

Received Certificate of Proficiency in Chemistry.  
Chemist, Hudson Coal Co.  
*Ad.*, 512 N. Hyde Avenue, Scranton, Pa.

**Charles Daniel Klingensmith.**

Received Certificate of Proficiency in Chemistry.  
Chemist, Jamison Coal and Coke Co.  
*Ad.*, Box 472, Greensburg, Pa.

**Edward S. Rose, Ph.G.**

Received Certificate of Proficiency in Food and Drug Course. Chemist, W. F. Severa Co., Cedar Rapids, Iowa.  
*Ad.*, 2956 4th Avenue, Cedar Rapids, Iowa.

**Loula W. Walz.**

Received Certificate of Proficiency in Chemistry.

**1910**

**Peter Amsterdam, P.D.**

*Thes.*, Cassia Bark.  
*Ad.*, 249 S. Orianna Street, Phila., Pa.

**Samuel Howard Bartholomew, P.D.**

*Thes.*, The Volumetric Determination of Sodium Borate.  
*Ad.*, 317 S. 5th Street, Easton, Pa.

**William David Baun, P.D.**

*Thes.*, Cinchona and Its Bast Fibers.  
Physician. Graduated in medicine, Jeff. Med. College, 1915. Res. Phys. Frankford Hosp. Phys. at Northern Disp. Roentgenologist to Evac. Hosp., No. 22, U. S. A.; Sch. of Military Roentgenology Cornell Univ. (Govt. Service). Instr. Mat. Med. Nurses' Training Sch., Frankford Hosp. Mem. Phi Chi Med. Frat. Masonic affiliation. Served in U. S. A. as Capt., Med. Dept., in U. S., France and Germany.  
*Ad.*, 2542 W. Girard Avenue, Phila., Pa.

**Jay Dana Beck, P.D.**

*Thes.*, A Simple Apparatus for the Recovery of Alcohol in the Retail Pharmacy.  
*Ad.*, 302 E. State Street, Sharon, Pa.

**Joseph Blumberg, P.D.**

*Thes.*, Zinc Oxide.  
Retail pharmacist. Masonic affiliation.  
*Ad.*, 729 S. 2nd Street, Phila., Pa.

**Stephen Dwight Bolton, P.D.**

*Thes.*, The Manufacture of Extract of Vanilla and Its Importance in Pharmacy.  
Retail pharmacist. Served in U. S. A. during World War.  
*Ad.*, 443 W. Main Street, Watertown, N. Y.

**Warren Roland Borneman, P.D.**

*Thes.*, Potassii Bitartras.  
*Ad.*, 126 E. Centre Street, Mahanoy City, Pa.

**Charles Henry Bose, P.D.**

*Thes.*, Sambucus Canadensis.  
Pharmacist.  
*Ad.*, 2015 Derry Street, Harrisburg, Pa.

**William Dale Boat, P.C.**

*Thes.*, Liqueur Plumbi Subacetatis.  
Chief Chemist, Orange Crush Co., Chicago. Masonic affiliation. Special courses in bact. and chem. Received P.D. degree, 1913.  
*Ad.*, 314 W. Superior Street, Chicago, Ill.



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**James Stanley Breen, P.D.**

*Thes.*, A Process for Determining the Value of Soap.  
Retail pharmacist.  
*Ad.*, 1912 Union Avenue, Altoona, Pa.

**Merle Stoles Bringman, P.D.**

*Thes.*, Blood and Tests for Blood.  
Mgr. Dixon's pharmacy.  
*Ad.*, 3016 N. 25th Street, Phila., Pa.

**Jay William Brooks, P.D.**

*Thes.*, The A. O. A. C. Standards as Applied to Belladonna.  
Manager, Sales Distribution, Bristol-Myers Co.  
*Ad.*, 281 Greene Avenue, Brooklyn, N. Y.

**Luke Thomas Butt, P.D.**

*Thes.*, Pepsin.  
*Ad.*, Lebanon, Pa.

**Wayne Cadwallader, P.C.**

*Thes.*, Ferri Carbonas Saccharatus.  
Import-Export drug broker. Mem. U. S. Shipping Board. Retail pharmacist until 1917.  
*Ad.*, Sea Bright, N. J.

**William Ray Calvin, P.C.**

*Thes.*, Liquor Potassii Arsenitis.  
Vice-pres. Calvin Investment Co. Received P.D. degree, 1911. Masonic affiliation. Served in U. S. A. as Sgt., Med. Dept., Evac. Hosp. No. 1, with A. E. F. in France.  
*Ad.*, P. O. Box 98, Miles City, Mont.

**George Fulmer Chapman, P.D.**

*Thes.*, Aqua Hydrogenii Dioxidi.  
*Ad.*, 115 S. Richland Avenue, York, Pa.

**Lester Cleveland Connelly, P.D.**

*Thes.*, The Advantages of the Compound Microscope in the examination of Powdered Drugs.  
Salesman, Armour and Co., Chicago. Served in U. S. A., Med. Dept., with A. E. F. in France.  
*Ad.*, 115 W. High Street, Carlisle, Pa.

**William Benjamin Dangerfield Cooper, P.C.**

*Thes.*, The Value and Efficiency of Greaseless Skin Creams.  
*Ad.*, 1732 Catharine Street, Phila., Pa.

**Mary O'Dea Costello (Mrs. Charles Ostrum), P.C.**

*Thes.*, The Anatomy of Cactus Selenicerus Grandiflorus.  
Conducted pharmacy at White Haven, Pa., for 10 years.

**Roy Deck, P.D.**

*Thes.*, Hydrogen Peroxide Solution as Sold by Druggists.  
Physician. Graduated in medicine, Jeff. Med. College, 1914. Res. Phys. Jeff. Hosp. Served in U. S. A., Med. Dept., as Lient. Attached to British Forces.  
*Ad.*, Lancaster, Pa.

**Henry Vernon DeHaven, P.D.**

*Thes.*, Sandalwood.  
Retail pharmacist.  
*Ad.*, 106 West Gay Street, West Chester, Pa.

**Howard Burtis Dilatush, P.D.**

*Thes.*, Phenol.

**Walter Driver, P.D.**

*Thes.*, A Quick Method for Filling Bottles.  
*Ad.*, Ocean Park, Cal.

**William Stacey Durbin, P.D.**

*Thes.*, Rhamnus Purshiana.  
Retail pharmacist.  
*Ad.*, 805 Wyoming Avenue, Dorranceton, Pa.

**Norman Elias Eberly, P.D.**

*Thes.*, Assay and Micro-Chemistry of Hydrastis.  
*Ad.*, 1935 W. Erie Avenue, Phila., Pa.

**Maurice Herr Eby, P.D.**

*Thes.*, Prescription Difficulties.  
Retail pharmacist.  
*Ad.*, New and Plum Streets, Lancaster, Pa.

**John Matthias Emlet, P.D.**

*Thes.*, Ferri Sulphas Exsiccatus.  
Retail pharmacist.  
*Ad.*, 14 Carlisle Street, Hanover, Pa.

**Fanny Ferry, P.C.**

*Thes.*, The Size of Globules in Various Emulsions.  
Received P.D. degree, 1915.  
*Ad.*, Freeland, Pa.

**Lewis Fleisher, P.C.**

*Thes.*, Cork.  
*Ad.*, 228 W. Ontario Street, Phila., Pa.

**Edward Paul Gibney, P.D.**

*Thes.*, Soluble Bismuth and Sodium Tartrate.  
Chicago Representative, Bayer Co., Inc.  
*Ad.*, 146 W. Kinzie Street, Chicago, Ill.

**James Jeffries Goodwin, P.D.**

*Thes.*, Assay of Ferrum Reductum.  
*Ad.*, 4th and Chestnut Streets, Louisville, Ky.

**Hyman Greenberg, P.D.**

*Thes.*, Improved Method for Prepared Castor Oil.

**William Robert Greene, P.D.**

*Thes.*, Antiseptic Properties of Iodine.

**Chloe Earl Greiner, P.D.**

*Thes.*, Liquor Potassii Hydroxidi.  
Representative H. K. Mulford Co. Masonic affiliation. Mem. B. P. O. E. Served in U. S. A., as Pvt., 117th Field Hosp., 105th Sanitary Train, 30th Div., A. E. F.  
*Ad.*, 926 Broadway, Kansas City, Mo.

**Frederick Griesemer, P.D.**

*Thes.*, Liquor Sodæ Chlorinatæ.  
Pharmacist for P. M. Ziegler Co.  
*Ad.*, 327 S. 9th Street, Reading, Pa.

**Norbert Harrison Grove, P.D.**

*Thes.*, Chromium Trioxide.  
*Ad.*, Chambersburg, Pa.

**Harold Dickinson Guenther, P.D.**

*Thes.*, The Percentage Loss or Gain in Weight of the U. S. P. Chemicals at Store Temperature.  
Retail pharmacist.  
*Ad.*, 240 S. 9th Street, Reading, Pa.

**William Clyde Harris, P.D.**

*Thes.*, Arsenous Iodide.  
*Ad.*, 600 S. Walnut Street, West Chester, Pa.

**\*Alfred Martin Harting, P.D.**

*Thes.*, Solution of Iron Peptonate with Manganese, N. F. III.  
Deceased, 1910.

**Joseph Victor Henkel, P.D.**

*Thes.*, Monohydrated Sodium Carbonate.  
Mgr., Centre Avenue Pharmacy for E. R. Mohler.  
Served in U. S. A. at Camp Lee, Va.  
*Ad.*, 546 S. 17th Street, Reading, Pa.

**Arthur Cecil Henrie, P.D.**

*Thes.*, Analytical Methods for the Pharmacist.  
Retail pharmacist.  
*Ad.*, Ordway, Colorado.

**Carl Racine Henry, P.C.**

*Thes.*, Liquor Sodii Phosphatis Compositus.  
Retail pharmacist. Served in U. S. N. as pharmacist's Mate on U. S. S. Northern Pacific and U. S. S. Dakotan. Masonic affiliation.  
*Ad.*, 1500 W. Genesee Street, Syracuse, N. Y.

**Edward Calvin Hickory, P.D.**

*Thes.*, Face Creams.  
*Ad.*, 330 E. Broad Street, Chester, Pa.

**Charles Coy Honaaker, P.D.**

*Thes.*, Phenolphthalein.  
Physio-therapeutist. Graduate of Penna. Ortho-  
paedic Inst., Phila.  
*Ad.*, Aldine Hotel, 19th and Chestnut Streets,  
Phila., Pa.

**Charles Lewis Horn, P.D.**

*Thes.*, Liquor Ferri Iodidi, N. F. III.  
Retail pharmacist.  
*Ad.*, Melrose Bldg., Summit, N. J.

**George Bercaw Hulick, P.D.**

*Thes.*, Spiritus Aetheris Nitrosi.  
Retail pharmacist.  
*Ad.*, 1500 Mt. Vernon Street, Phila., Pa.

**Ellsworth R. Jonea, P.D.**

*Thes.*, Rhamnus Purshiana.  
Retail pharmacist.  
*Ad.*, 901 Hamilton Street, Allentown, Pa.

**Erney Cornelius Kehr, P.D.**

*Thes.*, Glycerate of the Phosphates of Iron, Quin-  
ine and Strychnine.  
*Ad.*, York New Salem, Pa.

**Vastine Atkinson Kelster, P.D.**

*Thes.*, Bacterium Lactici Acidi.  
Retail pharmacist.  
*Ad.*, Pulaski, Va.

**William Wallace Keya, P.D.**

*Thes.*, Commercial Varieties of Rhubarb.

**Wallace Ellwood Klopp, P.C.**

*Thes.*, The Commercial Varieties of Vanilla.  
Pharmacist for W. K. Armstrong.  
*Ad.*, Millner Bldg., Sunbury, Pa.

**Eugene Walker Kniley, P.D.**

*Thes.*, Sodii Sulphas.  
*Ad.*, 5283 Germantown Avenue, Phila., Pa.

**John Leedom Kooker, Jr., P.D.**

*Thes.*, Caffea (Coffee).  
*Ad.*, 13th and Diamond Streets, Phila., Pa.

**Edward Michael Korb, P.D.**

*Thes.*, Zinci Oxidum.  
*Ad.*, 420 Grove Street, Honesdale, Pa.

**James Kramer, P.D.**

*Thes.*, Syrup of Ferrous Iodide.  
*Ad.*, 508 S. 61st Street, Phila., Pa.

**\*Sylvan Deering Lamb, P.D.**

*Thes.*, Magma Bismuthi.  
Retail pharmacist, Phila. Deceased, October 3,  
1918.

**Charles Nicholas Lang, P.D.**

*Thes.*, The Collection, Preparation and Preserva-  
tion of a Local Herbarium.  
*Ad.*, 1724 Stiles Street, Phila., Pa.

**William Jonas Laros, P.D.**

*Thes.*, Window Dressing and Its Value.  
*Ad.*, 837 Gordon Street, Allentown, Pa.

**James Petri Lengel, P.C.**

*Thes.*, Rhubarb.  
Retail pharmacist. Formerly with E. I. du Pont  
de Nemours and Co. as chemist and plant super-  
visor.  
*Ad.*, 107 Main Street, Phoenixville, Pa.

**George B. Levan, P.D.**

*Thes.*, The Preservation of Vegetable Drugs.  
*Ad.*, 406 William Street, Williamsport, Pa.

**Albert Edward Lounda, P.D.**

*Thes.*, Permanency of Glycerophosphates.  
*Ad.*, Crescent City, Fla.

**William Atkinson Lounsbury, P.D.**

*Thes.*, The Preservation of Syrup of Ferrous  
Iodide, U. S. P.  
*Ad.*, 36 S. Broad Street, Pennsgrove, N. J.

**Earl Martin Loveless, P.D.**

*Thes.*, The Assay and Micro-Chemistry of Stro-  
phanthus.  
Retail pharmacist.  
*Ad.*, 148 W. Spring Street, Titusville, Pa.

**Harry Elmer McAninch, P.D.**

*Thes.*, Liquor Magnesii Citratis.  
Retail pharmacist.  
*Ad.*, St. Mary's, Pa.

**Raymond Welles McCarty, P.D.**

*Thes.*, Pepsin.  
Retail pharmacist. Secy. and Treas., the Young  
Pharmacy.  
*Ad.*, Hornell, N. Y.

**Thomas Edward McCutcheon, P.D.**

*Thes.*, Aloes—Identification, Adulterations and  
Tests.  
*Ad.*, 3613 Woodland Avenue, Phila., Pa.

**John Aloysius McGonigal, P.D.**

*Thes.*, History of Opium.

**Donald Atlee McMillen, P.D.**

*Thes.*, The Effect of Heat on the Alkaloidal Assay  
of Opium.  
Served in U. S. A., Med. Dept., 61st Inf. A. E. F.  
Wounded.  
*Ad.*, 1002 State Street, Erie, Pa.

**\*Maurice Louis Mallaa, P.D.**

*Thes.*, Collection of the Medicinal Barks of Com-  
merce.  
Physician. Completed B.A. course and graduated  
in medicine, Univ. of Penna., 1918. On staff of  
Jewish Hosp., Phila. Served in U. S. A., as 1st  
Lieut., Med. Dept. Deceased, April 6, 1922.

**Thomaa Carpenter Marshall, P.D.**

*Thes.*, Elixir Digestivum Compositum.  
Retail pharmacist.  
*Ad.*, Avondale, Chester Co., Pa.

**Elliott Harrison Metcalf, P.D.**

*Thes.*, Pancreatin.  
Capt. Med. Corps, U. S. A. Graduated in medi-  
cine Jeff. Med. College, 1914. Served as res.  
phys., Youngstown City Hosp. and Phila. Gen.  
Hosp. Surgeon to American Ambulance Hosp.,  
attached to French Army, in 1916. Joined U. S.  
Forces as 1st. Lieut. Promoted to Capt., 1918.

**Robert Metzler, P.D.**

*Thes.*, Hepatica.  
Pharmacist.  
*Ad.*, 2200 Frankford Avenue, Phila., Pa.

**Emory Shinkle Mohn, P.D.**

*Thes.*, Potassium Iodide and Potassium Bromide.  
*Ad.*, Jersey Shore, Pa.

**Earl Spencer Moser, P.D.**

*Thes.*, Sapo Mollis.  
Retail pharmacist.  
*Ad.*, 813 12th Street, Altoona, Pa.

**Sister Berths Mueller, P.D.**

*Thes.*, Digitalis.  
Asst. pharmacist, Lankenau Hosp.  
*Ad.*, Lankenau Hospital, Phila., Pa.

**Joseph Edwin Mutty, P.D.**

*Thes.*, Liquid Extract of China "Dutch."  
Mgr. for L. K. Liggett Co. Recruiting Agt.  
Merchant Marine.  
*Ad.*, 55 Cedar Street, Bangor, Me.

**Evan Richard Owens, P.D.**

*Thes.*, Viburnum Prunifolium.  
*Ad.*, 503 E. Abriendo Street, Pueblo, Colo.

**Harry Jackson Pettyjohn, P.D.**

*Thes.*, Colocynthis.  
Retail pharmacist. Formerly pharmacist, Phila.  
Gen. Hosp. Served in U. S. A. as Sgt. 1st Class,  
Med. Corps.  
*Ad.*, Milford, Del.

- Mary Gertrude Powell, P.C.**  
*Thes.*, The Morphology of the Glandular Hairs of Humulus.  
*Ad.*, 58 Park Street, Carbondale, Pa.
- Henry William Preas, P.D.**  
*Thes.*, The Proper Time to Collect Roots and Rhizomes.  
Pharmacist. Served in U. S. N. Med. Dept. during World War.  
*Ad.*, Lansdale, Pa.
- Edward William Raines, P.D.**  
*Thes.*, Bacteriological Examination of Commercial Gelatin.
- George Edgar Ritchey, P.D.**  
*Thes.*, Kaolinum.  
*Ad.*, Carlisle, Pa.
- Jacob Clever Lebman Ritchey, P.D.**  
*Thes.*, Hydrastis Canadensis.  
*Ad.*, Carlisle, Pa.
- Zebulon Harrison Rodes, P.D.**  
*Thes.*, Ammonium Sulpho-Ichthyolate.  
Mgr. Schiller's Pharmacy. Sgt. Sanitary Detachment 3rd Inf., Penna. Reserve Militia.  
*Ad.*, 6542 Dalzell Place, Pittsburgh, Pa.
- William George Roof, P.D.**  
*Thes.*, The Manufacture of Paper.  
*Ad.*, Johnsonburg, Pa.
- Charles B. Rothenberger, P.D.**  
*Thes.*, The Cultivation of Hydrastis Canadensis.  
Pharmacist. Served with U. S. A. during World War.  
*Ad.*, Care of Gingrich Bros., Reading, Pa.
- Walter Edward Ruch, P.D.**  
*Thes.*, The Utility of Pharmacognosy.
- Percy Reginald Russell, P.D.**  
*Thes.*, Milk of Magnesia.  
*Ad.*, Brookline, Del. Co., Pa.
- Foster John Sankey, P.C.**  
*Thes.*, Ammonia.  
Retail pharmacist.  
*Ad.*, Reedsville, Pa.
- William Scargle, P.D.**  
*Thes.*, A Practical System of Accounts for Pharmacists.  
*Ad.*, East Lansdowne, Pa.
- Horace Martin Schabacker, P.D.**  
*Thes.*, Pepsinum.  
Representative, Burroughs, Wellcome, and Co.  
*Ad.*, 207 Birch Ave., Pittsburgh, Pa.
- Seima L. Schmidt, P.C.**  
*Thes.*, The Testing of Balsam of Peru.  
Received P.D. degree 1911.  
*Ad.*, 1414 Market Ave., S., Canton, Ohio.
- Christopher Schuehle, Jr., P.D.**  
*Thes.*, Seed Dispersal.  
Retail pharmacist. Formerly with Eli Lilly and Co. Served with U. S. N. R. F. during World War.  
*Ad.*, Helena, Mont.
- Lumir Severa, P.C.**  
*Thes.*, Liqueur Chlori Compositus.  
Vice-pres. and Treas., W. F. Severa Co. Served in U. S. A. as 2nd Lieut., School of Fire, Fort Sill, Okla.  
*Ad.*, Blake Blvd., Cedar Rapids, Iowa.
- William Harrison C. Shelly, P.D.**  
*Thes.*, Phenolphthalein as a Cathartic.  
Farm manager.  
*Ad.*, Quakertown, Pa., R. D. No. 2.
- Phillip Siegel, P.C.**  
*Thes.*, Precipitates in Alkaloidal Tinctures.  
Received P.D. degree 1915.
- Roscoe Solomon, P.D.**  
*Thes.*, Phenol.  
Mgr. Cady Drug Co. Steel inspector for British Govt. during World War.  
*Ad.*, 900 Saville Ave., Eddystone, Pa.
- Ernest Kenneth Stratton, P.D.**  
*Thes.*, Casein.  
Capt., Med. Corps, U. S. A. Graduated in medicine, George Washington Univ., 1916. Entered Army Med. Sch. 1917. Served as surgeon to 13th Machine Gun Btn. in France; later assigned as surgeon, 8th U. S. Inf., in Germany.
- Louis LeRoy Topper, P.D.**  
*Thes.*, Saccharum.  
*Ad.*, Taft, California.
- Frank Albert Treichler, P.D.**  
*Thes.*, Sodii Benzoas.  
*Ad.*, 128 W. Marshall Street, Norristown, Pa.
- Walter William Turner, P.D.**  
*Thes.*, Cannabis Indica.  
*Ad.*, 4th and Lehman Sts., Lebanon, Pa.
- Lewis Viner, P.D.**  
*Thes.*, Glycerinum.  
*Ad.*, 508 N. 6th Street, Phila., Pa.
- John Carroll Walton, P.D.**  
*Thes.*, Essentia Pepsini.  
Retail pharmacist.  
*Ad.*, 838 N. 24th street, Phila., Pa.
- Paul Carleton Hill Webb, P.D.**  
*Thes.*, Notes of the Histology and Chemistry of Tonquin Wood.  
Served in U. S. A. with A. E. F.  
*Ad.*, 1313 N. 8th Street, Phila., Pa.
- Waller Nardin Webb, P.D.**  
*Thes.*, Olive Oil.  
*Ad.*, Anderson, S. C.
- Karl Werner, P.D.**  
*Thes.*, Vanilla Flavoring Extract.  
Retail pharmacist.  
*Ad.*, Glenolden, Pa.
- Joseph Franklin Wiesner, P.D.**  
*Thes.*, Potassii Carbonas.  
Retail pharmacist. Mem. Wis. Pharm. Assn.; K. of P.; I. O. O. F.; B. P. O. E.  
*Ad.*, LaFarge, Wis.
- Philip Shuster Willingmyre, P.D.**  
*Thes.*, The Effects of Heat on Opium.
- John Herbert Wilson, P.D.**  
*Thes.*, Some Special Tests for the Valuation of Anthemis.  
*Ad.*, Ashland, Pa.
- Lewis Elmer Wilson, P.D.**  
*Thes.*, Fluidglycerate of Krameria.
- Robert James Wilson, P.D.**  
*Thes.*, Manganii Dioxidum Præcipitatum.  
*Ad.*, 101 N. 62nd Street, Phila., Pa.
- Claude Senft Wolfe, P.D.**  
*Thes.*, Elixir Aromaticum.  
Mgr. Lafean Drug Co. Masonic affiliation.  
*Ad.*, 638 Princess Street, York, Pa.
- Edward Benjamin Workman, P.D.**  
*Thes.*, Magnesium Oxide.  
Retail pharmacist. Masonic affiliation.  
*Ad.*, 522 Parson Street, Easton, Pa.
- David Solomon Zelmanoff, P.D.**  
*Thes.*, Sulphur Iodide.  
*Ad.*, 30th & York Streets, Phila., Pa.
- Frank Loomis Ziegler, P.D.**  
*Thes.*, Oleum Cinnamomi.  
Pharmacist.  
*Ad.*, 217 Ruth Avenue, Hanover, Pa.



**John Edwin Ziegler, P.D.**

*Thes.*, Calcium Orthosilicate or Portland Cement. Pharmacist. Served in U. S. A. as Sgt. Med. Dept., Bact. Lab., Base Hosp., Camp Meade, Md.

**Special Student.**

**Harmon M. Sechler.**

Received Certificate of Proficiency in Food and Drug Course.

**1911**

**James Harrison Allison, P.D.**

*Thes.*, Ferri Sulphas Exsiccatus. Retail pharmacist. Recruiting Officer, U. S. Merchant Marine. *Ad.*, Ridgway, Pa.

**John Walt Atkins, P.D.**

*Thes.*, Cacao. Received Certificate in Bacteriology, P. C. P., 1914. *Ad.*, 133 S. 8th Street, Lebanon, Pa.

**Samuel Baradofsky, (now Samuel Bardy), P.D.**

*Thes.*, Action of Iodine Upon Starch. Served in U. S. A. during World War. Since discharge from army has devoted time to scientific research and invention. *Ad.*, 2114 Natrona Street, Phila., Pa.

**Norman Clyde Beckley, P.D.**

*Thes.*, Acidum Sulphuricum Dilutum. Member of firm, Coast Sales Co., wholesale drug brokers. Formerly Secy. Idaho Pharm. Assn. *Ad.*, 108 11th Street, Portland, Ore.

**Jennie Bellitz, (Mrs. Bector), P.D.**

*Thes.*, Colocynth. *Ad.*, 18th and Berks Streets, Phila., Pa.

**DeWilton Snowden Berry, P.D.**

*Thes.*, Drug Store Management.

**Lee Otto Bloea, P.D.**

*Thes.*, Vanishing Cold Cream. *Ad.*, Peckville, Pa.

**\*Chester Eugene Bollinger, P.D.**

*Thes.*, Physiological Testing of Ointments. Deceased, August 26, 1913.

**Kersey Elmer Bradley, P.D.**

*Thes.*, Sterilization of Cocaine Solutions. *Ad.*, Summit Drug Co., Akron, Ohio.

**Oscar Samuel Bradley, P.D.**

*Thes.*, Ergota. Retail pharmacist. *Ad.*, Ulster, Pa., R. D. No. 18.

**Robert Osborn Bricker, P.D.**

*Thes.*, The Cultivation of Atropa Belladonna. *Ad.*, 1613 N. Broad Street, Phila., Pa.

**Franklin Cotton Brush, P.D.**

*Thes.*, Rhus Glabra. Physician and surgeon. Graduated in medicine, Medico-Chi. Coll., 1916. Commissioned 1st Lieut. Med. Reserve Corps, U. S. A. Served with A. E. F. in France, Field Hosp. No. 27, 3rd Div. With Army of Occupation in Germany. Appointed medical examiner, Pa. Nat'l Guards. *Ad.*, 204 S. Gay Street, Phoenixville, Pa.

**Lloyd Burt, P.D.**

*Thes.*, The Determination of Stearic Acid. Retail pharmacist. *Ad.*, 427 W. Tabor Road, Phila., Pa.

**\*John Albert Butler, P.D.**

*Thes.*, Petrox. Deceased, October 19, 1912.

**\*George Warner Carey, P.D.**

*Thes.*, Hydrastis Canadensis. Deceased, 1918.

**Pierce Raymond Carpenter, P.D.**

*Thes.*, Ointment of Mercuric Nitrate (Modification). *Ad.*, 935 Chestnut Street, Lebanon, Pa.

**Arthur Hudson Carrington, P.D.**

*Thes.*, Expressed Almond and Peach Kernel Oils. Hospital pharmacist, poultry farmer, magazine writer. *Ad.*, Mercer Hospital, Trenton, N. J.

**Julius Lewis Charleston, P.C.**

*Thes.*, Tasteless Castor Oil. *Ad.*, 437 N. 6th Street, Phila., Pa.

**Louis Edward Christopher, P.D.**

*Thes.*, Acidum Hydrochloricum Dilutum. *Ad.*, 513 Hennespin Avenue, Minneapolis, Minn.

**Phillip Cohen, P.D.**

*Thes.*, Sapo Mollis. Served in Tank Corps, U. S. A.

**Clayton Elmer Costenbader, P.D.**

*Thes.*, Hydrastis Canadensis. Retail pharmacist. *Ad.*, Palmerton, Pa.

**William Burton Crawford, P.D.**

*Thes.*, Mel.

**Elliot V. Davis, P.D.**

*Thes.*, Rhamnus Frangula. *Ad.*, 117 Summit Street, Kingston, Pa.

**John Henry Donnelly, P.D.**

*Thes.*, Liquor Sodæ Chlorinatæ. *Ad.*, 272 S. 1st Street, Coatesville, Pa.

**Frank Duvoisin, P.C.**

*Thes.*, Carbon Tetrachloride. *Ad.*, 3101 E. Jefferson Street, Detroit, Mich.

**David Everett Edwards, P.D.**

*Thes.*, Rhamnus Purshiana. Served in Ambulance Co. No. 6, Camp Greenleaf, Fort Oglethorpe, Ga. *Ad.*, 111 Market Street, Johnstown, Pa.

**David William Eisman, P.D.**

*Thes.*, Oleum Olivæ. Retail pharmacist. *Ad.*, 4913 N. 9th Street, Phila., Pa.

**James Henry Ennis, Jr., P.D.**

*Thes.*, Ether. Broker and manufacturers' agent. Formerly with H. K. Mulford Co.; Parke, Davis and Co.; E. I. du Pont de Nemours and Co.; and Frank L. Young Co. *Ad.*, 2042 Whitehall Bldg., 17 Battery Place, New York City.

**Walter John Farrell, P.D.**

*Thes.*, Fluid extract of Parsley Root, N. F. Physician. Graduated in medicine, Fordham Univ. Interne and House Surgeon, Harlem Div. Bellevue and Allied Hospitals, New York City. Served in U. S. A., as 1st Lieut. Asst. Surgeon Evac. Hosp., Number 42. Mem. B. P. O. E.; K. of C.; Binghamton Acad. of Medicine; N. Y. State Med. Soc.; Amer. Med. Assn.; Asst. Surgeon Johnson City Gen. Hosp. *Ad.*, 301 Main Street, Johnson City, N. Y.

**William Gordon Flickinger, P.C.**

*Thes.*, Fabrica Farinae. Physician. Graduated in medicine, Jeff. Med. College. Res. Phys. Kings County Hosp.; Norwegian Lutheran Hosp. Quarantine officer for Port of New York. In charge of Urological Dept., Camp Jackson S. C. during World War. *Ad.*, New Holland, Pa.

**Nathan Meyer Friedman, P.D.**

*Thes.*, Essentia Pepsini, N. F. Retail pharmacist. Served in U. S. A. Med. Corps. *Ad.*, 517 Wolf Street, Phila., Pa.

- Walter James Gaskell, P.D.**  
*Thes.*, Elixir Digestivum Compositum, N. F.  
 Automobile salesman, S. K. Blockson Motor Co.  
 Served in U. S. A. during World War.  
*Ad.*, 832 East Tioga Street, Phila., Pa.
- Claude Ellsworth Gault, P.D.**  
*Thes.*, Petrolatum.  
 Retail and mfg. pharmacist. Served in U. S. A.,  
 Ordnance Corps.  
*Ad.*, 3023 Hamilton Blvd., Detroit, Mich.
- David Harris Gordon, P.D.**  
*Thes.*, The Alcohol of Bay Rum.  
 Salesman, Wm. R. Warner and Co.  
*Ad.*, 709 Worthington Avenue, Charlotte, N. C.
- William Lewis Graeff, P.C.**  
*Thes.*, Desiccated Thyroid Glands.  
 Retail pharmacist. Received P.D. degree, 1912.  
*Ad.*, 2241 S. Bonsall Street, Phila., Pa.
- Alvah Frank Greaves, P.D.**  
*Thes.*, Peanut Oil.  
 Ranchman.  
*Ad.*, Whitney Point, N. Y.
- \***Florence Hunter Greaves, (Mrs. Alvah F. Greaves), P.C.**  
*Thes.*, Acidum Hydrobromicum Dilutum.  
 Deceased, May 31, 1922.
- Harrison W. Gregory, P.D.**  
*Thes.*, Soft Gelatin Capsules.  
 Retail pharmacist. Mem. B. P. O. E.; L. O. O. M.;  
 K. of C.  
*Ad.*, 16 N. Main Street, Shenandoah, Pa.
- Morris Haimowitz, (Now Henry Morris), P.D.**  
*Thes.*, The Presence of Calcium Oxalate in Podo-  
 phyllum.  
 Retail pharmacist. Secy. Retail Merchants Assn.,  
 Lansing, Mich. Mem. Legislative Committee,  
 Mich. State Pharm. Assn.; A. Ph. A.; Nat'l  
 Assn. Retail Druggists; Mich. State Pharm. Assn.;  
 Ingham County Pharm. Assn.  
*Ad.*, 129 E. Michigan Avenue, Lansing, Mich.
- Clyde Raymond Hancock, P.D.**  
*Thes.*, The Identification of Preparations of Aletris  
 Farinosa.  
 Pharmacist for L. K. Liggett Co. Served in  
 U. S. A. as Pvt. in Inf., Med. and Sanitary Corps.  
*Ad.*, 1536 First Street, N. W., Washington, D. C.
- Farel Hart, P.D.**  
*Thes.*, Solidified Alcohol.  
 Ohio representative, John Wyeth and Bro.  
 Served in U. S. A. Med. Dept. during World War.  
*Ad.*, 1239 Maple Avenue, Zanesville, Ohio.
- Earl Stewart Hartenstein, P.C.**  
*Thes.*, Liquor Ferri Chloridi.  
 Received P.D. degree, 1913.  
*Ad.*, Spencer, So. Dak.
- \***Clifton Elwood Heacock, P.D.**  
*Thes.*, Fluidextract of Kola.  
 Deceased, May 26, 1915.
- Frank Xavier Hedges, P.C.**  
*Thes.*, Tragacanth and Indian Gum.  
 Received P.D. degree, 1912.  
*Ad.*, 20th and Tioga Streets, Phila., Pa.
- John C. Held, Jr., P.D.**  
*Thes.*, Milk and the Cereal Modifications of Milk.  
 Salesman, Hance Brothers and White. Retail phar-  
 macist until 1916.  
*Ad.*, 531 Monastery Avenue, Roxborough, Phila.,  
 Penna.
- Robert Elton Hemminger, P.D.**  
*Thes.*, Show Globe Colors.  
*Ad.*, Carlisle, Pa.
- Lyle Vallington Hendricks, P.D.**  
*Thes.*, Aqua Hydrogenii Dioxidii.  
 Mem. of firm, Coast Sales Co., Wholesale Drug  
 Brokers.
- Clarence Sloan Herr, P.D.**  
*Thes.*, Steel.  
*Ad.*, 403 E. Robinson Street, N. S., Pittsburgh, Pa.
- Charles Pinkney Hildebrand, P.D.**  
*Thes.*, Maize Oil.  
 Retail pharmacist. Director, Farmers State Bank,  
 York, Neb.  
*Ad.*, 521 Lincoln Avenue, York, Neb.
- Herman Leo Hinski, P.D.**  
*Thes.*, Diastase.  
 Received Certificate of Proficiency in Chemistry,  
 P. C. P., 1914.  
*Ad.*, 4353 N. 9th Street, Phila., Pa.
- Herman Francis Hosfeld, P.D.**  
*Thes.*, Bacillus Acidii Lactici.
- David Emil Johnson, P.D.**  
*Thes.*, Fluidextracts of Celery and Angelica Root.  
*Ad.*, Lewistown, Pa.
- Carl Frederick Kaehler, P.D.**  
*Thes.*, Sulphuric Acid.
- Raymond John Kramer, P.C.**  
*Thes.*, Tinctura Ferri Chloridi.
- Oscar Perry Kreamer, P.D.**  
*Thes.*, Prescription Difficulties.  
*Ad.*, Bellefonte Avenue, Lock Haven, Pa.
- Daniel Joseph Langton, P.C.**  
*Thes.*, Pepsin.  
 Physician. Graduated in medicine, Jeff. Med. Col-  
 lege, 1917. Res. Phys. St. Agnes Hosp., Phila.  
 Res. surgeon Sacred Heart Hosp., Allentown, Pa.  
 Served in U. S. A., as 1st Lieut. Med. Corps,  
 Camps Gordon and Pike.  
*Ad.*, 4830 Germantown Avenue, Phila., Pa.
- William Norman Lathrop, P.D.**  
*Thes.*, A Saponaceous Dentifrice Elixir.  
 Manufacturer of toilet articles. Pres. Associated  
 Chemists and Co. Served with American Red  
 Cross as Field Director, with the rank of Major.  
*Ad.*, Room 316 Bumiller Bldg., Los Angeles, Cal.
- Herrmann Light Lemen, P.D.**  
*Thes.*, An Investigation of Acidum Hydriodicum  
 Dilutum.  
 Chemist, Corn Products Co. Course in Gen. and  
 Applied Chem. Univ. of Clermont, France.  
 Served in U. S. A. as 1st Sgt. Machine Gun Co.,  
 60th Inf., 5th Div.  
*Ad.*, Williamsport, Md.
- Walter Irvin Lightner, P.D.**  
*Thes.*, Chloroform.  
 Mgr. of Jacob Sitnek's pharmacy.  
*Ad.*, 1923 5th Street, Altoona, Pa.
- Louis Longaker, P.D.**  
*Thes.*, Unguentum Resorcini Compositum.  
*Ad.*, 3206 Market Street, Phila., Pa.
- Edgar Walthour Lowe, P.D.**  
*Thes.*, Advertising as Applied to Pharmacy.  
 Insurance, bonds, loans, investments. Sec. and  
 Treas. Calvin Investment Co., Miles City, Mont.  
 Masonic affiliation. Served in U. S. A. as Pvt.,  
 Pvt. 1st Class, Corporal, Sgt., 2nd Lieut.  
*Ad.*, 808 Sherwood Bldg., Spokane, Wash.
- Ellsworth Waldemar Lynn, P.D.**  
*Thes.*, Rhamnus Purshiana.  
*Ad.*, 312 Wyoming Avenue, Kingston, Pa.
- William Clyde McNutt, P.D.**  
*Thes.*, Liquor Calcis.  
 Retail pharmacist.  
*Ad.*, 289 Loomis Street, Meadville, Pa.

**William Ellsba Marshall, P.D.**

*Thes.*, Galls.  
*Ad.*, 516 N. 5th Street, Harrisburg, Pa.

**Joseph Stanislas Martin, P.D.**

*Thes.*, The Cultivation of Nicotiana Tabacum in Lancaster County.  
*Ad.*, Linne and Green Streets, Lancaster, Pa.

**Samuel George Washington Martz, P.D.**

*Thes.*, Aloe and Aloinum.

**Frederick Thornton Melville, P.D.**

*Thes.*, Tobacco and Smokecraft.  
Retail pharmacist. Formerly pharmacist, State Hosp., Scranton, and teacher of Mat. Med. at State Hosp. School for Nurses.  
*Ad.*, 1000 S. Main Avenue, Scranton, Pa.

**Martin Lester Messenger, P.D.**

*Thes.*, Pilocarpus—Its Preparations and Actions.  
Retail pharmacist. Received Certificate in Bacteriology, P. C. P., 1915.  
*Ad.*, 203 W. Olney Avenue, Phila., Pa.

**\*Jacob J. Miller, Jr., P.D.**

*Thes.*, The Physician's Prescription—To Whom Does It Belong?  
Deceased, May 13, 1917.

**Noble Collins Miller, P.D.**

*Thes.*, Medicated Waters.  
Retail pharmacist. Also in automobile business.  
*Ad.*, 184 N. 6th Street, Indiana, Pa.

**\*Samuel Millrood, P.D.**

*Thes.*, Fluidextract of Gentian.  
Deceased, August 28, 1914.

**Albert Worthington Moore, P.D.**

*Thes.*, Alcohol as Sold by Retail Pharmacists.  
Retail pharmacist. Formerly chemist at Union Powder Co. Plant.  
*Ad.*, 454 Main Street, Milltown, N. J.

**John Edward Morley, P.D.**

*Thes.*, Antidiphtheric Serum.

**Edwin Kramer Morris, P.D.**

*Thes.*, Tinctura Iodi.  
Retail pharmacist. Mem. Va. Pharm. Assn.  
*Ad.*, Care of Jefferson Pharmacy, Richmond, Va.

**Charles Muthig, P.D.**

*Thes.*, Sources of Salicylic Acid and Its Uses.

**Louis Henry Myers, P.D.**

*Thes.*, Hydrastis.  
Manufacturing pharmacist, Eureka Chemical Laboratories, Phila. Served in U. S. N. R. F., as Pharmacist's Mate.  
*Ad.*, 4920 N. Warnock Street, Logan, Phila., Pa.

**Lewis William Oswald, P.D.**

*Thes.*, Glycerin.  
Retail pharmacist.  
*Ad.*, 20th and Columbia Avenue, Phila., Pa.

**George William Patterson, Jr., P.D.**

*Thes.*, Phthalic Acid.  
Asst. in Bact. P. C. P., 1921.  
Pharmacist and clinical chemist. Instr. in Chemistry and Bact., Northwestern Gen. Hosp., Phila. Received Certificate of Proficiency in Bacteriology and in Clinical Chemistry, P. C. P., 1921. Served as pharmacist, Med. Dept., U. S. A.  
*Ad.*, 2110 N. Uber Street, Phila., Pa.

**Frank Oakman Patton, P.D.**

*Thes.*, Acidum Nitricum Dilutum.

**Leon Kirk Paxson, P.D.**

*Thes.*, The Physical and Chemical Constants of Goose Fats.  
Pharmacist for M. W. Bowman. Director Zenith Building and Loan Assn.  
*Ad.*, 1020 S. Ithan Street, Phila., Pa.

**Theodore Rufus Panney, P.D.**

*Thes.*, Casein Creams.

**Albert Worrell Pettit, P.D.**

*Thes.*, Tooth Washes.  
*Ad.*, Box 571, Smithville, Tex.

**Robert Earl Phillips, P.D.**

*Thes.*, Label Paste.  
*Ad.*, Port Royal, Pa.

**Albert Rachmil, (Now Albert S. Rathmill), P.D.**

*Thes.*, The Ethics of Harmony between Two Allied Professions.  
Retail pharmacist. Served in U. S. A. as Sgt. 1st Class, Med. Dept.  
*Ad.*, 1226 N. 7th Street, Phila., Pa.

**John Morrow Ralston, P.D.**

*Thes.*, Syrup of Chocolate as a Vehicle.  
Pharmacist for A. C. Newman.  
*Ad.*, Box 306, Albion, Pa.

**Jullus George Rappoport, P.D.**

*Thes.*, Strophanthus Kombé.  
Retail pharmacist. Mem. A. Ph. A.; Penna. Pharm. Assn.; Phila. Assn. Retail Druggists; Jewish Publication Society.  
*Ad.*, 858 S. Front Street, Phila., Pa.

**Thomas Preston Read, P.D.**

*Thes.*, Medicine as an Economic Science.  
Served as 1st Lieut. 110th Machine Gun Co. Wounded.  
*Ad.*, Huntingdon, Pa.

**Wallace Stoddard Rice, P.D.**

*Thes.*, Pilocarpus.  
Retail pharmacist. Spec. course in Bact., P. C. P.  
*Ad.*, 4626 Market Street, Phila., Pa.

**Frank Louis Riley, P.D.**

*Thes.*, Fermentation.  
*Ad.*, Rumford, Me.

**Edson William Rogers, P.D.**

*Thes.*, Oleum Olivæ.

**William Wilson Ross, P.D.**

*Thes.*, Capsicum in Tincture of Ginger.  
Mgr. Morton's pharmacy.  
*Ad.*, 118 Virginia Avenue, Westmont, N. J.

**Roswell John Rotbrock, P.D.**

*Thes.*, Fluidextractum Juniperi, N. F.  
With Shoemaker and Busch, Phila., wholesale druggists.  
*Ad.*, 5812 Belmar Terrace, Phila., Pa.

**Israel Rovner, P.D.**

*Thes.*, Solution of Calcium Creosote.  
Retail pharmacist.  
*Ad.*, 1128 Main Avenue, Lake View, N. J.

**Edwin Percy Runyan, P.D.**

*Thes.*, Theatrical Cold Creams.  
Traveling Auditor, H. K. Mulford Co., Phila.  
*Ad.*, 426 S. 13th Street, Phila., Pa.

**Edward Henry Ryan, P.D.**

*Thes.*, Magma Magnesiæ, N. F.  
Pharmacist. Served in U. S. A., as Sgt. Med. Corps, 16th Inf., 1st Div. With A. E. F. in France, and A. of C. in Germany. Wounded. Cited in general orders for gallantry.  
*Ad.*, 2035 N. 22nd Street, Phila., Pa.

**George Israel Sammons, P.D.**

*Thes.*, Cannabis Indica.  
Retail pharmacist.  
*Ad.*, Weatherly, Pa.

**Paul Douglass Sands, P.D.**

*Thes.*, The Determination of Phosphoric Acid.  
Received Certificate of Proficiency in Chemistry, P. C. P., 1917. Received Certificate in Bacteriology, 1914.

**Arno Richard Sasse, P.D.**

*Thes.*, Liquid Petrolatum of Commerce.  
Cereal chemist.  
*Ad.*, 703 W. 32nd Street, Kansas City, Mo.



## 620 First Century of the Philadelphia College of Pharmacy

**Howard George Schauermaun, P.D.**

*Thes.*, Glycerinum.

**\*Frank Wacker Schell, P.D.**

*Thes.*, Color Standards for Galenicals.  
Deceased, February 9, 1919, as result of injuries received while in the service.

**Nathaniel Jules Segal, P.D.**

*Thes.*, Opium.  
*Ad.*, 316 Reed Street, Phila., Pa.

**Elias Shaker, P.D.**

*Thes.*, The Production of Lactic Acid by Tablets under Differing Conditions  
Advertising. With Brown, Blodgett and Sperry Co., St. Paul, Minn. Served as Pvt. in U. S. A., Med. Dept.  
*Ad.*, 1626 Ashland Avenue, St. Paul, Minn.

**George Keyworth Shearer, P.D.**

*Thes.*, Goldner's Test for Cocaine.  
Retail pharmacist. Pres. N. H. Shearer and Co., York, Pa.  
*Ad.*, York, Pa.

**Stanley Andrew Shiles, P.D.**

*Thes.*, Acacia and Its Uses.  
Served in U. S. Marine Signal Corps.  
*Ad.*, Hatboro, Pa.

**Clayton French Shoemaker, Jr., P.C.**

*Thes.*, Chemistry of the Vanilla Bean and Manufacture of the Extract.  
Wholesale druggist. Associated with Shoemaker and Busch. Volunteer in U. S. Secret Service.  
*Ad.*, 310 Llandrillo Road, Cynwyd, Pa.

**\*George Forrester Shugars, P.D.**

*Thes.*, Trillium and Its Fluidextract.  
Deceased, November 8, 1912.

**Edgar Chellis Smith, P.D.**

*Thes.*, Label Paste.  
*Ad.*, Duncannon, Pa.

**Robert Edgar Smith, Jr., P.D.**

*Thes.*, Cactus Grandiflorus.  
Retail pharmacist.  
*Ad.*, 53 Washington Street, St. Augustine, Fla.

**Marshall Prescott Snyder, P.D.**

*Thes.*, Essence Pepsin.  
Retail pharmacist.  
*Ad.*, 1107 Lincoln Avenue Moore, Pa.

**Wilbert Somera, P.D.**

*Thes.*, Cologne Water.  
Pharmacist.  
*Ad.*, 722 Park Avenue, Weehawken, N. J.

**Paul Harriman Southard, P.D.**

*Thes.*, The Glycerophosphates.  
Retail pharmacist. Served in U. S. A., Med. Dept.  
Field Hosp. 146, 37th Div.  
*Ad.*, 405 W. Main Street, Newark, Ohio.

**Ethelbert Steelman, P.D.**

*Thes.*, Syrup Hydrochlorophosphates, N. F.

**Morris Stein, P.D.**

*Thes.*, Cold Cream.  
Served in U. S. A., Camp Crane.  
*Ad.*, 2821 Frankford Avenue, Phila., Pa.

**Raymond Albert Strauss, P.D.**

*Thes.*, Animal Diastase.  
*Ad.*, 241 N. 11th Street, Allentown, Pa.

**William Grimes Sylveator, P.D.**

*Thes.*, Phenolphthalein—Its Action in the Body.  
*Ad.*, 2763 Orthodox Street, Phila., Pa.

**Thomas Bernard Tanner, P.D.**

*Thes.*, Ergot and Its Preparations.  
Chief Chemist, Earle Chemical Co. Secy.-Treas., Pharm. Sec. Cleveland Acad. of Med.; Secy. N. Ohio Branch, A. Ph. A.  
*Ad.*, 1600 Green Street, Phila., Pa.

**Leith Sylvester Temperton, P.D.**

*Thes.*, Solution of Iron Peptonate and Manganese.  
*Ad.*, Care of Wm. R. Warner and Co., 113 W. 18th Street, New York City.

**William Howard Udell, P.D.**

*Thes.*, Cocaine and Its Legislation.  
Retail pharmacist.  
*Ad.*, 53rd and Woodland Avenue, Phila., Pa.

**Samuel Philip Verstine, P.D.**

*Thes.*, Crystallization.  
Retail pharmacist. Served in U. S. A. at Camp Greene, N. C.  
*Ad.*, 4201 Frankford Avenue, Phila., Pa.

**Llewellyn James Watkins, P.D.**

*Thes.*, The Dispensing Physician.  
*Ad.*, 115 S. Edith Street, Albuquerque, N. M.

**John Wear, P.D.**

*Thes.*, Liqueur Ferri Albuminati.  
Pharmacist for H. C. Blair.  
*Ad.*, 2318 N. 18th Street, Phila., Pa.

**Adolph Gustave Wepfer, P.D.**

*Thes.*, Baptisia Tinctura.  
Retail pharmacist.  
*Ad.*, Norwalk, Wis.

**John Coleman Winter, P.D.**

*Thes.*, Panax Quinquifolium.  
Retail pharmacist. Formerly salesman for Sharp and Dohme.  
*Ad.*, 36th and Sansom Streets, Phila., Pa.

**James Scott Wolford, P.D.**

*Thes.*, The Abuse of Narcotics.

**Frank Aloysius Young, P.D.**

*Thes.*, Oleum Morrhuæ.  
*Ad.*, 506 N. Shamokin Street, Shamokin, Pa.

### Special Students.

**Edward O. Denzler.**

Received Certificate of Proficiency in Chemistry.

**Charles Duvoisin.**

Received Certificate of Proficiency in Chemistry.  
Chemist, Powers-Weightman-Rosengarten Co. In Chemical Warfare Service.  
*Ad.*, 1309 S. 54th Street, Phila., Pa.

**F. Earl Haines.**

Received Certificate of Proficiency in Chemistry.  
Asst. Acid Supervisor, Harrison Works, E. I. du Pont de Nemours and Co.  
*Ad.*, 1674 S. Colling Road, Yorkshp Village, Camden, New Jersey.

**J. Harry Swain.**

Received Certificate of Proficiency in Chemistry.

### 1912

**Walter Marion Anderson, P.D.**

*Thes.*, Commercial Gelatin.  
Lieut. Med. Corps, U. S. N. Graduated in medicine, Ohio State Univ., 1917. Enrolled as Asst. Surgeon, U. S. N. R. F. Passed examination for Asst. Surgeon Regular Navy. Commissioned Lieut. (junior grade). Promoted to Lieut. (M.C.), U. S. N. Attended special course to Naval Medical Officers at Harvard Med. College. At present attached to U. S. S. Tennessee, Pacific Fleet.  
*Ad.*, U. S. S. Tennessee, care of Postmaster, San Francisco, Cal.

**Isaac Curtis Arledge, P.D.**

*Thes.*, The Influence of Molds on Nux Vomica.

**John James Armstrong, P.D.**

*Thes.*, Coptis Trifolia.  
Retail pharmacist.  
*Ad.*, 3501 Kensington Avenue, Phila., Pa.

**Mark Alphonse Arnold, P.D.**

*Thes.*, Cocaine.  
Mgr. for L. K. Liggett Co.  
*Ad.*, 6352 Sherman Street, Phila., Pa.

**Frank D. Baldwin, P.D.**

*Thes.*, Milkweed Cellulose (Soluble).  
Retail pharmacist. Served in U. S. A., Med. Dept.  
*Ad.*, 5406 Lansdowne Avenue, Phila., Pa.

**Bernard E. Blankenhush, P.D.**

*Thes.*, Action of Aloin on Alkaloids and Preparations Containing Alkalies.  
Retail pharmacist.  
*Ad.*, 45th and Spruce Streets, Phila., Pa.

**Joseph Theodore Bongartz, P.D.**

*Thes.*, The Dispensing Physician and the Prescribing Pharmacist.  
Served with 308th Inf., Co. E., Camp Upton. N. Y.  
*Ad.*, 358 Broadway, Kingston, N. Y.

**\*Wesley Rsy Boyer, P.D.**

*Thes.*, Liquor Arseni et Hydrargyri Iodidi, U. S. P.  
Deceased, October 3, 1918.

**\*James Andrew Bradley, P.D.**

*Thes.*, Pastes.  
Killed in action near Cunel, France, October 30, 1918.

**Albert Sipe Brennehan, P.D.**

*Thes.*, Aromatic Oil Sprays.  
Served in U. S. A., 82nd Div., as Sgt.  
*Ad.*, Ambler, Pa.

**Angus Eugene Brewster (Ph.G.), P.D.**

*Thes.*, Sugars.

**Charles Augustus Buohl, P.D.**

*Thes.*, *Elastica*.

**Joseph Vester Caton, P.D.**

*Thes.*, Acidum Tannicum.

**Earl Wesley Colborn, P.D.**

*Thes.*, Pepsin Chewing Gum.  
Retail pharmacist.  
*Ad.*, Ashley, Pa.

**Charles Gray Cone, P.D.**

*Thes.*, Opium and Assay of Its Preparations.

**Joseph Benton Cooper, P.D.**

*Thes.*, Toilet Waters.  
In automobile business. Served in U. S. N., Aviation Dept., during war.  
*Ad.*, Statesville, N. C.

**Frederic Bennum Coulbourn, P.D.**

*Thes.*, Rice Powders Sold in Philadelphia.  
Served in U. S. A. Ordnance Dept. as Metallurgical Chemist.  
*Ad.*, Questa, N. M.

**Carl Reed Cox, P.D.**

*Thes.*, Acidum Aceticum.  
*Ad.*, Ephrata, Pa.

**Emlyn Davies, P.D.**

*Thes.*, Petroxes.  
Pharmacist. Formerly pharmacist for Penna. State Sanatorium, Mont Alto, Pa.  
*Ad.*, 230 Spring Street, Scranton, Pa.

**\*J. Warren Dolbey, P.D.**

*Thes.*, Magma Bismuthi.  
Deceased, May 29, 1912.

**Edward John Durbin, P.D.**

*Thes.*, Rheum.  
Retail pharmacist. Served in U. S. N. Hosp. Corps during World War.  
*Ad.*, 2963 Kensington Avenue, Phila., Pa.

**William Joseph Durkin, P.D.**

*Thes.*, Tincture of Iodine.  
Served in U. S. N. Hosp. Corps.  
*Ad.*, 1234 N. 29th Street, Phila., Pa.

**Agnes Duvoisin, P.C.**

*Thes.*, Plasters and Their Spreading.  
Retail pharmacist. Received P.D. degree, 1914.  
*Ad.*, Clifton Heights, Pa.

**Arthur Ebischbach, P.D.**

*Thes.*, Powdered Extract of Glycyrrhiza.  
Pharmacist.  
*Ad.*, 2021 Ogden Street, Phila., Pa.

**Charles Maurice Emig, P.D.**

*Thes.*, Tablet Manufacturing.  
Retail pharmacist. Formerly with Sharp and Dohme.  
*Ad.*, Kenwood and Hudson Streets, Baltimore, Md.

**Charles Elmer Enberg, P.D.**

*Thes.*, Physiological Salt Solution.  
Pharmacist. Served in U. S. A. as Lieut. Sanitary Corps.  
*Ad.*, 156 Desmond Street, Sayre, Pa.

**Erwin Henry Eppler, P.D.**

*Thes.*, Saponin.  
Pharmacist.  
*Ad.*, 1518 Willington Street, Phila., Pa.

**William Epstein, P.D.**

*Thes.*, The Physiological Standardization of Digitalis.  
Retail pharmacist.  
*Ad.*, 51st and Market Streets, Phila., Pa.

**Fred Howard Estep, P.D.**

*Thes.*, Fluidglycerate of Rhus Glabra, Rhubarb and Krameria.  
Retail pharmacist.  
*Ad.*, Ambridge, Pa.

**\*Walter Terpe Fair, P.D.**

*Thes.*, Acidum Sulphuricum Aromaticum.

**Leonora Gibb Fetters, (Mrs. Gordon Leech), P.D.**

*Thes.*, Comparative Studies in the Histology of Aconite.  
Pharmacist, Penna. Hosp. Formerly asst. pharmacist Medico-Chi. and Penna. Hosp.  
*Ad.*, 4304 Manayunk Avenue, Roxborough, Phila., Penna.

**Nathan Finkelstein, P.D.**

*Thes.*, Chloral Alcoholate as Met in Prescriptions.  
Retail pharmacist. President, Selma Retail Drug Club.  
*Ad.*, 201 Broad Street, Selma, Ala.

**John Clark Foust, P.D.**

*Thes.*, Ipecacuanha.  
Pharmacist. Served in U. S. A. as Sgt., Med. Dept.  
*Ad.*, 770 S. Broad Street, Phila., Pa.

**Samuel Byers Foust, P.D.**

*Thes.*, Potassium Nitrate.  
Proprietor of drug store and music shop.  
*Ad.*, 407 Second Street, Juniata, Pa.

**Clarence R. Fox, P.D.**

*Thes.*, Hydrastine.  
*Ad.*, 32 N. 7th Street, Lebanon, Pa.

**Malcolm Wight Gallagher, P.D.**

*Thes.*, Hydrargyrum Cum Creta.

**Lynn Hubbell Gates, P.D.**

*Thes.*, Hydrargyrum Ammoniatum.  
*Ad.*, Union City, Pa.

**Joseph Hess Geiger, P.C.**

*Thes.*, Chloroform.  
Farmer and lumberman. Attended Franklin and Marshall College.  
*Ad.*, Conowingo, Md.

**Howard Elias Gensler, P.D.**

*Thes.*, Analysis of Pepsin Chewing Gums for Pepsin.  
Asst. Chemist and Microscopist, Bureau of Chem., Penna. Dept. of Agriculture. Seed analyst for Bureau after study with U. S. Bureau of Plant Industry, Washington, D. C.  
*Ad.*, 1609 Forster Street, Harrisburg, Pa.

**Wallace Thompson Glover, P.D.**

*Thes.*, Manufacture of Iron from Mill Cinder.

**Theodore Isadore Goldblum, P.D.**

*Thes.*, Hydrogen Peroxide, U. S. P.  
Retail pharmacist. Studied medicine two years.  
*Ad.*, 224 Market Street, Phila., Pa.

**Lloyd Philip Griesemer, P.D.**

*Thes.*, Liquor Potassii Arsenitis.  
Chemist, D. B. Martin Co. Formerly with Marlborough Chem. Co. and Sharp and Dohme. Received Certificate of Proficiency in Chemistry, P. C. P., 1915.  
*Ad.*, 7 E. Woodland Avenue, Baltimore, Md.

**Ivor Griffith, P.D.**

*Thes.*, Show Card Writing.  
Instr. in pharmacy and pharmaceutical arithmetic, P. C. P. (See page 443.)  
*Ad.*, 145 N. 10th Street, Phila., Pa.

**William Mathues Hart, P.D.**

*Thes.*, Liquor Antisepticus, U. S. P.  
Mgr. for L. K. Liggett Co.  
*Ad.*, 401 Cedar Lane, Phila., Pa.

**\*Allen K. Hartman, P.D.**

*Thes.*, Ammonii Chloridum.  
Died of pneumonia in France, March 10, 1918.  
First P. C. P. graduate to die in World War.

**Charles Russel Heart, P.D.**

*Thes.*, History of Bees and Honey.  
*Ad.*, 4220 Osage Avenue, Phila., Pa.

**Theodore Einehsrt Heller, P.D.**

*Thes.*, Hypophosphorus Acid.  
*Ad.*, Forty-Fort, Pa.

**Edward Francis Henning, P.D.**

*Thes.*, Ginger and Syrup of Ginger.  
Pharmacist and chemist. Received Certificate in Bacteriology, P. C. P., 1917.  
*Ad.*, 1611 N. 56th Street, Phila., Pa.

**Elmer Hunsberger Hessler, P.D.**

*Thes.*, Advertised Solutions of Hydrogen Dioxide.  
Laboratory Supt., Robt. McNeil, Phila., Pa.  
Mem. P. C. P.; A. Ph. A.; Penna. Pharm. Assn.; Amer. Chem. Soc.  
*Ad.*, 88 Reed Street, New York City.

**James Van Sant Hewitt, P.C.**

*Thes.*, Pill Excipients.  
*Ad.*, 25 S. Massachusetts Avenue, Atlantic City, New Jersey.

**LeRoy Agnew Kern Hillegass, P.D.**

*Thes.*, Advertising and Conducting a Retail Drug Store.  
Retail pharmacist. Served in U. S. A. as Pvt., 1st Class, Co. K, 314th Inf.  
*Ad.*, 213 W. Broad Street, Quakertown, Pa.

**Walter Frederick Hitzelberger, P.D.**

*Thes.*, Potassii Iodidum.  
With Goodyear Tire and Rubber Co. Formerly with E. I. du Pont de Nemours and Co.  
*Ad.*, 1014 E. 28th Street, Los Angeles, Cal.

**Donald Witherow Huber, P.D.**

*Thes.*, Elixir of Iron, Quinine and Strychnine Phosphates.  
Chemist, Penna. Bureau of Foods. Formerly associated with Prof. C. H. LaWall. Served in U. S. A. Div. of Food and Nutrition, Med. Corps. Mem. Amer. Chem. Soc.; A. Ph. A.; Univ. Club; Colonial Country Club. Received Certificate of Proficiency in Chemistry, P. C. P., 1918. Received Certificate in Bacteriology, 1914.  
*Ad.*, University Club, Harrisburg, Pa.

**Harry Herbert Humphrey, P.D.**

*Thes.*, Asphaltum.  
*Ad.*, 902 Cedar Avenue, Scranton, Pa.

**Edward Lee Hunter, P.D.**

*Thes.*, Pancreatin.

**Parker Isalah Hutchins, P.C.**

*Thes.*, Preserving Chlorine Compounds.  
*Ad.*, R. F. D. 3, Oxford, N. Y.

**Antonio L. Infante Maldonado, P.C.**

*Thes.*, Wild Guira.  
*Ad.*, Holguin, Oriente, Cuba.

**George Herman Iachler, P.D.**

*Thes.*, Pyroxylin and Its U. S. P. Derivatives.  
*Ad.*, 1218 S. Edgewood Street, Phila., Pa.

**Louis Henry Jerger, Jr., P.D.**

*Thes.*, Acidum Benzoicum.  
*Ad.*, Clearwater, Fla.

**Elmer George Keene, P.D.**

*Thes.*, Fermentation and Fermentation Industries.  
Retail pharmacist. Served in U. S. A. with A. E. F. in France.  
*Ad.*, 808 Coleman Avenue, Johnstown, Pa.

**Carl Franklin Keener, P.D.**

*Thes.*, Preparation of the Chlorides of Iron, Mercury, Quinine and Arsenic.  
Pharmacist. Secy. and Treas. Wm. M. Fouch Co.  
*Ad.*, North Avenue and 8th Street, Baltimore, Md.

**Max Keiser, P.D.**

*Thes.*, Unguentum Zinci Oxidi.  
*Ad.*, 5th and Mifflin Streets, Phila., Pa.

**Stanley Atkins Kern, P.D.**

*Thes.*, Olive Oil.

**Melvin Sterner Knauf, P.D.**

*Thes.*, Medicinal Plants Indigenous to this Community.  
Retail pharmacist.  
*Ad.*, 12th and Somerset Streets, Phila., Pa.

**Howard Jonathan Koch, P.C.**

*Thes.*, Liquid Soap.  
Mgr. Plus Oil Co., Tar Distillers. Received Certificate of Proficiency in Chemistry, P. C. P., 1916. Received Certificate in Bacteriology, P. C. P., 1915.  
*Ad.*, Coopersburg, Pa.

**\*Jacob William Kraus, P.D.**

*Thes.*, Ginseng.  
Mgr. and Treas. Hazle Drug Co., Hazleton, Pa.  
Deceased, October, 1918.

**Harry Dittmar Lawrence, P.D.**

*Thes.*, Cod Liver Oil.  
Retail pharmacist.  
*Ad.*, 24th and Clearfield Streets, Phila., Pa.

**Harry Landis Leaphart, P.D.**

*Thes.*, Standard Solution of Caramel.  
Relief Work.  
*Ad.*, Carlisle, Pa.

**Gordon Leech, P.D.**

*Thes.*, The Histology of Podophyllum.  
Chemist, Powers, Weightman and Rosengarten. Spec. Chem. P. C. P. Course in Chem. at Drexel Inst. Served with A. E. F. in France with Penna. Base Hosp., No. 10.  
*Ad.*, 4304 Manayunk Avenue, Roxborough, Phila., Penna.

**Albert A. Lehman, P.D.**

*Thes.*, Diluted Hydrochloric Acid.  
Retail pharmacist. Masonic affiliation. Mem. Board of Health, 2 years.  
*Ad.*, Galeton, Pa.

**Percy Landis Leidich, P.D.**

*Thes.*, Perfumes in Cosmetics.  
Retail pharmacist. Served in U. S. A., 28th Div., with A. E. F.  
*Ad.*, Front and Vine Streets, Harrisburg, Pa.



**Clarence Milton Lenhart, P.C.**

*Thes.*, Liquid Soap.  
Received P.D. degree, 1915.  
*Ad.*, 340 Walnut Street, Jenkintown, Pa.

**Albert Morgan Lewis, P.D.**

*Thes.*, Aloes.  
Pharmacist for Valley Drug Co. Formerly Enrolling Agent for U. S. Merchant Marine.  
*Ad.*, 73 Gaylord Avenue, Plymouth, Pa.

**George Mathias Litsch, P.D.**

*Thes.*, Solution of Magnesium Citrate.  
*Ad.*, 14 E. Centre Street, Mahanoy City, Pa.

**William Frederick Lofand, P.D.**

*Thes.*, The Menhaden Fishing Industry.

**Ernest Luedecke, P.D.**

*Thes.*, Ferrum Reductum U. S. P.  
*Ad.*, 1118 Lafayette Avenue, Moores, Pa.

**James Michael McGinty, P.D.**

*Thes.*, Potassium Bromide.  
Retail pharmacist. Served in U. S. A. during World War.  
*Ad.*, Main Avenue, Hawley, Pa.

**Ray Henney Machesney, P.D.**

*Thes.*, Tinctura Myrrhae.  
Retail pharmacist.  
*Ad.*, Broad and Bristol Streets, Phila., Pa.

**Hugh Leo I. Mattson, P.D.**

*Thes.*, Potassii Iodidum.  
Bacteriologist. Received Certificate in Bacteriology, P. C. P., 1918.  
*Ad.*, 6131 Jefferson Street, Apt. A., Phila., Pa.

**Emil Rosenthal Mayerberg, P.D.**

*Thes.*, Sodium Perborate.  
Physician. Graduated in medicine, Jeff. Med. College, 1916. Res. Phys. Delaware Hosp. On staff Delaware Hosp. and Phys. and Surg. Hosp. Mem. New Castle County Med. Soc.; Amer. Med. Assn.; Chm. of revision committee Workingman's Compensation Bill; Mem. Med. Reserve Corps.  
*Ad.*, 408 Equitable Bldg., Wilmington, Del.

**Walter William Meyer, P.D.**

*Thes.*, Liquid Toilet Soap.  
*Ad.*, 510 Lincoln Way, LaPorte, Ind.

**Clayton Franklin Miller, P.D.**

*Thes.*, Aurantii Dulcis Cortex.  
Salesman, Smith, Kline and French Co.  
*Ad.*, 500 City Line, Oak Lane, Phila., Pa.

**Clarence Donald Moon, P.D.**

*Thes.*, India Rubber and Vulcanite.  
Served in U. S. A., Med. Dept., with A. E. F.

**\*James Scanlan Mullen, P.D.**

*Thes.*, Linum.  
Deceased, November 7, 1913.

**\*William Alsobrook Mulloy, P.D.**

*Thes.*, Betel-Nut.  
Killed in action in France, October 8, 1918.

**Theodore McCloskey Myers, P.D.**

*Thes.*, Olive Oil.  
Served in U. S. A., 19th Reg. Engineers, with A. E. F.

**Ambrose Pancoast, P.D.**

*Thes.*, The Determination of Ferrous Iodide Content in Pills of Ferrous Iodide.  
Pharmacist for R. H. Knowles. Served in U. S. A., as Sgt., 348th Ambulance Co., and 312th Sanitary Train, 87th Div.  
*Ad.*, Millville, N. J.

**James Edward Parks, P.D.**

*Thes.*, Tannic Acid.  
Retail pharmacist. Served in U. S. N., as Pharmacist's Mate, 1st Class.  
*Ad.*, 528½ Wood Street, Johnstown, Pa.

**Norman Perrine, P.C.**

*Thes.*, Crystallography.  
Chemist, Federal Horticultural Board, Washington, D. C. In charge of research laboratory. Formerly retail pharmacist. Received P.D. degree, 1916.  
*Ad.*, 1657 31st Street, N. W., Washington, D. C.

**William James Peterson (Ph.G.), P.D.**

*Thes.*, Belladonna Grown in California.

**Howard Lee Poffenberger, P.D.**

*Thes.*, Efficiency of Tests for Formaldehyde in Milk.  
Salesman, Smith, Kline and French Co.  
*Ad.*, 39 N. 19th Street, Harrisburg, Pa.

**Louis Powell, P.D.**

*Thes.*, Empty Gelatin Capsules.  
Retail pharmacist.  
*Ad.*, 4th and Snyder Avenue, Phila., Pa.

**Eldridge Hancock Prickitt, P.D.**

*Thes.*, The Manufacture of Ice.  
With John G. Eby Tincture and Extract Co., Mfg. Pharmacists.  
*Ad.*, Gloucester, N. J.

**Tucker Lucas Rsdolph, P.D.**

*Thes.*, Spiritus Aetheris Nitrosi.  
Physician. Graduated in medicine at Jeff. Med. College, 1916. Res. Phys. South Side Hosp., Pittsburgh, Pa. Served in U. S. A., Med. Corps.  
*Ad.*, Leesburg, Fla.

**John Arthur Riley, P.D.**

*Thes.*, Starch Test Solution.

**Peale Dillard Robinson, P.D.**

*Thes.*, Myrrh and Its Preparations.  
*Ad.*, 1402 N. Fawn Street, Phila., Pa.

**G. Raymond Hamilton Rodgers, P.C.**

*Thes.*, Fluidglycerates.  
Real estate broker. Pharmacist until 1917. Received P.D. degree, 1916.  
*Ad.*, 739 Kaighn Avenue, Camden, N. J.

**Blair Grier Rumsey, P.D.**

*Thes.*, The Practical Cost of Manufacturing.  
Retail pharmacist. Served in U. S. A., Hosp. Corps, Co. 9, 109th Inf.  
*Ad.*, 6917 N. Broad Street, Phila., Pa.

**John Ralph Rupert, P.D.**

*Thes.*, Label Varnish.  
Pharmacist for Powers and Reynolds.  
*Ad.*, 902 S. 46th Street, Phila., Pa.

**Sylvester James Rusch, P.D.**

*Thes.*, Benzoin.  
Served in U. S. A., 28th Div., A. E. F.  
*Ad.*, Bradford, Pa.

**John Adsm Saylor, P.D.**

*Thes.*, Liqnor Ferri Iodidi.  
Retail pharmacist.  
*Ad.*, 8th and Chestnut Streets, Lebanon, Pa.

**Hilbert Julius Schersten, P.D.**

*Thes.*, Peroxide Cold Cream.  
*Ad.*, Titusville, Pa.

**Jacob Shtofman, P.D.**

*Thes.*, Silica and Its Compounds.  
Manufacturer of specialties. Served in U. S. A., 59th Pioneer Inf., Camp Dix, N. J.  
*Ad.*, 2235 Market Street, Wilmington, Del.

**Morris Sisman, P.D.**

*Thes.*, Modified Commercial Cold Creams and Ointments of Rose Water.  
Retail pharmacist.  
*Ad.*, 946 S. 5th Street, Phila., Pa.

**William James Skinner, P.D.**

*Thes.*, Spirit of Nitrous Ether as Found on the Market.  
Lawyer. Graduated in law, Stetson Univ., 1916. Atty. for State Board of Medical Examiners and State Board of Pharmacy.  
*Ad.*, Nat'l City Bank Bldg., Tampa, Fla.

- Nathan Norman Smiler, P.D.**  
*Thes.*, Circulatory Displacement.  
*Ad.*, 1103 P Street, Washington, D. C.
- Milton Lovett Smith, P.D.**  
*Thes.*, Enteric Capsules.  
*Ad.*, Doylestown, Pa.
- Robert Alfred Smith, P.D.**  
*Thes.*, Advice to Graduates.
- Alfred George Stadelmann, P.D.**  
*Thes.*, Grape Juice in a Drug Store.  
Retail pharmacist.  
*Ad.*, Great Kills, Staten Island, N. Y.
- Wilford Gilbert Stauffer, P.D.**  
*Thes.*, Acidum Nitricum Dilutum.  
Retail pharmacist. Formerly pharmacist, Univ. of Penna. Hosp.  
*Ad.*, New Holland, Pa.
- Samuel Stein, P.D.**  
*Thes.*, Rolling Creams.
- Fred Hersman Stover, P.D.**  
*Thes.*, The Gastro-Pancreatic Ferments.  
Retail pharmacist.  
*Ad.*, Care of Taylor Drug Co., Bessemer, Ala.
- William Elwood Strunk, P.D.**  
*Thes.*, Official Glandular Extracts.  
Retail pharmacist.  
*Ad.*, 6917 Torresdale Avenue, Wissinoming, Pa.
- Alice Williams Taylor, P.D.**  
*Thes.*, Serpentaria.  
*Ad.*, Methodist Hospital, Phila., Pa.
- James DeWitt Thompson, P.D.**  
*Thes.*, Production of Gasoline from Natural Gas. Served in U. S. A., 61st Artillery, Camp Eustis, Virginia.
- Clara Louise Timm, P.D.**  
*Thes.*, Proposed New Formulas of the National Formulary.  
Retail pharmacist. Formerly pharmacist Howard Hosp., Phila., and St. Luke's Hosp., Jacksonville, Florida.  
*Ad.*, Mahanoy City, Pa.
- Frank Atman Venner, P.D.**  
*Thes.*, The Manufacture of Tooth Paste by Retail Pharmacists.  
Mem. A. Ph. A.; Penna. Pharm. Assn.; Nat'l Assn. Retail Druggists; Phila. Assn. Retail Druggists. Masonic affiliation.  
*Ad.*, 18 S. Boston Avenue, Atlantic City, N. J.
- Otto Gross Wagner, P.D.**  
*Thes.*, Tinctura Ferri Chloridi.  
*Ad.*, Riverton, N. J.
- Clarence Gardner Warner, P.D.**  
*Thes.*, Sodium Nitrate.  
*Ad.*, Ardmore, Pa.
- Harry Edwin Warner, P.D.**  
*Thes.*, Opium.  
Retail pharmacist. Served in U. S. A., Med. Dept.  
*Ad.*, 112 N. Summit Street, Harrisburg, Pa.
- Glenn Leland Watta, P.D.**  
*Thes.*, Sterilization and Approximate Sterilization.  
Retail pharmacist. Mem. N. Y. State Pharm. Assn.; N. Y. State Rexall Club. Masonic affiliation.  
*Ad.*, Maybrook, Orange Co., New York.
- John Fogel Weller, Jr., P.C.**  
*Thes.*, Koumyss.  
*Ad.*, 14 N. 7th Street, Allentown, Pa.
- John Roberts Weller, P.D.**  
*Thes.*, Acidum Sulphuricum Dilutum.  
Pharmacist for Lateen Drug Co. Served in U. S. A. Med. Corps, as Sgt. in charge of mail at Base Hosp., Camp Gordon, Ga.  
*Ad.*, 251 S. George Street, York, Pa.
- Hirsh Wilderman, P.D.**  
*Thes.*, Serum Antidiphthericum.  
Retail pharmacist.  
*Ad.*, 6th and Jackson Streets, Phila., Pa.
- Howard Jones Woolsey, P.D.**  
*Thes.*, Linseed Oil and Pigments.  
*Ad.*, E. Huntingdon and Tulip Streets, Phila., Pa.
- Eugene John Wurster, P.D.**  
*Thes.*, Vanilla and Its Importance in Pharmacy.  
Retail pharmacist. Served in U. S. A. Hosp. Corps, 26th Div., with A. E. F. in France.  
*Ad.*, 1417 6th Street, Portsmouth, Ohio.

## Special Students.

- Eugene Arthur Fry.**  
Received Certificate of Proficiency in Chemistry.
- Edward Francis Kenney.**  
Received Certificate of Proficiency in Chemistry.  
*Ad.*, 215 3rd Street, Auburn, Me.
- Aase Teisen.**  
Received Certificate of Proficiency in Chemistry.  
*Ad.*, Holmesburg, Pa.
- Charles Louis Wagner.**  
Received Certificate of Proficiency in Chemistry.  
*Ad.*, 1034 W. Girard Avenue, Phila., Pa.

## 1913

- Ray Augustus Albeck, P.D.**  
*Thes.*, Kieselguhr.  
Retail pharmacist.  
*Ad.*, Care of Steel's Pharmacy, Huntingdon, Pa.
- Guy Raymond Arnold, P.D.**  
*Thes.*, Pigments.  
Retail pharmacist. Served in U. S. A. with 28th Div. in France.  
*Ad.*, Hughesville, Pa.
- Jacob Austin, P.D.**  
*Thes.*, Hydrargyrum and the Halogens.  
*Ad.*, 61st and Race Streets, Phila., Pa.
- Albert Henry Anthony Bailey, P.D.**  
*Thes.*, Extract of Cascara Sagrada.  
Retail pharmacist.  
*Ad.*, 21st and Passyunk Avenue, Phila., Pa.
- Harry Francis Baumgartner, P.C.**  
*Thes.*, Syrupus Limonis.  
*Ad.*, 2727 N. Broad Street, Phila., Pa.
- Malcolm Beach, P.D.**  
*Thes.*, Extemporaneous Ointments.  
Wholesale and retail pharmacist. Secy., S. Felt Drug Co.  
*Ad.*, 112 Court Street, Watertown, N. Y.
- Joseph Andrew Beaver, P.D.**  
*Thes.*, Combretum Sundiacum.  
Asst. Mgr. Temple Pharmacy Co.  
*Ad.*, Kane, Pa.
- William Caleb Blake, P.C.**  
*Thes.*, The Manufacture of Steel by the Open Hearth Process.  
Health officer. Special course in bact., Princeton University.  
*Ad.*, 19 Olden Street, Princeton, N. J.
- Walter Alvan Blasingame, P.D.**  
*Thes.*, Calcium Hypophosphite.  
Pharmacist and laboratory technician. Served as Hosp. Sgt., U. S. A. Special courses in bact. and serology.  
*Ad.*, 92 Luckie Street, Atlanta, Ga.

**William Philip Brisgol, P.D.**

*Thes.*, Basic Aromatic Elixirs.  
Retail pharmacist. Served in U. S. A., 19th Reg. Engineers, with A. E. F.  
*Ad.*, 52nd and Spruce Streets, Phila., Pa.

**Charles Henry Brown, P.D.**

*Thes.*, Elixir of Iron, Quinine and Strychnine Phosphates.  
Served in U. S. A., Camp Meade, Md.  
*Ad.*, 601 Penn Street, Reading, Pa.

**West Smith Brown, P.D.**

*Thes.*, Alcohol—Sources and Cost of Manufacture.  
Retail pharmacist and owner of clinical lab. Received Certificate in Bacteriology, P. C. P., 1914.  
*Ad.*, 16th and Poplar Streets, Phila., Pa.

**William Robert Buck, P.C.**

*Thes.*, Oleum Gossypii Seminis.  
*Ad.*, Anaheim, Cal.

**Raymond Gager Buckalew, P.D.**

*Thes.*, Calx Chlorinata.  
Mgr. Moyer Bros. Drug Store.  
*Ad.*, Bloomsburg, Pa.

**Walter Peter Burke, P.D.**

*Thes.*, Manufacture of Wine.  
*Ad.*, Spring Lake, N. J.

**Alphonso Colfax Burwell, P.C.**

*Thes.*, Emulsions.  
*Ad.*, 1786 T Street, N. W., Washington, D. C.

**Frank Williams Campbell, P.D.**

*Thes.*, Flaxseed and Its Products.

**Joe Stinchfield Case, P.D.**

*Thes.*, Acidum Hydrochloricum Dilutum.  
Retail pharmacist.  
*Ad.*, 360 E. Main Street, Logan, Ohio.

**Edgar George Clark, P.D.**

*Thes.*, Nux Vomica.  
Retail pharmacist. Served in U. S. N. during World War.  
*Ad.*, 325 E. Main Street, Mechanicsburg, Pa.

**\*Roy Lavender Clark, P.C.**

*Thes.*, Antityphoid Vaccination.  
Received Certificate of Proficiency in Food and Drug Course, P. C. P., 1914. Deceased, 1918.

**Gertrude Agnes Comber, P.C.**

*Thes.*, Magnesii Oxidum.  
Received P.D. degree, 1914.  
*Ad.*, Penna. Hosp., 8th and Spruce Streets, Phila., Penna.

**M. Beatrice Comber, P.D.**

*Thes.*, Sodium Phosphate.  
*Ad.*, 98 N. 35th Street, Phila., Pa.

**Albert Roy Crouse, P.D.**

*Thes.*, Mistura Ferri Salicylas.  
Pharmacist. Served in U. S. A. with 313th Inf. Co. A. with A. E. F. in France. Wounded.  
*Ad.*, 3039 Eastern Avenue, Baltimore, Md.

**Paul Styer Cutter, P.D.**

*Thes.*, The Manufacture of Prescription Bottles.  
Pharmacist. Mem. Loyal Order of Moose; N. J. Pharm. Assn.; A. Ph. A. Served in U. S. A. as Sgt., Med. Corps.  
*Ad.*, Hopewell, N. J.

**Robert Pattison Dunkle, P.D.**

*Thes.*, Carmine.  
Pharmacist.

**Eugene Blair Dunkleberger, P.D.**

*Thes.*, Narcotics.  
Vocational advisor in U. S. Govt. Rehabilitation Work. Served in U. S. N. Wounded during submarine attack near France.  
*Ad.*, 469 Fifth Avenue, New York City.

**Roy Sperow Eakle, P.D.**

*Thes.*, Perfumery.

**Russell Neely Eberly, P.D.**

*Thes.*, Liquor Calcis.  
Life insurance agent. Served in U. S. N. R. F. as pharmacist's mate.  
*Ad.*, 417 W. Horrtter Street, Germantown, Phila., Penna.

**Joseph Francia Elward, P.C.**

*Thes.*, Extemporaneous Emulsions.  
Res. Phys. Providence Hosp., Washington, D. C. Studied medicine at Georgetown Univ. Graduated, 1919. Formerly Prof. of Mat. Med., U. S. College Vet. Surg., Washington, D. C. Enlisted med. reserves. S. A. T. C. Received P.D. degree, 1915.  
*Ad.*, "The York," Georgia Avenue at Quebec Place, N. W., Washington, D. C.

**Myrle Emmette Engstrom, P.D.**

*Thes.*, The Recovery of Phosphoric Acid in the Manufacture of Hydrogen Peroxide.  
Retail pharmacist.  
*Ad.*, 4851 Mulberry Street, Frankford, Phila., Pa.

**Roacoe Russel Eahenbaugh, P.C.**

*Thes.*, The Chemical Characteristics of Linseed Oil.  
Mgr. for Carson-Shro Co., Inc., pharmacists. Served as 1st Lieut. in U. S. A., Med. Dept. with A. E. F. in France.  
*Ad.*, Indiana, Pa.

**Philip Frederic Fackenthal, P.C.**

*Thes.*, Digitalis Seedlings.  
Instr. Pharmacognosy P. C. P., 1913-15. (See page 441.)  
*Ad.*, Medical College of Va., Richmond, Va.

**William Hamer Fairlamb, P.D.**

*Thes.*, Tinctura Vanillae.  
Retail pharmacist.  
*Ad.*, 989 Olive Street, Coatesville, Pa.

**Charlea Edward Fitzgerald, P.D.**

*Thes.*, Sapo Mollis.

**Alvin Elmer Foltz, P.D.**

*Thes.*, Ferrum.  
*Ad.*, Palmyra, Pa.

**Job Fong, P.C.**

*Thes.*, Ginseng.  
*Ad.*, Care of Chung Mei Drug Co., Canton, China.

**Harry Billings Ford, P.D.**

*Thes.*, The Manufacture of Effervescent Salts.  
Dealer in ice. Retail pharmacist 2 years. Masonic affiliation.  
*Ad.*, 233 Main Street, Norwich, Conn.

**Sylvan Lorraine Foster, P.D.**

*Thes.*, Manufacture of Paper.  
Retail pharmacist. Received Certificate of Proficiency in Chemistry, P. C. P., 1916.  
*Ad.*, 1926 Lancaster Avenue, Wilmington, Del.

**Joseph Patrick Fox, P.D.**

*Thes.*, Nitroglycerin and Its Use in Coal Mining.  
*Ad.*, 416 W. Oak Street, Shenandoah, Pa.

**Harvey Frank, P.D.**

*Thes.*, Color Standards for Liquids.  
Pharmacist for John N. Scott and Co. Served in U. S. A. during World War.  
*Ad.*, North Wales, Pa.

**Cyrns Thurston Gilbert, P.D.**

*Thes.*, Liquor Plumbi Subacetatis Dilutus.  
Pharmacist. Postmaster, Noroton Heights, Conn. Served in Base Hosp. No. 43, Fort McPherson, Ga.  
*Ad.*, Noroton, Conn.

**Harry Poltzer Goodfriend, P.C.**

*Thes.*, Silicate of Soda and Its Solution.  
Retail pharmacist. Served in U. S. N. as pharmacist's mate during World War.  
*Ad.*, 54th and Chestnut Streets, Phila., Pa.



- Harry Herman Gray, P.D.**  
*Thes.*, Magma Magnesia.  
*Ad.*, 1862 E. 101st Street, Cleveland, Ohio.
- Abraham Gruber, P.D.**  
*Thes.*, Hydrastis Canadensis.  
*Ad.*, 6th and Dickinson Streets, Phila., Pa.
- Marlon Eugene Guyn, P.D.**  
*Thes.*, Spiritus Ammonia Aromaticus.  
*Ad.*, 246 E. Main Street, Carlisle, Ky.
- \*Edward Richard Haney, P.D.**  
*Thes.*, Potassium Bitartrate.  
Retail pharmacist, Phila. Deceased, October 10, 1918.
- Miles Vern Harnly, P.D.**  
*Thes.*, Potassium Ferrocyanide.  
*Ad.*, P. O. Box 524 A, Upland, Cal.
- Harold Johnson Heaton, P.D.**  
*Thes.*, A Comparison of Menstrua in the Extraction of Cudbear.  
Mgr. Streeper's Pharmacy.  
*Ad.*, 7115 Cresheim Road, Mt. Airy, Phila., Pa.
- Wilmer Martin Heberlig, P.D.**  
*Thes.*, Fluidextract of Aconite by Repercolation.  
Mgr. F. W. Woolworth Co. store.  
*Ad.*, Hanover, Pa.
- Ralph A. Henry, (Ph.G.), P.D.**  
*Thes.*, Manufacture of Paper—"Soda-Pulp" Process.  
Received degree Ph.G. from Ohio State College.  
*Ad.*, Huntingdon, Pa.
- Frank Mallory Hill, P.D.**  
*Thes.*, Extraction of Turpentine from Pine Wood.
- John Wilson Holloway, P.C.**  
*Thes.*, Greaseless Vanishing Creams.  
Received P.D. degree, 1917.
- Victor Oliver Homerberg, P.D.**  
*Thes.*, Sanguinaria Canadensis.  
Student at Mass. Inst. of Tech. Course in Chem. Engineering. Asst. in Dept. of Analytical Chemistry. Mem. Engineers' Reserve Corps.  
*Ad.*, Room 321, Mass. Inst. Technology, Cambridge, Mass.
- George Barkley Hutchison, P.D.**  
*Thes.*, Solution of Hydrogen Dioxide.  
Retail pharmacist. Served in U. S. A. during World War.  
*Ad.*, Winchester, Ky.
- Oscar Collins Ireland, P.C.**  
*Thes.*, Sugar and Its Manufacture.  
*Ad.*, Linwood, N. J.
- Samuel Maxwell Irwin, P.D.**  
*Thes.*, The Manufacture of Tooth Paste by the Pharmacist.  
Salesman, H. K. Mulford Co. Served in U. S. A. during World War.
- Frederick Eugene Keller, P.C.**  
*Thes.*, Liquid Petroleum from Gas.  
Physician. Graduated in medicine, Jeff. Med. College, 1917. Res. Phys. Jeff. Hosp. Chief Res. Frankford Hosp., Phila. Mem. Phila. County Med. Soc.; Med. Club of Phila.; Medico-Legal Soc. of Phila. Served in U. S. A. as 1st Lieut., Med. Dept.  
*Ad.*, 2217 E. Huntingdon Street, Phila., Pa.
- John Fred Keppler, P.C.**  
*Thes.*, Rattlesnake Venom.  
*Ad.*, 1528 Venango Street, Phila., Pa.
- Alvin Henry Kern, P.D.**  
*Thes.*, Slate.  
Retail pharmacist.  
*Ad.*, Wood and Northampton Street, Easton, Pa.
- Edwin Homer Kinback, P.C.**  
*Thes.*, Glass Graduates.  
Undertaker. Received P.D. degree, 1914. Served as Sgt., 1st Class, 312th F. A., Med. Dept., U. S. A.  
*Ad.*, 320 Cemetery Street, Peckville, Pa.
- David Klebanoff, P.D.**  
*Thes.*, Filling Capsules.  
Retail pharmacist.  
*Ad.*, 1530 Market Street, Phila., Pa.
- Raymond Howell LaRue, P.D.**  
*Thes.*, Asafoetida.  
Pharmacist.  
*Ad.*, Malvern, Pa.
- Isador Lehrman, P.D.**  
*Thes.*, Digitalis.  
Retail pharmacist.  
*Ad.*, 2nd and Cumberland Streets, Phila., Pa.
- Gustav Byron Levi, P.D.**  
*Thes.*, Cataplasma Kaolini.  
*Ad.*, 2520 Atlantic Avenue, Atlantic City, N. J.
- Harland Adair McCarty, P.D.**  
*Thes.*, Dentifrices.  
Pharmacist. Served in U. S. N. during World War.  
*Ad.*, Dushore, Pa.
- Harold Andrew McKean, P.C.**  
*Thes.*, The Salt Industry in New York State.  
Retail pharmacist. Received P.D. degree, 1914.  
*Ad.*, Knox, Pa.
- \*Alfred Robert Franklin Marth, P.D.**  
*Thes.*, Pancreatinum.  
Deceased, November 21, 1913.
- Guy William Messimer, P.D.**  
*Thes.*, Anisum.
- \*Robert White Michael, P.D.**  
*Thes.*, Cod Liver Oil.  
Deceased, July, 1920.
- John Arthur Moon, P.D.**  
*Thes.*, Tablet Triturates and Compressed Tablets.
- George Thorn Morris, P.C.**  
*Thes.*, Acetanilidum.  
Retail pharmacist. Served in U. S. N. as Chief Pharmacist's Mate.  
*Ad.*, 15th and York Streets, Phila., Pa.
- William Vance Moyer, P.D.**  
*Thes.*, Sulphurated Potassa.  
Pharmacist for Moyer Bros. Instr. in chemistry at Bloomsburg State Normal Sch., 1915-17. Served in U. S. A. during World War. Mem. Bloomsburg Town Council, 1916-17.  
*Ad.*, 216 Market Street, Bloomsburg, Pa.
- Edward Andrew Mullen, P.D.**  
*Thes.*, Syrupus Hypophosphitum Compositus.  
Lieut. Med. Corps, U. S. N. Graduated in medicine, Jeff. Med. College, 1917. Served on transports during World War as medical officer.  
*Ad.*, 221 Rochelle Avenue, Wissahickon, Phila., Pa.
- \*Lee Armstrong Nisley, P.D.**  
*Thes.*, Dental Wash.  
Pharmacist, Coatesville, Pa. Deceased, April 28, 1920.
- \*August Harry Nitschke, P.D.**  
*Thes.*, Glycyrrhiza and Glycyrrhizin.  
Deceased, May 9, 1915.
- James Edmund Osborne, P.D.**  
*Thes.*, Veratrum Viride.  
Retail pharmacist.  
*Ad.*, Calais, Me.
- Grafton Marvin Peberdy, P.D.**  
*Thes.*, Extract of Belladonna.  
*Ad.*, 240 Elm Street, West Haven, Conn.

**Henry Harris Perlman, P.D.**

*Thes.*, Soy Beans.  
Physician. Graduated in medicine, Jeff. Med. College, 1918. Res. Phys. Jeff. Hosp. Asst. to prof. of Pediatrics, Jeff. Med. College. Instr. in Pediatrics, Jeff. Med. College. Lecturer Mat. Med. and Hygiene, White Haven Sanatorium. Enlisted Med. Reserve Corps.  
*Ad.*, 1904 N. Franklin Street, Phila., Pa.

**Warren Lucien Peters, P.D.**

*Thes.*, Pharmaceutical Sterilization.  
*Ad.*, Lehigh, Pa.

**Fred James Plunkett, P.D.**

*Thes.*, Nitric Acid and Dilute Nitric Acid.  
Served in Aero Construction Squadron No. 441, Vancouver Barracks, Wash.  
*Ad.*, Groveton, N. H.

**Scott Coyle Rea, P.D.**

*Thes.*, Tooth Pastes.  
Retail pharmacist. Mem. Sunbury Rotary Club; Sunbury Chamber of Commerce.  
*Ad.*, 430 Market Street, Sunbury, Pa.

**William Edward Reichard, P.D.**

*Thes.*, Liquid Soaps.  
*Ad.*, 623 Pawnee Street, Bethlehem, Pa.

**Henry Isadore Reinsh, P.D.**

*Thes.*, Ampoules—Their Preparation and Use.  
Retail pharmacist. Served in U. S. A. as Sgt. 1st Class, Camp Gordon, Ga.  
*Ad.*, 1922 N. 32nd Street, Phila., Pa.

**John Gregory Ricketts, P.D.**

*Thes.*, Liquor Magnesii Citratis.  
Pharmacist for W. D. White and Co. Studied Chem. Engineering at Carnegie Tech. Inst. Served as Pvt. in U. S. A.  
*Ad.*, 323 N. Washington Street, Wilkesbarre, Pa.

**Herman Alice Rohn, P.D.**

*Thes.*, Calcii Carbonas.  
*Ad.*, 1838 S. 22nd Street, Phila., Pa.

**Joseph Mervin Rosenberger, P.D.**

*Thes.*, Compound Syrup of Hypophosphites.  
With Smith, Kline and French Co., Phila. Served as Lieut. in U. S. A. Sanitary Corps, Gen. Hosp. No. 10.  
*Ad.*, 410 W. Danphin Street, Phila., Pa.

**Lillian Russell, P.C.**

*Thes.*, Magnesii Carbonas.

**Elton Sunday Ruth, P.D.**

*Thes.*, Boric Acid Solutions.  
Pharmacist. Served in 315th Pioneer Inf., 79th Div. with A. E. F.  
*Ad.*, 32 N. 40th Street, Phila., Pa.

**Robert Jacob Ruth, P.D.**

*Thes.*, The Masking of Emulsions.  
Pharmacist and chemist. Formerly Prof. of Inorganic chemistry at Southern Methodist Univ., Dallas, Texas. Prof. of Pharmacology, Latin, Mathematics and Biological Therapeutics.  
*Ad.*, 380 Broad Street, Elyria, Ohio.

**Lee Dietrich Rutter, P.D.**

*Thes.*, Gelsemium.  
In real estate business. In Ordnance Dept., U. S. Govt. Received Certificate in Bacteriology, P. C. P., 1917.  
*Ad.*, 829 Cumberland Street, Lebanon, Pa.

**Gustav Samet, P.D.**

*Thes.*, Courier Oil.  
*Ad.*, 943 E. Ontario Street, Phila., Pa.

**Clarence Lerch Sandt, P.D.**

*Thes.*, Quinine.  
*Ad.*, Easton, Pa.

**\*Louis Edward Seif, P.D.**

*Thes.*, Alum.  
Lieut. Seif was killed in action in France during the summer of 1918.

**George Washington Shade, P.D.**

*Thes.*, Sodium Nitrate.  
Retail pharmacist.  
*Ad.*, 43 N. Marshall Street, Shamokin, Pa.

**Marvin Asa Shales, P.D.**

*Thes.*, Moulded and Sterilized Strophanthus.  
Asst. Mgr. Green's Pharmacy.  
*Ad.*, 382 N. Washington Street, Wilkesbarre, Pa.

**Fred Williams Slocum, P.D.**

*Thes.*, Artificial Silk.  
Served in U. S. N.  
*Ad.*, 1611 Wallace Street, Phila., Pa.

**\*Arthur Joseph Smith, P.D.**

*Thes.*, Cotton Seed Products and Their Uses.  
Deceased, June 30, 1919.

**Fred Merrels Smith, P.D.**

*Thes.*, Potassium Bicarbonate.

**Stanley Warren Smith, P.D.**

*Thes.*, Liquor Potassii Hydroxidi.  
Retail pharmacist.  
*Ad.*, 805 Pine Street, Berwick, Pa.

**Erwin Cleveland Snyder, P.D.**

*Thes.*, Adulteration of Catechu with Mangrove Extract.  
Retail pharmacist. Secy. and Treas. Palace Drug Co.

**James Morton Southall, P.D.**

*Thes.*, Elixir of the Phosphates of Iron, Quinine and Strychnine.  
Retail pharmacist. Graduated Univ. of Penna., 1914. Served in U. S. A. with 76th F. A., 3rd Div. Commissioned 2nd Lieut. With A. E. F. in France.  
*Ad.*, Florence, Ala.

**Gerald Henry Stevens, P.D.**

*Thes.*, Embalming Fluids.  
Served in U. S. A. as bacteriologist. Assigned to Yale Univ. for further training in bact. by U. S. Government.  
*Ad.*, 1817 7th Avenue, Altoona, Pa.

**John Lewis Sutcliffe, P.D.**

*Thes.*, Graphite and Its Uses.  
*Ad.*, 1907 N. Park Avenue, Phila., Pa.

**Roy Horton Taylor, P.D.**

*Thes.*, Tincture of Strophanthus.  
Mgr. for L. K. Liggett Co.  
*Ad.*, 608 Marlyn Road, Phila., Pa.

**William Samuel Toplis, P.D.**

*Thes.*, Gelatin Capsules for Enteric Use.  
Pharmacist.  
*Ad.*, 4939 Germantown Avenue, Phila., Pa.

**John Michael Vogel, P.D.**

*Thes.*, Cottonseed.  
Pharmacist. Served in U. S. N. R. F. as Chief Pharmacist's Mate.

**Norman Aloysius Wack, P.D.**

*Thes.*, Enteric Capsules.  
*Ad.*, Wayne, Pa.

**Charles Ellsworth Walters, P.D.**

*Thes.*, Liquor Ferri et Ammonii Acetatis.  
Pharmacist. Mgr. for Harvey and Carey, Inc.  
*Ad.*, Care of Harvey and Carey, Altoona, Pa.

**David Hanan Weinberg, P.D.**

*Thes.*, Physiological Standardization of Digitalis by Means of Frogs.  
With Clare Food and Relish Co.

**Hans Peter West, P.D.**

*Thes.*, Starch.  
Physician. Graduated in medicine, Jeff. Med. College, 1911. Enlisted Med. Reserve Corps and S. A. T. C.  
*Ad.*, Sistersville, W. Va.

**Ernest Herbert Whipple, P.D.**

*Thes.*, Bismuth Betanaphthol.  
*Ad.*, Care of Marshall Drug Co., Cleveland, Ohio.

**Charles Albert White, Jr., P.C.**

*Thes.*, Bee Culture and Its Products Used in Pharmacy.  
Retail pharmacist. Received P.D. degree, 1914.  
*Ad.*, Swedesboro, N. J.

**\*Leon Francis Witkowski, P.D.**

*Thes.*, Bacterins.  
Deceased, September 27, 1915.

**Lawrence Keenportz Wolf, P.D.**

*Thes.*, Emulsion of Silver Iodide.  
Pharmacist. Served in U. S. N. as Chief Pharmacist's Mate.  
*Ad.*, 5948 Webster Street, Phila., Pa.

**George Rufus Worley, P.D.**

*Thes.*, The Quantitative Estimation of Acidum Phosphoricum, U. S. P. IX.  
Druggist and dealer in general merchandise.  
*Ad.*, Covington, Ohio.

**Nathan Zonles, P.D.**

*Thes.*, Iodine.  
Retail pharmacist.  
*Ad.*, 29th and Diamond Streets, Phila., Pa.

**Special Students.****LeRoy Forman.**

Received Certificate of Proficiency in Chemistry.  
Chemist, Johnson and Johnson.

**George Rodney Foas.**

Received Certificate of Proficiency in Food and Drug Course. Salesman, Parke, Davis and Co.  
*Ad.*, 8 N. Waldron Street, Memphis, Tenn.

**Richard I. Grantham.**

Received Certificate of Proficiency in Food and Drug Course. Chemist, Sharp and Dohme.  
*Ad.*, 110 E. 25th Street, Baltimore, Md.

**Glenn E. Jeliff.**

Received Certificate of Proficiency in Chemistry.  
*Ad.*, Care of Armstrong Cork Co., Camden, N. J.

**Frank Nicolai Moerk.**

Received Certificate of Proficiency in Chemistry.  
Chief Engineer, Direct Oxidation and Disposal Corp., Phila., Pa.  
*Ad.*, 4729 N. 15th Street., Phila., Pa.

## 1914

**Samuel Martin Ankrum, P.D.**

*Thes.*, Acetone as a Cleaning Fluid.

**Woods D. Ballet, P.D.**

*Thes.*, Serums and Vaccines.  
Retail pharmacist. Served in U. S. A. at Camp Meade.  
*Ad.*, 5500 Spruce Street, Phila., Pa.

**Clarence Haco Berryman, P.D.**

*Thes.*, The Presence of Arsenic in Tin Foil.  
Pharmacist.  
*Ad.*, Cambridge, Md.

**Samuel Biren, P.D.**

*Thes.*, Show Card Writing, Advertising and Displaying.  
Retail pharmacist. Served in U. S. A., Med. Dept., Camp Lee, Va.  
*Ad.*, 857 N. Franklin Street, Phila., Pa.

**Joseph Franklin Botdorf, P.D.**

*Thes.*, Kaolinum.  
*Ad.*, 937 N. St. Bernard Street, Phila., Pa.

**William Merton Boyd, P.D.**

*Thes.*, Improved Methods of Preparing Some U. S. P. and N. F. Preparations.  
Retail pharmacist. Served in U. S. A. with A. E. F. in France. Wounded.  
*Ad.*, 60th and Catharine Streets, Phila., Pa.

**John Joseph Burke, P.D.**

*Thes.*, Cork—Its Origin and Uses.  
*Ad.*, Spring Lake, N. J.

**Samuel Cahan, P.D.**

*Thes.*, Sapo Mollis.  
Retail pharmacist.  
*Ad.*, 2421 N. 24th Street, Phila., Pa.

**Ernest Clifford Cameron, P.D.**

*Thes.*, Production of Cacao.  
Retail pharmacist.  
*Ad.*, 18th and Ellsworth Street, Phila., Pa.

**Paul Clifford Cantner, P.D.**

*Thes.*, Acidum Hydriodicum Dilutum.  
Retail pharmacist.  
*Ad.*, Federalsburg, Md.

**Edmund Eugene Carr, P.D.**

*Thes.*, Petroselinum Fructus.  
Retail pharmacist. Served as Pvt. in Med. Corps, U. S. A., Vancouver Barracks, Wash. Treas. Utah Pharm. Assn., 1921-23.  
*Ad.*, Ogden, Utah.

**Paul Daniel Coble, P.D.**

*Thes.*, Ammonium Hypophosphite.  
*Ad.*, 345 W. Washington Street, Hagerstown, Md.

**Louis Cohen, P.D.**

*Thes.*, Pharmacy in Ireland.

**John Edmund Collins, P.D.**

*Thes.*, Sapo Mollis Ex Oleo Gossypii Seminis.  
*Ad.*, Shamokin, Pa.

**Leonard Ellsworth Coolbaugh, P.D.**

*Thes.*, Cudbear.  
Salesman, John Wyeth and Bro. Received Certificate in Bacteriology, P. C. P., 1919.

**William Wheeler Craft.**

*Thes.*, The Typho-Bacterins.  
Retail pharmacist. Served as Sgt. in Med. Corps. with A. E. F. in France.  
*Ad.*, 1440 S. 20th Street, Phila., Pa.

**Wilmer Paul Davidson, P.D.**

*Thes.*, Tincture of Iodine.  
*Ad.*, Newville, Pa.

**Thomas Young Dickson, P.D.**

*Thes.*, Ground Flaxseed.  
Served in U. S. A., Camp Sherman, Ohio.  
*Ad.*, 3226 N. 25th Street, Phila., Pa.

**Chauncey Lloyd Dils, P.D.**

*Thes.*, The Manufacture of Window Glass.  
Pharmacist. Served in Camp Hosp. No. 8 with A. E. F. in France.  
*Ad.*, 128 Abbott Street, Fairmont, W. Va.

**Christopher Patrick Dougherty, Jr., P.D.**

*Thes.*, Aromatic Spirits of Ammonia.

**Harold Powell Edwards, P.D.**

*Thes.*, Elixir Ferri, Quininae et Strychninae Phosphatum.  
Pharmacist. Mgr. W. R. Partridge Estate. Served as Pvt. 1st Div. Med. Dept. U. S. A.  
*Ad.*, Augusta, Me.

**William Payson Eldredge, P.D.**

*Thes.*, Phenolsulphonephthalein—Functional Test.



- Meyer Charles Epstein, P.D.**  
*Thes.*, Chocolate and Cocoa.
- John Arthur Flacel, P.D.**  
*Thes.*, Sapo Mollis.  
*Ad.*, The Traymore Pharmacy, Atlantic City, N. J.
- \***William Henry Fitzsimmons, P.D.**  
*Thes.*, Crude Petroleum.  
Retail pharmacist, Kane, Pa. Died at Great Lakes Training Station, October, 1918.
- George Thomas Flack, P.C.**  
*Thes.*, Unfermented Grape Juice—Manufacture and Use.  
*Ad.*, Westmont, N. J.
- Clark Harrison Flanagan, P.D.**  
*Thes.*, Compound Syrup of Hypophosphites, U. S. P.  
*Ad.*, 110 Main Street, Binghamton, N. Y.
- Charles August Flottman, P.C.**  
*Thes.*, Monazite Sand.  
Retail pharmacist.  
*Ad.*, Camp Hill, Cumberland Co., Pa.
- James Andrew Fox, P.D.**  
*Thes.*, Specifications for Portland Cement.  
Served in U. S. A., Hosp. Train No. 2, Camp Greenleaf, Ga.  
*Ad.*, Bellefonte, Pa.
- William Reuban Frank, P.D.**  
*Thes.*, Incandescent Gas Lighting.  
*Ad.*, 63rd and Race Streets, Phila., Pa.
- Daniel Joshua Fry, Jr., P.D.**  
*Thes.*, Studies of the Origin and Tests of the True Oregon Balsam.  
Wholesale and retail pharmacist. Served in U. S. A. with A. E. F. in France.  
*Ad.*, Salem, Ore.
- Charlea Louis Gantert, P.D.**  
*Thes.*, Mesquite Gum.  
Pharmacist for James A. Ferguson.  
*Ad.*, 10 W. Jefferson Street, Phila., Pa.
- John Clucas Gehrung, P.D.**  
*Thes.*, An Accounting System for the Average Size Drug Store.  
Cost Accountant with National Malleable Castings Co. Pharmacist until 1918.  
*Ad.*, 315 Overbrook Park Drive, Cleveland, Ohio.
- Harry Jerome Gonya, P.D.**  
*Thes.*, Calamine.  
Retail pharmacist.  
*Ad.*, Millinocket, Me.
- \***John Calvin Gray, P.D.**  
*Thes.*, Gentian.  
Retail pharmacist, Miners Mills, Pa. Died at Fort Oglethorpe, October, 1918.
- Barnett Ruasell Greens, P.D.**  
*Thes.*, Hydrogen Peroxide Production—Past and Present.  
Retail pharmacist.  
*Ad.*, 11th and Poplar Streets, Phila., Pa.
- William Harold Griffin, P.D.**  
*Thes.*, Theatrical Cold Cream.  
Representative, Stephen F. Whitman and Son, Commissioned 2nd Lieut. Inf., O. T. C., Atlanta, Georgia.  
*Ad.*, 90 E. 10½ Street, Oswego, N. Y.
- Joseph Jeremiah Hsngenman, P.D.**  
*Thes.*, Acidum Aceticum Dilutum.  
Retail pharmacist.  
*Ad.*, 1601 Cayuga Street, Phila., Pa.
- \***Jaaper Bonsall Hall, P.D.**  
*Thes.*, Liquor Cresolis Compositus.  
Deceased, August 16, 1916.
- Henry Lewia Hansell, P.C.**  
*Thes.*, Syrup Hypophosphites Compound—Cloudy.  
Physician. Graduated Jeff. Med. College, Bachelor of Arts Course at Temple Univ. Enlisted Med. Reserve Corps.  
*Ad.*, 231 Jamestown Street, Roxborough, Phila., Penna.
- George Herbert Harris, P.D.**  
*Thes.*, Purgoric.  
Retail pharmacist. Also organizer Harris Chem. Co.  
*Ad.*, 1123 Main Street, Honesdale, Pa.
- John Henry Hayes, P.D.**  
*Thes.*, Modern Industrial Reducing Agents.  
Pharmacist, U. S. Public Health Service, Served at U. S. Marine Hosp., Wilmington, Del.; U. S. Quarantine Station, Boston, Mass.; Extra-Cantonment Sanitation, Newport News, Va.; U. S. Marine Hosp., New York; Supply Officer, U. S. Pub. Health Service Hosp. No. 43. Received Certificate in Bacteriology, P. C. P., 1915.  
*Ad.*, 16 7th Street, S. W., Washington, D. C.
- William Wellcome Heckenberger, P.D.**  
*Thes.*, The Three Cinnamons.  
*Ad.*, Catasauqua, Pa.
- Charlea Jacob Heinle, P.C.**  
*Thes.*, Paper.  
Pres. Charles L. Heinle Specialty Co. Retail pharmacist 7 years. Received Certificate of Proficiency in Chemistry, P. C. P., 1906. Received P.D. degree, 1916.  
*Ad.*, Crescentville, Phila., Pa.
- Ray Charles Held, P.D.**  
*Thes.*, Accurate Weighing.  
*Ad.*, 758 S. 8th Street, Allentown, Pa.
- George Leon Helwig, P.D.**  
*Thes.*, Liquor Magnesii Citratis.  
Retail pharmacist. Pres. Apex Building and Loan Assn.  
*Ad.*, 19th and Fairmount Avenue, Phila., Pa.
- Ralph Heber Hinman, P.D.**  
*Thes.*, Glycerophosphates.  
Retail pharmacist.
- Anton Hogstad, Jr., P.C.**  
*Thes.*, Belladonna.  
Instructor in Botany P. C. P., 1914-16. (See page 441.)  
*Ad.*, South Dakota State College, Brookings, S. D.
- William James Hurley, P.D.**  
*Thes.*, Syrup of Quinine.  
Pharmacist. Served in U. S. N. as Pharmacist's Mate in transport service.  
*Ad.*, 309 Greeves Street, Kane, Pa.
- Clarence Paul Johnson, P.D.**  
*Thes.*, Analysis of Viburnum Opulus.  
Retail pharmacist.  
*Ad.*, Sheldon, Ill.
- Ernest Irvin Johnson, P.D.**  
*Thes.*, Medication of Zinc Stearate.  
*Ad.*, 1000 French Street, Wilmington, Del.
- Frank Lot Kahler, P.D.**  
*Thes.*, Eucalyptus.  
Pharmacist for Jones pharmacy. Served in U. S. A. as Sgt., Med Corps.  
*Ad.*, 521 Parson Street, Easton, Pa.
- Walter Melvin Kauffman, P.D.**  
*Thes.*, Structure of Viburnum Opulus and Various Viburnum Barks.  
Pharmacist for George A. Gorgas.  
*Ad.*, Colonial Park, R. D. 4, Harrisburg, Pa.
- Mortimer Adrian Kentch, P.D.**  
*Thes.*, Medicated Baths and Their Extemporaneous Preparation by the Pharmacist.  
Pharmacist. Served in U. S. A. during World War. Special course at Univ. of Mich.  
*Ad.*, Wellsboro, Pa.

## 630 First Century of the Philadelphia College of Pharmacy

### George Henry Kostenbauder, P.D.

*Thes.*, The Extemporaneous Preparation of Medicated Bougies.  
Clerk, Standard Steel Works Co. Commissioned 1st Lieut. Field Artillery.  
*Ad.*, Burnham, Pa.

### Harry Nunemacker Krick, P.D.

*Thes.*, Elixir Terpini Hydratis.  
*Ad.*, Sinking Springs, Pa.

### Jacob Harold Kulp, P.D.

*Thes.*, The Evils of Newspaper Prescribing.  
Pharmacist. Received Certificate in Bacteriology, P. C. P., 1914.  
*Ad.*, 109 E. Coulter Street, Germantown, Phila., Penna.

### Charles Frederick Kutteroff, P.C.

*Thes.*, Camphor and Its Preparations.  
Physician. Graduated Hahnemann Med. Coll.

### Anthony LaCourse, Jr., P.D.

*Thes.*, Silicon Carbide.  
With Burrough Bros. Mfg. Co., Pharmaceuticals.  
*Ad.*, 104 Evergreen Avenue, Baltimore, Md.

### Edgar Seiple LaWall, P.D.

*Thes.*, Carbon Dioxide in Atmospheric Air and Its Estimation.  
Retail pharmacist.  
*Ad.*, Catasauqua, Pa.

### Stewart Grier Leidich, P.D.

*Thes.*, The Cultivation and Handling of Golden Seal.  
Retail pharmacist.  
*Ad.*, 333 S. Front Street, Harrisburg, Pa.

### Allen Abraham Leinbach, P.D.

*Thes.*, Purity of Commercial Gelatin.  
Salesman for the Borden Sales Co. Served as Sgt. Camp Hosp. No. 25, A. E. F.  
*Ad.*, 19 S. 5th Street, Reading, Pa.

### Walter Palmer Llewellyn, P.D.

*Thes.*, Bermuda Arrowroot.  
Pharmacist.

### Roy Paul Lodge, P.D.

*Thes.*, The Electrolytic Manufacture of Organic Compounds and Fine Chemicals.  
Phila. Wholesale Drug Co. Course in Wharton Sch. Univ. of Penna. Served with Ambulance Co. No. 36, Gen. Hosp. No. 13, and Debarkation Hosp. No. 52, U. S. A.  
*Ad.*, 645 N. Broad Street, Phila., Pa.

### Enzer Lewis McCall, P.D.

*Thes.*, Clay.  
Pharmacist, Boyles Drug Store. Served as Sgt. Med. Corps, U. S. A., with A. E. F. in France. Commander American Legion Post No. 441.  
*Ad.*, Falls Creek, Pa.

### Chester Lee McLaren, P.D.

*Thes.*, Piscidia Erythrina.  
Served in U. S. A., Base Hosp., Camp Lee, Va.  
*Ad.*, 624 W. Rittenhouse Street, Germantown, Phila., Pa.

### Forrest Scott Marshall, P.D.

*Thes.*, Tea and Its Caffeine Yield.  
Retail pharmacist. Served in U. S. A. as Sgt. 351st F. A. with A. E. F. in France.  
*Ad.*, 629 Boas Street, Harrisburg, Pa.

### Elmer Frank Merz, P.D.

*Thes.*, Phosphates of Calcium.  
Retail pharmacist. Masonic affiliation.  
*Ad.*, Front and Susquehanna Avenue, Phila., Pa.

### Robert Crozier Morehead, P.D.

*Thes.*, Burgundy Fitch.  
Pharmacist for Kimball Drug Co. Served in U. S. A. during World War.  
*Ad.*, Kimball, West Va.

### Robert Goulden Murtoff, P.D.

*Thes.*, Acetylene.  
*Ad.*, Boiling Springs, Pa.

### Nervin Amos Myers, P.D.

*Thes.*, Bacterins.  
Salesman for the Upjohn Co.  
*Ad.*, 206 Broad Street, Harrisburg, Pa.

### Charles Vincent O'Hare, P.D.

*Thes.*, Oleum Amygdala Amaræ et Benzaldehydum.  
Pharmacist. Course in bact. at Univ. of Galway, Galway, Ireland. Served in U. S. A. as Sgt. Med. Dept.

### Irl Washington Owings, P.D.

*Thes.*, Tablet Making in the Retail Drug Store.  
*Ad.*, 128 Oakwood Avenue, Newark, Ohio.

### Roland Levi Pettit, P.D.

*Thes.*, Face Creams.  
Retail pharmacist.  
*Ad.*, Maple Shade, N. J.

### Clarence Frank Turner Porter, P.C.

*Thes.*, Methods for Recovering Both Volatile and Fixed Oils from Emulsions.

### John Frederick Gartner Quin, P.C.

*Thes.*, The Production of Cottonseed Oil.  
With John Wyeth and Bro. Enlisted in U. S. N. Transferred to Marine Corps. Stationed at Guantanamo Bay, Cuba, as Pharmacist's Mate.  
*Ad.*, 1417 S. 51st Street, Phila., Pa.

### Nathan Rachmell, P.D.

*Thes.*, Acidum Hydrochloricum Dilutum.  
Retail pharmacist. Mem. national, state, and local drug assns. Mem. B. P. O. E. Masonic affiliation.  
*Ad.*, 3rd and Ritner Streets, Phila., Pa.

### Ralph Benjamin Rogers, P.D.

*Thes.*, Acacia.  
Manufacturing chemist.  
*Ad.*, 29 W. Main Street, Moorestown, N. J.

### Julius Jacob Rosenberg, P.D.

*Thes.*, Cork.  
Retail pharmacist.  
*Ad.*, 31st and Norris Streets, Phila., Pa.

### Maurice Rosoff, P.D.

*Thes.*, Drug Standardization and Its Value in Pharmaceutical Preparations.  
Retail pharmacist.  
*Ad.*, 423 S. 60th Street, Phila., Pa.

### Norris Dean Rowland, P.D.

*Thes.*, Colorimetric Test for Cubeb.  
*Ad.*, Elizabeth, Pa.

### Charles Allen Russell, P.D.

*Thes.*, Potassa Sulphurata.  
*Ad.*, Union Hill, N. J.

### Venola Bruce Salsbury, P.D.

*Thes.*, Emulsion of Cod Liver Oil.  
*Ad.*, 1053 Penn Avenue, Tyrone, Pa.

### Ralph Monroe Schadt, P.D.

*Thes.*, Insecticides.  
Retail pharmacist.  
*Ad.*, 10th and Liberty Streets, Allentown, Pa.

### Harold Nelson Schoonover, P.C.

*Thes.*, Buttermilk in Cold Cream.  
*Ad.*, Dickson City, Pa.

### Irvin Clarence Semmel, P.D.

*Thes.*, Prescription Precipitation.  
*Ad.*, 54th and Willows Avenue, Phila., Pa.

### Raymond Leslie Shover, P.D.

*Thes.*, The Assay of Donovan's Solution.  
Pharmacist. Served in U. S. A. as Sgt. Co. K, 311th Inf. 78th Div.  
*Ad.*, 1001 Atlantic Avenue, Atlantic City, N. J.

**Henry Ward Shumaker, P.D.**

*Thes.*, Hygienic Laboratory of the U. S. P. H. Service.  
Retail pharmacist. Received Certificate in Bacteriology, P. C. P., 1914. Served in U. S. A., Camp Travis, Tex.  
*Ad.*, Lewistown, Pa.

**Isadore Slipakoff, P.D.**

*Thes.*, Sponges.  
Retail pharmacist.  
*Ad.*, 2001 N. 17th Street, Phila., Pa.

**Edwin Royer Spangler, P.D.**

*Thes.*, The Rhizome of *Asarum Canadense*. Pharmacist. Served in U. S. A. with 26th Engrs. A. E. F. Received Certificate in Bacteriology, 1914.  
*Ad.*, Ephrata, Pa.

**Ernest Leo Staever, P.D.**

*Thes.*, Maple Sap, Syrup and Sugar.  
Retail pharmacist.  
*Ad.*, Elizabethtown, Pa.

**George Findley Stines, P.D.**

*Thes.*, Carum.  
Retail pharmacist. Served in U. S. A. as Sgt. Med. Corps, Base Hosp. No. 58, with A. E. F.  
*Ad.*, 246 Main Street, Conneaut, Ohio.

**Stanley Eugene Sutton, P.D.**

*Thes.*, Colloids, Chemistry and Their Practical and Therapeutical Application.  
*Ad.*, Woodbury, N. J.

**Leander Gifford Taylor, Jr., P.D.**

*Thes.*, Physiologic Saline Solution.  
Pharmacist for George B. Evans.  
*Ad.*, 5210 Webster Street, Phila., Pa.

**William Henry Taylor, P.D.**

*Thes.*, Logwood.  
*Ad.*, 600 Kerlin Street, Chester, Pa.

**Frank Davenport Thompson, P.D.**

*Thes.*, Peroxides and Perborates.  
Pharmacist.  
*Ad.*, Ambridge, Pa.

**Earl Fred Train, P.D.**

*Thes.*, Manna.

**Leo Thomas Trambley, P.D.**

*Thes.*, The Chemistry of Paper Making.  
*Ad.*, 547 E. 5th Street, Erie, Pa.

**Charles Joseph Veigel, P.D.**

*Thes.*, Volumetric Estimation of Mercury.  
Retail pharmacist.  
*Ad.*, Wyncote, Pa.

**J. Schureman Waker, P.D.**

*Thes.*, Fluidextractum Rhamni Purshiana Aromaticum.  
Pharmacist. Served in U. S. A. as Sgt. Co. H, 311th Inf. with A. E. F. in France.  
*Ad.*, 212 First Avenue, New Brunswick, N. J.

**William Romine Wallace, P.C.**

*Thes.*, The Constituents and Manufacture of Fertilizers.  
With Henry K. Wampole and Co. Course in mechanical engineering at Lehigh Univ. one year. Served in U. S. A. Tank Corps, Co. A, 301st Btn. Received Certificate in Bacteriology, P. C. P., 1914.  
*Ad.*, Fort Washington, Pa.

**John Russel Watson, P.D.**

*Thes.*, Camphor, Natural and Synthetic.  
*Ad.*, 595 Bath Street, Bristol, Pa.

**Walter Irving Watson, P.D.**

*Thes.*, Urinalysis.  
Representative, Gillette Safety Razor Co. Masonic affiliation.  
*Ad.*, 23 N. High Street, West Chester, Pa.

**John Cloud Way, Jr., P.D.**

*Thes.*, The Contributions of Ancient Greece to Modern Medicine.  
Served in U. S. N.  
*Ad.*, 819 Hepburn Street, Williamsport, Pa.

**Alvin Chester Webb, P.C.**

*Thes.*, Gallæ Ex Rhoe Glabra.  
Served in U. S. A. Gen. Hosp. No. 13.  
*Ad.*, 150 Holly Avenue, Pitman, N. J.

**Abram Weinstein, P.D.**

*Thes.*, *Hirudo* (The Leech).

**Elwyn J. Wheeler, P.D.**

*Thes.*, Certified Food Colors.  
*Ad.*, Lancaster, N. H.

**Oscar Kellogg Whipple, Jr., P.D.**

*Thes.*, Weeds Used in Official Pharmacy.  
With E. R. Squibb and Sons. Served in U. S. A. Med. Dept., Camp McClellan, Ala.  
*Ad.*, 65 Broad Street, Bridgeton, N. J.

**Horace William Willmers, P.D.**

*Thes.*, Sandalwood.  
*Ad.*, 2008 Green Street, Phila., Pa.

**Fred Cleveland Wolverton, P.D.**

*Thes.*, Podophyllum Fruit and Its Adjuvant Syrup.  
Pharmacist. City Councilman, 2nd Vice-pres. Humane Soc. Mem. K. of P. Masonic affiliation.  
*Ad.*, 62 Spring Street, Newark, Ohio.

**Abraham Wyman, P.D.**

*Thes.*, Sodium Chloride.  
Pharmacist. Served in U. S. A. Base Hosp. No. 72 with A. E. F. in France.  
*Ad.*, 5718 Lansdowne Avenue, Phila., Pa.

**Special Students.**

**J. Lyol Bush.**

Received Certificate of Proficiency in Chemistry.  
Pharmacist. Served in U. S. A., Chemical Warfare Service, Development Div., Cleveland, Ohio.  
*Ad.*, Lock Haven, Pa.

**Henry Carleton Cowles, Jr.**

Received Certificate of Proficiency in Chemistry.  
*Ad.*, 5822 Cedarhurst Avenue, Phila., Pa.

**Joseph Jeffreys Garrett.**

Received Certificate in Bacteriology.

**Paul Adolph Kind.**

Received Certificate of Proficiency in Chemistry.  
Gelatin manufacturer. Served in U. S. A. with A. E. F. in France. Mem. Board of Trustees, P. C. P.  
*Ad.*, Head of 5th Street, Camden, N. J.

**Gustave Adolph Kraus, Jr.**

Received Certificate in Bacteriology.

**Fred S. Leathers.**

Received Certificate in Bacteriology.

**Donald Malcolm Patterson.**

Received Certificate in Bacteriology.

**John Preston Smith.**

Received Certificate in Bacteriology.

**Joseph Stein.**

Received Certificate in Bacteriology. Received Certificate of Proficiency in Chemistry, 1915.



1915

- \*Aaron Moses Abrahamson, P.D.**  
*Thes.*, Citric Acid.  
Retail pharmacist, Phila. Deceased, January 5, 1919.
- Carlos Maria Aguilar, P.D.**  
*Thes.*, Powdered Extracts of Belladonna and Stramonium.  
Served in U. S. A., Co. F, 373rd Inf., as 2nd Lieut. Received Certificate in Analysis of Agricultural Products, P. C. P., 1916.  
*Ad.*, P. O. Box 342, Arecibo, P. R.
- Ahmed Mahmoud El Aguizy, P.D.**  
*Thes.*, Ancient and Modern Pharmacy and Medicine in Egypt.  
Received Certificate in Bacteriology, P. C. P., 1914.  
*Ad.*, Tantah, Egypt.
- Silvia Clotilde Alacan, P.D.**  
*Thes.*, Histology and Microscopical Study of Coffee and Distribution of Caffeine.  
Asst. in Pharmacognosy Lab., Univ. of Havana, Havana, Cuba. Received Certificate in Bacteriology, P. C. P., 1916.  
*Ad.*, 17 number 21 Vedado, Havana, Cuba.
- Clinton Flak Avia, P.D.**  
*Thes.*, The manufacture and Use of Silk Bolting Cloth.  
Retail pharmacist.  
*Ad.*, Elmer, N. J.
- Harold Romayne Biddleman, P.D.**  
*Thes.*, Anthracite Coal.  
Pharmacist for Griffin and Evans.  
*Ad.*, 1707 N. Main Avenue, Scranton, Pa.
- \*Jay William Bright, P.D.**  
*Thes.*, Spiritus Aetheris Nitrosi.  
Deceased, October 15, 1918.
- Earl Raymond Brlner, P.D.**  
*Thes.*, Modern Pharmacy.  
*Ad.*, 1763 Perkiomen Avenue, Reading, Pa.
- Bernice Berry Brown, (Ph.G.), P.D.**  
*Thes.*, Syrup of Krameria.  
Pharmacist. Served in U. S. Marine Corps, 2nd Div., A. E. F.
- Estella Elizabeth Brozeitis, (Ph.G.) (Mrs. Klimaa), P.D.**  
*Thes.*, Absorbent Cotton.  
*Ad.*, 2538 E. Alleghany Avenue, Phila., Pa.
- Edward Thomaas Burton, Jr., P.D.**  
*Thes.*, Sulphur and Its Uses.  
*Ad.*, Wachapreague, Va.
- Martin Francia Carmody, P.D.**  
*Thes.*, The Recovery of Material from Pharmaceutical Preparations.  
Retail pharmacist.  
*Ad.*, 1133 S. Broad Street, Phila., Pa.
- Earl Daniel Clark, P.D.**  
*Thes.*, Pepsin and Its Preparations.  
*Ad.*, 1236 S. 8th Street, Phila., Pa.
- \*Paul Close, P.D.**  
*Thes.*, Magnesia Magma.  
Deceased, October 17, 1918.
- Charles Mervin Conrow, P.D.**  
*Thes.*, Terpin Hydrate.  
Pharmacist. Served in U. S. N. during World War at Naval Hosp., Newport, R. I., and New London, Conn. Graduated U. S. Naval Hosp. School.  
*Ad.*, 565 E. Main Street, Moorestown, N. J.
- Catherine Elizabeth Costello, P.D.**  
*Thes.*, Strophanthus.  
*Ad.*, 183 E. Northampton Street, Wilkesbarre, Pa.
- Parker Bare Creep, P.D.**  
*Thes.*, Bacterin, Serum and Serobacterin Therapy.  
Received Certificate in Bacteriology, P. C. P., 1916.  
*Ad.*, 1233 S. 48th Street, Phila., Pa.
- Ralph Bernard Deaver, P.D.**  
*Thes.*, Sperm Oil.  
Served in Sanitary Engineering Corps, Yale Univ.
- Henry B. Decker, P.D.**  
*Thes.*, Bouillon Titration.  
Res. Phys. Cooper Hosp., Camden, N. J. Graduated in medicine, Jeff. Med. College, 1920. Enlisted in Med. Reserve Corps, S. A. T. C.  
*Ad.*, White House, N. J.
- Lewis Hayden Eaton, P.D.**  
*Thes.*, Ichthyol—Its Substitutes and Uses.  
Pharmacist. Served in U. S. A. with A. E. F., 42nd Div., in France and Germany.  
*Ad.*, 854 Exposition Avenue, Dallas, Tex.
- Walter Elmer, P.C.**  
*Thes.*, The Assay of Milk of Magnesia.  
Farmer. Served U. S. A., Med. Dept., Central Machine Gun O. T. C., Camp Hancock, Ga.  
*Ad.*, Egg Harbor City, N. J.
- Charles Brewin Everlockner, P.D.**  
*Thes.*, Industrial Alcohol.  
Pharmacist for George T. Williams. Served in U. S. A. Med. Dept. as Sgt., 112th F. A.  
*Ad.*, 453 High Street, Burlington, N. J.
- Elmer Delmire Fox, P.D.**  
*Thes.*, A Palatable Emulsion of Cod Liver Oil.  
With L. K. Liggett Co. Served in U. S. A. with 304th Engineers, Co. A., A. E. F.  
*Ad.*, 681 Manor Street, Lancaster, Pa.
- Joseph Fox, P.D.**  
*Thes.*, Salicylic Acid and Its Uses.  
Retail pharmacist. Mem. Phila. Assn. Retail Druggists; Penna. Pharm. Assn.  
*Ad.*, 313 W. Diamond Street, Phila., Pa.
- Lewis Armstrong Fredericks, P.D.**  
*Thes.*, Why Home Culture of Drugs Should be Advocated.  
*Ad.*, 55 W. Main Street, Lock Haven, Pa.
- Ivan Ralph Fuas, P.D.**  
*Thes.*, Emulsion of Olive Oil.  
Pharmacist, Paterson Gen. Hosp., 1917-19. Masonic affiliation. Mem. N. J. Pharm. Assn.; Amer. Chem. Soc.  
*Ad.*, 51 Westfield Avenue, W., Roselle Park, N. J.
- Walter Emanuel Gable, P.D.**  
*Thes.*, Modern Pharmacy.  
Pharmacist for Bamford and Kemp.  
*Ad.*, 612 N. 9th Street, Reading, Pa.
- Louis Gerahenfeld, P.D.**  
*Thes.*, Ergot.  
Prof. of Bacteriology, P. C. P. (See page 422.)  
*Ad.*, 281 S. 63rd Street, Phila., Pa.
- Raymond George Gihney, P.D.**  
*Thes.*, Deterioration of Official Syrups.  
Retail pharmacist. Served as Sgt. in Med. Corps, 538th Engrs. A. E. F.  
*Ad.*, 643 E. Main Street, Coatesville, Pa.
- Leonard Edward Greenberg, P.D.**  
*Thes.*, Milk Adulteration.  
Retail pharmacist.  
*Ad.*, 349 Wharton Street, Phila., Pa.
- J. Ralph Grube, P.D.**  
*Thes.*, Petrolatum Liquidum.  
*Ad.*, Coatesville, Pa.
- William Frederick Haase, Jr., P.D.**  
*Thes.*, Diatomaceous Earth.  
Asst. in botany P. C. P., 1915-16. (See page 442.)  
*Ad.*, 285 Park Avenue, Newark, N. J.

**Charles Raymond Harer, P.D.**

*Thes.*, Glue.  
Chemist for Keystone Glue Co.  
*Ad.*, 826 McMinn Avenue, Newberry, Pa.

**Asher Miller Hawk, P.C.**

*Thes.*, Magna Bismuthi.  
Mgr. of drug store. Served in Dept. Lab., Fort Leavenworth, Kansas.  
*Ad.*, Parkesburg, Pa.

**Clarence Augustine Adams Henry, P.D.**

*Thes.*, Mistura Glycyrrhizae Composita.

**William John Heymann, P.D.**

*Thes.*, Hydrastis Canadensis.  
Retail pharmacist.  
*Ad.*, Galeton, Pa.

**Earle Milton Hite, P.D.**

*Thes.*, Theories of Immunity and of Bacterin Therapy.  
Retail pharmacist. Received Certificate in Bacteriology, P. C. P., 1914.  
*Ad.*, 417 Main Street, Roaring Spring, Pa.

**James Henry Hodgkins, P.D.**

*Thes.*, Arrangements and Preservation of Stock.  
Pharmacist for Millener Drug Co.  
*Ad.*, Care of Millener Drug Co., Williamsport, Pa.

**\*Eleanor Grace Hoffman, P.D.**

*Thes.*, Digitalis.  
Employed in laboratory of H. K. Mulford Co.  
Deceased, October 12, 1919.

**John Henry Hoffman, P.D.**

*Thes.*, Pyro-Analysis of Crude Drugs.  
Retail pharmacist.  
*Ad.*, 4948 N. Broad Street, Phila., Pa.

**\*Arnold Hoffman Huber, P.D.**

*Thes.*, Sapo Mollis.  
Served as ward master, Base Hosp., Camp Meade, Md. Deceased, October 2, 1918.

**Joshua Israel, P.D.**

*Thes.*, Microphotography.  
Student at Penna. State College. Enlisted in Reserve Engrs. Transferred to S. A. T. C.  
*Ad.*, 631 E. Allegheny Avenue, Phila., Pa.

**Charles Edwin Jackson, P.D.**

*Thes.*, Economy as a Fine Art to the Student.  
Pharmacist for George B. Evans.

**Elwyn Jones, P.D.**

*Thes.*, Pharmacy as a Lost Art.  
Mgr. Garrison's Pharmacy. Served in U. S. A. as mgr. drug store at May's Landing Ord. Depot.  
*Ad.*, Elmer, N. J.

**Herbert Victor Jordan, P.C.**

*Thes.*, Sugar.  
Asst. Mgr. L. K. Liggett Co. Mem. U. S. Ambulance Corps, serving with French Army. Taken prisoner by the Germans, July, 1918, and released Jan., 1919. Received P.D. degree, 1917.

**\*Jamea Watson Kephart, P.D.**

*Thes.*, Tinctura Iodi.  
Died while in the service.

**Frank Martin Kling, P.D.**

*Thes.*, White Portland Cement.  
Retail pharmacist. Served as Chief Pharmacist's Mate. in U. S. N.  
*Ad.*, Allentown, Pa.

**Dixon Gorgas Kitzmiller, Jr., P.D.**

*Thes.*, The Suspension and Use of Mineral Oils.  
Mgr. for F. S. Githens.  
*Ad.*, 213 Irving Avenue, Atlantic City, N. J.

**Paul Edgar Klucher, P.D.**

*Thes.*, Cascara Sagrada.  
*Ad.*, 524 N. 16th Street, Harrisburg, Pa.

**Niles Amadus Knauss, P.C.**

*Thes.*, Soft Soap from Cottonseed Oil.  
Retail pharmacist. Served in U. S. A., Camp Zachary Taylor, Ky.  
*Ad.*, Moores, Pa.

**William Charles Kohnle, P.D.**

*Thes.*, The Utilization of the Cotton Stalk in the Manufacture of Paper Pulp.  
*Ad.*, 4326 N. 8th Street, Phila., Pa.

**William Sidea Koller, P.D.**

*Thes.*, Microscopical Characteristics of Hyoscyamus.  
Mgr., Libhart Drug Co. Course in Italian, Bact. and Sanitary Engineering. Served in Med. Dept., U. S. A., Camp Meade, and Army Med. Sch., Washington, D. C. Received Certificate of Proficiency in Bacteriology and in Clinical Chemistry, P. C. P., 1921.  
*Ad.*, Mechanicsburg, Pa.

**Claude Spencer LaDow, P.D.**

*Thes.*, Ichthyol.  
*Ad.*, Wayne, Pa.

**Mehner Lander, P.D.**

*Thes.*, Mel.  
*Ad.*, 8 Madison Street, Princeton, N. J.

**Eugene Stanton Latta, P.D.**

*Thes.*, Leather.  
Served in U. S. N., Newport, R. I.  
*Ad.*, Parkesburg, Pa.

**Robert Allen Levy, P.C.**

*Thes.*, The Venereal Diseases and Their Relation to Public Health.  
Retail pharmacist. Received P.D. degree, 1916.  
*Ad.*, Pennsburg, Pa.

**Robert Franklin Ligan, P.C.**

*Thes.*, The Steel Industry.  
Retail pharmacist. Served in Med. Dept., U. S. A., 28th Div., A. E. F. Received P.D. degree, 1917, and Certificate in Bacteriology, P. C. P., 1915.  
*Ad.*, 189 S. Front Street, Steelton, Pa.

**Frank Aloysius Loehle, P.D.**

*Thes.*, Fertilizers.  
Received Certificate in Bacteriology, P. C. P., 1914. Served in U. S. A., Med. Dept., Base Hosp., No. 1.  
*Ad.*, 7th and Lehman Streets, Lebanon, Pa.

**George Lulie, P.D.**

*Thes.*, Philadelphia Sewerage Disposal Plant.  
Received Certificate in Bacteriology, P. C. P., 1915.  
*Ad.*, 4608 D Street, Phila., Pa.

**Sharon Tyndale McCloakey, P.D.**

*Thes.*, Modified Gutzeit's Test for Arsenic.  
*Ad.*, Wayne, Pa.

**James Harry Magowan, P.D.**

*Thes.*, The Manufacture of Glass.  
Bond salesman. Served in U. S. A. during World War.  
*Ad.*, Kane, Pa.

**Paul Marcus Pfeiffer Merner, P.C.**

*Thes.*, Liquor Potassii Arsenitis.  
Student in Chem. Engineering Course, Stanford Univ. Received Certificate in Bacteriology, P. C. P., 1914.  
*Ad.*, P. O. Box 137, Stanford Univ., Cal.

**Leonardo Antonio Miceli, P.D.**

*Thes.*, Alcohol and Its Uses.  
*Ad.*, 13th and Wharton Streets, Phila., Pa.

**Thomas Gilbert Miller, P.C.**

*Thes.*, Serpentina.  
Retail pharmacist. Served in Med. Dept., Aviation Section, U. S. A., Fort Oglethorpe, Ga.  
*Ad.*, Latrobe, Pa.

- Charles Franklin Moyer, P.D.**  
*Thes.*, Hairs of Rhus Glabra and Rhus Typhina.  
 Mgr. American Medicine Co., Allentown, Pa.  
 Served as Recruiting Agt., U. S. Merchant Marine.  
*Ad.*, Slatington, Pa.
- Edward Vincent Myer, P.D.**  
*Thes.*, Potassium Hydroxide.  
 Pharmacist. Served in Med. Dept., U. S. A.,  
 68th Artillery, with A. E. F. in France.  
*Ad.*, 222 E. Gravers Lane, Phila., Pa.
- Robert Lester Myers, P.D.**  
*Thes.*, Prescription Precipitation.  
 Pharmacist. Served in U. S. A. with 305th Am-  
 bulance Corps, 77th Div., with A. E. F. in France.  
*Ad.*, Monument Place, Lock Haven, Pa.
- William Edgar Nelson, P.D.**  
*Thes.*, Oleomargarine.  
 Pharmacist for Hay Drug Co. Enlisted in 18th  
 Reg. Nat'l Guard of Penna. Served with 111th  
 Inf. 28th Div., U. S. A., with A. E. F. in France.  
 Course in nat. med., pharmacy, chemistry, etc.,  
 in University of Toulouse, Toulouse, France.  
*Ad.*, 30 6th Street, DuBois, Pa.
- Charles Adrian Pennock, P.D.**  
*Thes.*, Salesmanship.  
 Sales manager for Richard Hudnut. Served in  
 U. S. A. as 1st Lieut. F. A.  
*Ad.*, 113 West 18th Street, New York City.
- Charles William Pepper, P.D.**  
*Thes.*, Sterilization.  
*Ad.*, Ashland, Pa.
- Earle Charles Phillips, P.D.**  
*Thes.*, Ampoules.  
 Retail pharmacist. Mem. I. O. O. F.; K. of P.;  
 F. O. S. of A.  
*Ad.*, Hatboro, Pa.
- Garland Blair Potterfield, P.D.**  
*Thes.*, Relation Between Phenol Content and  
 Germicidal Power.  
 Retail pharmacist. Received Certificate in Bacteri-  
 ology, P. C. P., 1914.  
*Ad.*, Charleston, West Va.
- Frank Jerome Reddon, P.D.**  
*Thes.*, The Behavior of Starch toward Certain  
 Reagents.  
 Retail pharmacist.  
*Ad.*, Susquehanna, Pa.
- Mark Rigg, P.C.**  
*Thes.*, Cotton Culture.  
 Retail pharmacist.  
*Ad.*, 22nd and Market Streets, Phila., Pa.
- Gerald John Ruddy, P.C.**  
*Thes.*, The Cultivation of American Ginseng.  
 Retail pharmacist. Served in U. S. Naval Hosp.  
 Corps.  
*Ad.*, 174 Dana Street, Wilkesbarre, Pa.
- \*Vaughn Ross Rupert, P.D.**  
*Thes.*, Pasteurization of Milk.  
 Pharmacist for J. P. Rothermel, Lewistown, Pa.  
 Served in U. S. A. as 2nd Lieut. Ord. Dept. De-  
 ceased, March 22, 1920.
- George Woodward Samsel, P.D.**  
*Thes.*, The Tanning Industry.  
 Retail pharmacist.  
*Ad.*, Portage, Pa.
- Bernard Samuels, P.D.**  
*Thes.*, The Coloration of Suprarenine Solutions.  
 Dealer in electrical supplies. Retail pharmacist  
 until 1917.  
*Ad.*, 118 N. Ruby Street, Phila., Pa.
- Wesley Melvin Saylor, P.D.**  
*Thes.*, The Standardization of Drugs by the Use  
 of Living Plants.  
 Served in U. S. N.  
*Ad.*, 1663 E. 73rd Street, Cleveland, Ohio.
- Lewis Cass Scheffey, P.D.**  
*Thes.*, Pollen Grains in Relation to Hay Fever.  
 Res. Phys. Jeff. Hosp., Phila., Pa. Graduated in  
 medicine, Jeff. Med. College, Asst. Pharmacist,  
 Jeff. Hosp. Pvt. Jeff. Med. College Unit  
 S. A. T. C.  
*Ad.*, Jefferson Hospital, Phila., Pa.
- Walter Raymond Scher, P.C.**  
*Thes.*, Compound Elixir of Glycerophosphates.  
 Retail pharmacist.  
*Ad.*, 1538 Venango Street, Phila., Pa.
- Helene Edith May Schofield, P.D.**  
*Thes.*, Greaseless Cold Cream.  
 Asst. Roentgenologist, Atlantic City Hosp., Atlan-  
 tic City, N. J.  
*Ad.*, 6 S. Montpelier Avenue, Atlantic City, N. J.
- William Watts Schollenberger, P.D.**  
*Thes.*, Legislation vs. Habit-Forming Drugs.  
*Ad.*, Mt. Penn, Pa.
- Charles Romey Silva, P.C.**  
*Thes.*, Essential Oils from a Practical Point of  
 View.  
*Ad.*, 1503 Clearfield Street, Phila., Pa.
- Harry Lanch Smlth, P.D.**  
*Thes.*, Petrolatum Liquidum.  
 Retail pharmacist. Received Certificate in Bacteri-  
 ology, P. C. P., 1915.  
*Ad.*, 1324 Allegheny Street, Jersey Shore, Pa.
- William Henry Snyder, P.C.**  
*Thes.*, Production of Industrial Alcohol from  
 Potatoes.  
 Pharmacist for Snavely Drug Co. Served in U.  
 S. A. in Gen. Hosp. No. 17 and No. 31 in charge  
 of disp. Received P.D. degree, 1917.  
*Ad.*, 1023 Willow Street, Lebanon, Pa.
- \*James Samuel Soyles, P.D.**  
*Thes.*, Sodium Chloride.  
 Deceased, August 17, 1917.
- Chester Arthur Spangler, P.D.**  
*Thes.*, Drug Store Efficiency.  
 Retail pharmacist.  
*Ad.*, Littlestown, Pa.
- Stephen Treverton Spargo, P.D.**  
*Thes.*, Bituminous Coal.
- Robert James Stewart, P.D.**  
*Thes.*, The Misuse of Bichloride of Mercury and  
 Its Prevention.  
 Served as Sgt., U. S. A., Camp Gordon, Ala.
- Henry Horace Stiles, P.D.**  
*Thes.*, Tooth Powders.  
 Mgr. music store. Formerly retail pharmacist.  
*Ad.*, Moorestown, N. J.
- Harvey E. Stouffer, P.D.**  
*Thes.*, Disinfectants as a Profitable Sideline for  
 the Retail Pharmacist.  
 Mgr. for S. B. Davis.  
*Ad.*, 27th and Dickinson Streets, Phila., Pa.
- Carroll Burrill Suminsby, P.D.**  
*Thes.*, Pathological Stains.  
 Pharmacist for George M. Schettler.
- William Randolph Tenney, P.D.**  
*Thes.*, Hamamelis.  
 Retail pharmacist. Served as Ensign in U. S. N.  
*Ad.*, 91 Main Street, Brockton, Mass.
- John Thomas, P.D.**  
*Thes.*, Latex of Wahoo.  
 Mgr. for Wm. Dalin. Served as Sgt. Sanitary  
 Dept. 310th F. A., 79th Div., U. S. A.  
*Ad.*, 539 E. Cambria Street, Phila., Pa.
- Charles Isaac Tomlin, P.D.**  
*Thes.*, Petroleum.  
 Served in U. S. A., 82nd Div.  
*Ad.*, 5140 Chester Avenue, Phila., Pa.



**\*Samuel Aaron Trethewey, P.D.**

*Thes.*, Cacao Theobroma.  
Retail pharmacist, Boyertown, Pa. Deceased,  
April 4, 1921.

**Harry David Wagner, P.D.**

*Thes.*, The Dispensing of Eye Prescriptions.  
Pharmacist for George B. Evans. Served in U.  
S. A. with A. E. F. in France.  
*Ad.*, 5201 Whitby Avenue, Phila., Pa.

**Esther Weinberg, P.D.**

*Thes.*, The Manufacture of Rubber.  
*Ad.*, 7th and Morris Streets, Phila., Pa.

**Albert Maurice Weiner, P.D.**

*Thes.*, Santonica as Found Upon the Market.  
*Ad.*, 20th and Tioga Streets, Phila., Pa.

**Harold Edwin Werkhelsaer, P.C.**

*Thes.*, Paraffin.  
Pharmacist, Weaver's Pharmacy. Received P.D.  
degree, 1916.  
*Ad.*, 713 Bushkill Street, Easton, Pa.

**Harry Randolph Whitmlre, P.D.**

*Thes.*, Tanning of Sole Leather—Liquor Process.  
Received Certificate in Bacteriology, P. C. P.,  
1915.  
*Ad.*, 524 Eric Avenue, Renovo, Pa.

**Joseph Livingston Wilder, P.D.**

*Thes.*, Vanilla Extract.  
*Ad.*, 12th and Mt. Vernon Streets, Phila., Pa.

**David Boyer Witman, P.D.**

*Thes.*, Santonica.  
Received Certificate in Bacteriology, P. C. P.,  
1916.  
*Ad.*, 6th and Walnut Streets, Lebanon, Pa.

**Gaile Edgar Wolfe, P.D.**

*Thes.*, Hydrastis Canadensis.  
Salesman, Wm. R. Warner and Co. Commis-  
sioned 2nd Lieut. Fort Oglethorpe, Ga. Trans-  
ferred to 87th Div., 336th Machine Gun. Served  
with A. E. F. in France. Course in French at  
Alliance Francaise, Paris. Course in bact. at the  
Sorbonne Univ., Paris.  
*Ad.*, Wapakoneta, Ohio.

**Special Students.**

**Robert Truman Beardaley.**

Received Certificate of Proficiency in Chemistry.

**John Brady Evana.**

Received Certificate of Proficiency in Chemistry.  
*Ad.*, Care of Union Switch and Signal Co., Swiss-  
vale, Pa.

**Norman L. Force.**

Received Certificate in Bacteriology.

**Gilbert Leon Harvey.**

Received Certificate in Bacteriology. Received  
Certificate of Proficiency in Food and Drug  
Course, 1917, and in Physiological Assaying, 1919.

**Thomas Danforth Hughes.**

Received Certificate of Proficiency in Chemistry.  
*Ad.*, 818 Ashland Avenue, Niagara Falls, N. Y.

**Lloyd Harry Patten.**

Received Certificate in Bacteriology.

**Leroy Ludwig Pennypacker.**

Received Certificate in Bacteriology.

**Paul S. Rodgers.**

Received Certificate of Proficiency in Chemistry.  
Analytical and Research Chemist, Penna. R. R.  
Co. Established and conducted training school  
for enlisted chemists in U. S. A., Ord. Dept., at  
Syracuse Univ.  
*Ad.*, Mechanicsburg, Pa.

**Jay A. Smith.**

Received Certificate in Bacteriology.

**Winfield Scott Taylor, Jr.**

*Thes.*, Electro Deposit on Non-Metallic Substances.  
Received Certificate for course in pharmacy. Re-  
tail pharmacist. Served in Med. Corps, U. S. A.  
*Ad.*, Broad and Perry Streets, Trenton, N. J.

**J. Archibald Wolever.**

Received Certificate of Proficiency in Chemistry.  
Chemist, Jessup and Moore Paper Co.  
*Ad.*, Elkton, Maryland.

**William Henry Woodring.**

Received Certificate in Bacteriology.

**1916**

**Rudolph Eric Alff, P.D.**

*Thes.*, Bacteriology as an Asset to the Phar-  
macist.  
Instr. Baylor Univ. College of Pharmacy. Formerly  
Clinical Laboratorian, Amer. Stomach Hosp., Phila.,  
Pa. Served in U. S. A. as Sgt., 34th Inf., 86th  
Div. Received Certificate in Bacteriology, P. C.  
P., 1916.  
*Ad.*, Columbus, Wis.

**Walter Franklin Ankerbrand, P.D.**

*Thes.*, American Ginseng.  
Retail pharmacist.  
*Ad.*, 5138 N. Carlisle Street, Phila., Pa.

**Lew Wallace Beecher, P.D.**

*Thes.*, Photographic Supplies—A Valuable Ad-  
junct to Pharmacy.  
Pharmacist. Masonic affiliation. Served in U.  
S. N., as Pharmacist's Mate.  
*Ad.*, 1214 S. 56th Street, Phila., Pa.

**\*Arthur Hartman Belles, P.D.**

*Thes.*, Ipecacuanha.  
Deceased, September 27, 1918, while in the service  
in France.

**Ada Malvna Bernstein, P.D.**

*Thes.*, An Italian Drug Store in an American City.  
Pharmacist, Women's College Hospital.  
*Ad.*, 5820 Larchwood Avenue, Phila., Pa.

**Ramon Blanco Maa, P.D.**

*Thes.*, Cork.  
Pharmacist and sugar cane grower. Received  
Certificate in Bacteriology, P. C. P., 1916.  
*Ad.*, Jiguani, Oriente, Cuba.

**Louis Nathan Blauatein, P.D.**

*Thes.*, Bees Wax.  
Retail pharmacist. Served in U. S. N. on trans-  
port.  
*Ad.*, 2300 W. Oxford Street, Phila., Pa.

**Charles Julita Blum, P.D.**

*Thes.*, Extraction of Asparagin from Althaea.  
Pharmacist.  
*Ad.*, 2314 N. Woodstock Street, Phila., Pa.

**Joseph Nathaniel Bongiovanni, P.D.**

*Thes.*, Pepsin.  
Retail pharmacist.  
*Ad.*, 601 Washington Avenue, Phila., Pa.

**Charles E. Bosserman, P.D.**

*Thes.*, Manna.  
Retail pharmacist. Served in U. S. A. as Sgt.,  
Med. Corps. Received Certificate in Bacteriology,  
P. C. P., 1916.  
*Ad.*, Newport, Pa.

**Leater Yoder Brendle, P.D.**

*Thes.*, Urinalysis.  
Retail pharmacist. Served in U. S. N. during  
World War.  
*Ad.*, 5th and Main Streets, Darby, Pa.

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- Paul E. Buoymaster, P.D.**  
*Thes.*, Lime Stone and Lime.
- Fred LeRoy Carn, P.D.**  
*Thes.*, Embalming and Embalming Fluid.  
Pharmacist. Served in France with 1st Gas Reg., U. S. A.  
*Ad.*, 800 24th Street, Altoona, Pa.
- Artimus Bogan Cash, P.D.**  
*Thes.*, Bile and the Bile Salts.  
*Ad.*, 903 E. 12th Street, Winston-Salem, N C.
- John Edward Collins, P.D.**  
*Thes.*, Brass.  
*Ad.*, Troy, Pa.
- John Coldsmith Cravens, Jr., P.C.**  
*Thes.*, Castor-Jell.  
Received P.D. degree, 1917.  
*Ad.*, 1127 E. Susquehanna Avenue, Phila. Pa.
- Ellerslie Wallace Davis, P.D.**  
*Thes.*, Test for Methyl Alcohol in Ethyl Alcohol.  
*Ad.*, 6038 Hazel Avenue, Phila., Pa.
- William John Dawe, P.D.**  
*Thes.*, Limestone.  
Retail pharmacist. Served in U. S. A. as Sgt., Med. Dept.  
*Ad.*, Pen Argyl, Pa.
- Samuel Harry Depew, Jr., P.D.**  
*Thes.*, Liquefaction of Gases.  
Retail pharmacist. Served in France with 20th Balloon Co., U. S. A.  
*Ad.*, 125 E. Broad Street, Tamaqua, Pa.
- Owen Philip Eaches Dilatush, P.D.**  
*Thes.*, The Pineal Gland.  
Professional pharmacist. Received Certificate in Bacteriology, P. C. P., 1916.  
*Ad.*, 411 S. Cedar Street, Apt. D., Spokane, Wash.
- Chalmer John Durand, P.D.**  
*Thes.*, Estimation of Sulphur in Pyrites.  
Served in Gen. Hosp. No. 10.  
*Ad.*, 121 S. 14th Street, Easton, Pa.
- Karl Francis Ehmman, P.C.**  
*Thes.*, Glycyrrhiza.  
Analytical chemist. Hance Bros. and White. Mem. Amer. Chem. Soc.; A. Ph. A. Served in U. S. A. with 315th Inf., 79th Div., A. E. F. Received P.D. degree, 1917.  
*Ad.*, 5015 N. 4th Street, Phila., Pa.
- Charles Kohlman Eisman, P.D.**  
*Thes.*, Hamamelis.  
Retail pharmacist.  
*Ad.*, 3rd and Columbia Avenue, Phila., Pa.
- Luisa Lutgarda Ecanaverino Pinetro, P.D.**  
*Thes.*, Anacardium Occidentale.  
Retail pharmacist. Mem. Colegio Farmaceutico de Oriente; 4th Med. Congress of Cuba.  
*Ad.*, San Jeronimo (a) 28 Santiago, Cuba.
- Maria Dolores Escanaverino Pinetro, P.D.**  
*Thes.*, Theobroma Cacao.  
Retail pharmacist. Mem. A. Ph. A.; Colegio de Farmaceutico de Oriente; 4th Med. Congress of Cuba. Prof. of Chemistry, Physics and Nat. Hist. in Oriente Normal School.  
*Ad.*, Sanchez Hechavarria (a) 28, Santiago, Cuba.
- Joseph Aloysius Ferko, P.D.**  
*Thes.*, Vanilla and Its Extract.  
Retail pharmacist. Mem. U. S. Naval Reserves.  
*Ad.*, 5th Street and Glenwood Avenue, Phila., Pa.
- Adam Hastings Fitzkee, P.D.**  
*Thes.*, Disinfection and Disinfectants.  
Instr. Operative Pharmacy, at P. C. P., 1916-17. (See page 455.)  
*Ad.*, 1043 N. Penna. Street, Indianapolis, Ind.
- James Walls Gillfillan, Jr., P.D.**  
*Thes.*, Emetine.  
Retail pharmacist.  
*Ad.*, Bar Harbor, Me.
- Adolph Addie Goldblum, P.D.**  
*Thes.*, Aqua Hydrogenii Dioxidi.  
Retail pharmacist. Served in U. S. N. with Bombing Squad in France.  
*Ad.*, 6100 Walton Avenue, Phila., Pa.
- Jacob Edison Good, P.D.**  
*Thes.*, Tooth Powders.  
Retail pharmacist. Optometrist. Mem. Harrisburg Chamber of Commerce. Elected Burgess of New Cumberland. Served in U. S. N. during World War. Received Certificate in Bacteriology, 1915.  
*Ad.*, New Cumberland, Pa.
- Earl Stouffer Gottshall, P.D.**  
*Thes.*, Oleum Arachidis.  
Served in U. S. A., Camp McArthur, Tex.  
*Ad.*, Care of Bickley's Drug Store, Chester, Pa.
- John Russell Graham, P.D.**  
*Thes.*, Liquor Antisepticus.  
*Ad.*, Box 345, Wheeling, West Va.
- Seth Parker Grandy, P.C.**  
*Thes.*, Influenza.  
Rancher. Received B.S. degree, Univ. of Mich. In charge of dispensary, Camp Greenleaf Annex, Fort Oglethorpe. Received P.D. degree, 1917. Received Certificate in Bacteriology, P. C. P., 1916.  
*Ad.*, Box 153, Mesa, Ariz.
- Raymond Green, P.D.**  
*Thes.*, Tinctura Iodi.  
Served with 312th Artillery, Camp Meade, Md.  
*Ad.*, 1160 S. 52nd Street, Phila., Pa.
- Harry Raymond Greenleaf, P.D.**  
*Thes.*, The Cohesion Figures of True and Synthetic Volatile Oils.  
Mgr. Sides Drug Store. Served as chemist in lab. of Med. Supply Depot, New York.  
*Ad.*, Downington, Pa.
- Joseph Raymond Guarini, P.D.**  
*Thes.*, Nitric Acid.  
Pharmacist. Mem. Loyal Order of Moose.  
*Ad.*, 15th and Reed Street, Phila., Pa.
- Warren Rogers Guest, P.D.**  
*Thes.*, The Manufacture of Gun Powder.  
Pharmacist for George M. Andrews and Son. Received Certificate in Clinical Chemistry, P. C. P., 1921.  
*Ad.*, Woodstown, N. J.
- John Jay Gunn, P.D.**  
*Thes.*, Household Disinfection.  
Pharmacist. Formerly foreman of ship construction at Hog Island.  
*Ad.*, 5511 Larchwood Avenue, Phila., Pa.
- George Leonard Heiges, P.D.**  
*Thes.*, Glass—Ancient and Modern.  
Pharmacist. Served in U. S. N. Base Hosp. No. 5 at Brest and aboard U. S. S. Prometheus.  
*Ad.*, Manheim, Pa.
- Laurence William Helweg, P.C.**  
*Thes.*, Coconut Oil.  
With Aschenbach and Miller, Inc., wholesale druggists. 2nd Lieut., U. S. School of Military Aeronautics.  
*Ad.*, 860 N. 5th Street, Phila., Pa.
- William Hendrie, P.D.**  
*Thes.*, Acetylene.  
Pharmacist. Served with Canadian Army in Canada and Siberia.  
*Ad.*, 3813 Sharp Street, Wissahickon, Pa.
- Clayton Brooks Hill, P.D.**  
*Thes.*, Paper Manufacture.  
Retail pharmacist. Served with U. S. A. in West Indies.  
*Ad.*, 553 Market Street, Johnsonburg, Pa.

**George Edgar Hirzel, P.D.**

*Thes.*, Emetine.  
Retail pharmacist. Served in U. S. A., 105th Depot Brigade, Camp Lee, Va.  
*Ad.*, 406 York Avenue, Lansdale, Pa.

**Edward James Hughes, P.D.**

*Thes.*, Colloids and Colloidal Solutions.  
Instructor in Chemistry, P. C. P. (See page 450.)  
*Ad.*, 5641 N. 2nd Street, Phila., Pa.

**William H. Ibach, Jr., P.D.**

*Thes.*, Cellulose and Its Uses.  
Pharmacist. Served in infirmary at Camp Greenleaf, Ga.  
*Ad.*, Mt. Penn, Pa.

**Rlenzi Jamea, P.D.**

*Thes.*, Soaps.  
Retail pharmacist.  
*Ad.*, 2562 N. 29th Street, Phila., Pa.

**Vartan Mardiros Kalusdian, P.C.**

*Thes.*, Perfume and Its Preparation.  
Served in U. S. A., Med. Dept., Camp Greenleaf, Ga.  
*Ad.*, 102 S. 61st Street, Phila., Pa.

**Agatha E. Karnauskas, (Mrs. Rnnk), P.D.**

*Thes.*, Store Service.  
Served in Base Hosp. Lab., Camp Hancock, Ga.  
*Ad.*, Mt. Joy, Pa.

**Norman David Keefer, P.D.**

*Thes.*, Colloidal Suspensoids.  
*Ad.*, State Sanatorium, Mont Alto, Pa.

**Robert Russell Keely, P.D.**

*Thes.*, The Harrison Act.  
Retail pharmacist. Served as Sgt., 1st Class, Med. Dept. U. S. A., Base Hosp., Camp Meade, and in Washington, D. C.  
*Ad.*, 56 Broadway, Milton, Pa.

**Samuel Peter Kindt, P.D.**

*Thes.*, Cork—Its Origin and Uses.  
Pharmacist. Served in U. S. A. as Pvt. and as Sgt. in Med. Sup. Detach. of Sanitary Corps.  
*Ad.*, 4800 Westminster Avenue, Phila., Pa.

**Jacob Harris Kling, P.C.**

*Thes.*, Filter Paper.  
Retail pharmacist. Served in U. S. A. with Co. L, 315th Inf., A. E. F. Received P.D. degree, 1917.  
*Ad.*, 3849 Lancaster Avenue, Phila., Pa.

**Frank Stanley Korncavitz, P.D.**

*Thes.*, Liquor Picis Carbonis.  
Retail pharmacist. Served as Sgt. in U. S. A., Med. Dept.  
*Ad.*, 280 W. Main Street, Nanticoke, Pa.

**John Rabold Kurtz, P.D.**

*Thes.*, Ammonium Carbonate.  
Served as Lieut., U. S. A., Inf., Camp Meade, Md.  
*Ad.*, 9th and Penn Streets, Reading, Pa.

**Matthew Ivey Lasley, P.D.**

*Thes.*, Sodium Bromide.  
Served in U. S. A., 317th Machine Gun Btn., with A. E. F.  
*Ad.*, Germantown and Chelton Avenues, Phila., Pa.

**Isadore Lax, P.D.**

*Thes.*, Acidum Hydrochloricum and Acidum Hydrochloricum Dilutum.  
Retail pharmacist.  
*Ad.*, 1438 N. Alvarado Street, Los Angeles, Cal.

**John Amzi LeBar, P.D.**

*Thes.*, Dialysis and Dialyzed Iron.  
Served in U. S. N. as Pharmacist's Mate, Phila. Navy Yard.  
*Ad.*, 550 Scott Street, Stroudsburg, Pa.

**Irvin Elias Lehr, P.D.**

*Thes.*, Pyrethrum.  
Served in U. S. A., 1st Div., A. E. F. and A. of O. Masonic affiliation.  
*Ad.*, 3 E. Sunbury Street, Shamokin, Pa.

**Clifford Lenninger, P.C.**

*Thes.*, Tincture of Strophanthus.  
Pharmacist. Served in U. S. N. R. F. as Pharmacist's Mate, 1st Class, Mare Is. Yard Disp.  
*Ad.*, Cody, Wyo.

**Albert Lerner, P.D.**

*Thes.*, Cacodylic Acid.  
Retail pharmacist. Served in U. S. A., Inf., Med. Corps, as recruit examiner and instr. 1st aid A. E. F.  
*Ad.*, 5124 Race Street, Phila., Pa.

**Isadore Joseph Lindenbaum, P.D.**

*Thes.*, Monobasic Sodium Phosphate.  
Served in U. S. A., Med. Dept., 154th Depot Brigade, Camp Meade, Md.  
*Ad.*, 3032 Germantown Avenue, Phila., Pa.

**Henry Lischer, P.D.**

*Thes.*, Action of Free Iodine on the Upper Air Passages.  
Pharmacist. Received Certificate in Bacteriology, 1915.  
*Ad.*, 220 W. 2nd Street, Davenport, Iowa.

**Leroy Oliver Lohrman, P.D.**

*Thes.*, Coca.  
Served in U. S. A., Camp Lee, Va.  
*Ad.*, 1004 Monroe Street, Wilmington, Del.

**Harry Lounsbury, P.D.**

*Thes.*, Creosote Water.  
Retail pharmacist.  
*Ad.*, Penns Grove, N. J.

**Maurice Auguatine Luther, P.C.**

*Thes.*, Mescal.  
*Ad.*, Ebensburg, Pa.

**Harold McAleer, P.D.**

*Thes.*, Insecticides and Fungicides.  
Retail pharmacist. Served in Inf., Med. Corps, and Artillery, U. S. A.  
*Ad.*, 243 N. 54th Street, Phila., Pa.

**Florence M. Raphael McGarrity, P.C.**

*Thes.*, Advertising.  
Instr. in Bact. at Univ. of Penna. Formerly Bacteriologist for H. K. Mulford Co. Served in U. S. A. Med. Corps as 1st Asst. Bacteriologist. Received P.D. degree, 1921.  
*Ad.*, 936 N. 48th Street, Phila., Pa.

**John Frederick McGinnis, P.D.**

*Thes.*, Glycerrhiza.  
Retail pharmacist. Served as Sgt. on Mexican Border and as Sgt. 1st class, with U. S. A. in France.  
*Ad.*, 1531 N. 56th Street, Phila., Pa.

**Oacar Paul Mallard, P.D.**

*Thes.*, Acidum Hydrochloricum.  
Retail pharmacist.  
*Ad.*, 6052 Market Street, Phila., Pa.

**John Albert Martin, P.D.**

*Thes.*, Citric Acid by Fermentation.  
*Ad.*, 1068 9th Street, Denver, Colo.

**Clark McCord Miller, P.D.**

*Thes.*, The Efficiency of Label Pastes.  
Served in U. S. A., 319th Field Hosp., with A. E. F.

**Edward Paul Miller, P.D.**

*Thes.*, Enteric Pills and Capsules.  
Retail pharmacist. Served with A. E. F. in France in Field Hosp. No. 3, 28th Div.  
*Ad.*, Montgomery, Pa.

**Robert Jacob Miller, P.D.**

*Thes.*, Sterilization of Tooth Brushes and Eye Droppers.  
Pharmacist. Served with A. E. F. in France.  
*Ad.*, State College, Pa.

**\*Clayton Henry Mouer, P.D.**

*Thes.*, Magma Magnesiae.  
Deceased, October 17, 1916.



**Vincent Patrick O'Neill, P.D.**

*Thes.*, Drug Store Advertising.  
Served as Sgt., U. S. A., with A. E. F.

**Emmett Edward Packer, P.D.**

*Thes.*, Citrus Trifoliata.  
Retail pharmacist.  
*Ad.*, 58 N. 18th Street, Harrisburg, Pa.

**John Gwinner Pascoe, P.D.**

*Thes.*, Glycerin.  
Served in U. S. N. Hosp. School, Newport, R. I.  
*Ad.*, Custom House, Norfolk, Va.

**Preston Arlington Paul, P.D.**

*Thes.*, The Making of Rubber Goods.  
Served in U. S. N., Newport, R. I.  
*Ad.*, 218 Thompson Street, Jersey Shore, Pa.

**Howard Lewis Peters, P.D.**

*Thes.*, Modern Hard Soaps.  
*Ad.*, 337 E. Chelton Avenue, Germantown, Phila., Penna.

**Joseph William Piekarski, P.D.**

*Thes.*, Lime Water, U. S. P.  
Mfg. pharmacist with Polonia Medicine Co. Enlisted in Bacteriological Corps.  
*Ad.*, Wayne Avenue and Dennie Street, Phila., Penna.

**John Wolf Porr, P.D.**

*Thes.*, Colleges of Pharmacy in the United States.  
Retail pharmacist. Mem. Kappa Psi Frat.; B. P. O. E. Served in U. S. A. 28th Div., A. E. F.  
*Ad.*, 139 N. Front Street, Steelton, Pa.

**Alpheus William Resser, P.D.**

*Thes.*, The Assay of Lime Water.  
Representative, Parke, Davis and Co. Served in U. S. A. as pharmacist with Base Hosp. No. 38 and 216.  
*Ad.*, Care of Parke, Davis and Co., Baltimore, Md.

**Paul Edward Rhoads, P.D.**

*Thes.*, Magma Magnesiae.  
*Ad.*, 2nd and Main Streets, Camden, N. J.

**Arthur Rovner, P.D.**

*Thes.*, Essence of Peppermint.  
*Ad.*, Carmel, N. J.

**Felix Enrique Sanchez Mestril, P.D.**

*Thes.*, Tobacco.  
Bacteriologist and chemist. Received Certificate in Bacteriology, P. C. P., 1916.  
*Ad.*, Camaguey, Cuba.

**Joseph Sarlo, P.D.**

*Thes.*, Vanilla.  
*Ad.*, 5717 Baynton Street, Germantown, Phila., Penna.

**Edmund Morris Scheible, P.D.**

*Thes.*, Solubility of Sulphur in Carbon Disulphide.  
Pharmacist for Gilbert Pharmacy.  
*Ad.*, 429 S. 2nd Street, Chambersburg, Pa.

**Lawrence Brown Schlegel, P.D.**

*Thes.*, Phenolphthalein and Its Many Uses.  
Pharmacist for T. B. Smith. Served in Med. Dept. U. S. A.  
*Ad.*, 101 Cricket Avenue, Ardmore, Pa.

**John Woodburn Searight, P.D.**

*Thes.*, Ergot and Its Uses.  
Pharmacist. Served in Gen. Hosp. No. 2, Ft. McHenry, Md.  
*Ad.*, 7 N. Hanover Street, Carlisle, Pa.

**Robert Lawrence Seitzinger, P.D.**

*Thes.*, Saturated Solutions.  
Served in U. S. A., Camp Lee, Va.  
*Ad.*, Freeland, Pa.

**Ally Selim, P.D.**

*Thes.*, Caradaih (Abutilon).

**James Walter Shaffer, P.D.**

*Thes.*, Hydrastis Canadensis.  
Received Certificate in Bacteriology, P. C. P., 1917. Served in U. S. A. 313th Sanitary Detachment., with A. E. F.  
*Ad.*, 518 N. 8th Street, Lebanon, Pa.

**\*Guy Warren Showers, P.D.**

*Thes.*, Chinese Wood-Oil.  
Killed in France May 29, 1918, while serving as Pvt. in Ambulance Corps No. 12. Received Certificate in Bacteriology, P. C. P. 1915.

**\*Dole McClure Smith, P.D.**

*Thes.*, Prescription Dispensing.  
Died in France while in the service, December 27, 1918. Received Certificate in Bacteriology, P. C. P., 1916.

**William George Smith, P.D.**

*Thes.*, Salol Coating of Pills.  
Pharmacist for Cameron Drug Co. Served in U. S. A., Camp Lee, Va.  
*Ad.*, Emporium, Pa.

**Ernest Harley Sonne, P.D.**

*Thes.*, Iodine Petroxolin.  
Pharmacist for Harvey and Carey. Served as Sgt., 1st Class, Med. Dept., U. S. A.  
*Ad.*, Oil City, Pa.

**Maxwell Wensel Steel, P.D.**

*Thes.*, Acacia and the Official Mucilage.  
Retail pharmacist.  
*Ad.*, Huntingdon, Pa.

**Abraham Mordecai Stein, P.D.**

*Thes.*, Calamus.  
*Ad.*, 700 S. 19th Street, Phila., Pa.

**Lewis Gustave Steltzer, P.D.**

*Thes.*, Thermalite.  
With L. D. Caulk Dental Mfg. Co.  
*Ad.*, 1927 Park Street, Harrisburg, Pa.

**Albin Stikarofsky, P.C.**

*Thes.*, Chelidonium.  
Pharmacist. Student at Clark College, Worcester, Mass. Served as Pvt. in U. S. A., Camp Devens, Mass.  
*Ad.*, R. F. D. Winter Street, N. Lexington, Mass.

**Harvey Venton Stokely, P.D.**

*Thes.*, The Manufacture of White Lead.  
Representative of Parke, Davis and Co. in China. Served as Sgt. 1st class, O. T. C., Camp Meade, Maryland.  
*Ad.*, 427 S. 8th Street, Upper Sandusky, Ohio.

**John Wesley Straup, P.D.**

*Thes.*, Solidified Alcohol.  
Retail pharmacist.  
*Ad.*, Centre and Berwick Streets, Easton, Pa.

**James Earle Stuart, P.D.**

*Thes.*, An Intestinal Lubricant.

**Lester Ambrose Suter, P.D.**

*Thes.*, Potassii Bitartras.  
Pharmacist.  
*Ad.*, 2514 8th Avenue, Altoona, Pa.

**Norman Harvey Tagg, P.D.**

*Thes.*, Drug Store Cleanliness.  
Served in U. S. A. as 2nd Lieut., Base Hosp. No. 58, with A. E. F.  
*Ad.*, Littlestown, Pa.

**Harry Carl Thornton, P.D.**

*Thes.*, Liquor Aluminii Acetatis Crudus (Burov's Solution)  
With Maxwell-Chalmers Motor Car Co. Served in U. S. A. during World War.  
*Ad.*, Watsonstown, Pa.

**\*James Albert Togans (Ph.G.), P.D.**

*Thes.*, The Germicidal Power of Emetine and Alcresta Ipecac.  
Veteran of the World War. Deceased, February 1, 1920.

**Oscar George Tucker, P.D.**

*Thes.*, Rheum.  
Retail pharmacist. Served in U. S. A. Med. Corps, 310th F. A., 79th Div. with A. E. F.  
*Ad.*, 1921 E. Birch Street, Phila., Pa.

**Harry Umsted Vandegrift, P.D.**

*Thes.*, Essence of Pepsin.  
Pharmacist for W. H. Fairlamb.  
*Ad.*, P. O. Box 570, Coatesville, Pa.

**William Alexander Wallace, P.D.**

*Thes.*, Plant Hairs and Their Importance.  
Physician. Graduated in medicine, Jeff. Med. College, 1920. Res. Phys. Phila. Gen. Hosp. Enlisted in Medical Reserve Corps.

**Cyrus Albert Waters, P.C.**

*Thes.*, Syrupus Ferri Iodidi.  
Served in U. S. N.  
*Ad.*, 907 Water Street, Newberry, Pa.

**Boyd Weatherford, P.D.**

*Thes.*, Ichthyol—Its Substitution Compounds.  
Pharmacist for John S. Wells. Received Certificate in Bacteriology, P. C. P., 1916.  
*Ad.*, Hustonville, Ky.

**Harry Cornelius Webb, P.D.**

*Thes.*, Herbs.  
Pharmacist. Served as Pvt. in Med. Corps, 304th Engrs., 79th Div., A. E. F.  
*Ad.*, Shrewsbury, Pa.

**Kenneth Weeks, P.D.**

*Thes.*, The Assay of Milk of Magnesia.  
Pharmacist.  
*Ad.*, Bridgeton, N. J.

**Walter Franklin Weidler, P.D.**

*Thes.*, Liqueur Plumbi Subacetatis.  
Pharmacist. Served in U. S. A., Gen. Hosp. No. 38.  
*Ad.*, 501 Market Street, Camden, N. J.

**Elmer Milton Weidner, P.D.**

*Thes.*, The Assay of Aromatic Spirit of Ammonia.  
Received Certificate in Bacteriology, P. C. P., 1915.  
*Ad.*, Birdsboro, Pa.

**Walter Neff Walls, P.D.**

*Thes.*, Show Card Writing and Window Decoration.  
Retail pharmacist.  
*Ad.*, 25th and Federal Streets, Camden, N. J.

**Cecil Semmons Werntz, P.D.**

*Thes.*, Drug Store Side Lines.  
*Ad.*, 1535 Loudon Street, Phila., Pa.

**Benjamin J. Wexlar, P.D.**

*Thes.*, Cacao Butter and Chocolate.  
Retail pharmacist.  
*Ad.*, Broad and Snyder Avenue, Phila., Pa.

**Walter P. Whelan, P.D.**

*Thes.*, Turpentine.  
Soldier. In U. S. A. Ambulance Service. Transferred to Water Supply Lab., Div. of Construction and Forestry. Gassed. Sgt. 1st Class.  
*Ad.*, 5556 Market Street, Phila., Pa.

**Hobart Pryde White, P.D.**

*Thes.*, Hyoscyamus.  
Mgr. Stewart Drug Co. Masonic affiliation.  
*Ad.*, Clearfield, Pa.

**Elwood E. Whitesell, P.D.**

*Thes.*, The Extraction and Analysis of Molasses from Cane Sugar.  
Retail pharmacist.  
*Ad.*, Towanda, Pa.

**John William Wieser (Ph.G.), P.D.**

*Thes.*, Own Preparation Plan.  
With Merck and Co., Mfg. Chemists, Pres. Merck's Chemists Club. Scoutmaster. Sec'y N. Y. Grad. Chapter, Kappa Psi Frat. Mem. Rahway Board of Trade. Received Certificate in Bacteriology, P. C. P., 1916.  
*Ad.*, 119 Lawrence Street, Rahway, N. J.

**Elizabeth May Willard (Mrs. Levis), P.D.**

*Thes.*, Father Time and Pharmacy.  
*Ad.*, Westmont, N. J.

**Clarence Melvin Wolf, P.D.**

*Thes.*, Citric Acid and Citrates.  
Bacteriologist, Penna. R. R. Co. Served in U. S. N. Naval Med. Sch., and on U. S. S. George Washington as Chief Pharmacist's Mate.  
*Ad.*, Nanty Glo, Pa.

**Special Students.**

**Herbert Calvin Brightbill.**

Received Certificate of Proficiency in Chemistry.  
*Ad.*, 6017 Locust Street, Phila., Pa.

**Andrew C. Fayko.**

Received Certificate in Bacteriology.

**Vincent Allen Heinle.**

Received Certificate in Bacteriology.

**Joseph A. Hilton.**

Received Certificate in Bacteriology.

**Louis J. Kleinfeld.**

Received Certificate of Proficiency in Chemistry.  
Chemist, Baugh and Sons Co.  
*Ad.*, R. F. D. 6, Vineland, N. J.

**Louis G. Linford, Ph.G.**

Received Certificate of Proficiency in Food and Drug Course. Received Certificate in Bacteriology, 1914.  
*Ad.*, Pennsgrove, N. J.

**Chester Luther Masser.**

Received Certificates of Proficiency in Chemistry and Bacteriology. Dept. Head, N. Y. Quinine and Chemical Co. Mem. Amer. Chem. Soc.; Soc. of Political and Social Science. Assigned to Bureau of Aircraft, Production Div.  
*Ad.*, 911 S. 60th Street, Phila., Pa.

**John J. Over.**

Received Certificate of Proficiency in Chemistry.  
Chemist, Carnegie Steel Co.  
*Ad.*, 506 Main Street, Irwin, Pa.

**Robert Rowen.**

Received Certificate of Proficiency in Chemistry and in Bacteriology. Chief Chemist, United Fruit Company.  
*Ad.*, Macabi, Oriente, Cuba.

**Mignon Gray Simonin.**

Received Certificate in Bacteriology.

**Sadis Swyers.**

Received Certificate in Bacteriology.

**George W. Tucker.**

Received Certificate of Proficiency in Chemistry.  
Area Supervisor, duPont Dye Works.  
*Ad.*, 73 Cypress Street, Carney's Point, N. J.

**Max M. Waxman.**

Received Certificate of Proficiency in Chemistry.  
*Ad.*, 803 S. 58th Street, Phila., Pa.

**1917**

**Aristides Abslo, Ph.G.**

*Ad.*, Paces Recio, Sta Cruz del Sur, Cuba.

**Elwood C. Adams, Ph.G.**

Pharmacist. Served in U. S. A. in France, with 335th Inf. Field Hosp.  
*Ad.*, 27 N. 3rd Street, Shamokin, Pa.

# 640 First Century of the Philadelphia College of Pharmacy

- Ernest Watta Adama, P.D.**  
*Thes.*, Application of Purity Tests.  
*Ad.*, Burlington, N. J.
- Rudolph Wolf Adler, P.D.**  
*Thes.*, Chaulmoogra Oil.  
Served as Lieut. 15th U. S. Engineers Railway, Med. Dept., U. S. A., with A. E. F.  
*Ad.*, 55th and Diamond Avenue, Cleveland, O.
- Courad Henry Ahrendts, Ph.G.**  
*Ad.*, 30 Metcalf Street, Wilkesbarre, Pa.
- James Philip Anderson, Ph.G.**  
*Thes.*, Spiritus Aetheris Nitrosi.  
Pharmacist. Served with A. E. F. two years, with Engrs. and Quartermasters Corps, in France and England. Attended University of Aix-Marseilles, Marseilles, France.  
*Ad.*, Wapakoneta, Ohio.
- Harry Franklin Angstadt, Ph.C.**  
Chemist for the Sun Company.  
*Ad.*, 200 S. 12th Street, Phila., Pa.
- Bernard Alfred Ashcraft, Ph.G.**  
Pharmacist and Instr. in Chemistry, Clearfield Hosp., Clearfield, Pa. Served in U. S. A. as Sgt., 420th Tel. Btn., Signal Corps, with A. E. F.  
*Ad.*, Clearfield Hosp., Clearfield, Pa.
- Martin J. Bambrick, Ph.G.**  
*Thes.*, Petrolatum.  
Retail pharmacist. Served in U. S. A. at Ft. Wadsworth, N. Y. and at Ft. Des Moines, Ia. Dispensary work. Laboratory Sch. at Yale.  
*Ad.*, 152 W. Main Street, Girardville, Pa.
- Harry George Banzhof, P.D.**  
*Thes.*, Olive Oil.  
Served in U. S. A., 28th Div., with A. E. F.  
*Ad.*, 50 Goepf Street, Bethlehem, Pa.
- Harry Barah, Ph.G.**  
*Thes.*, The Composition of Certain Face Powders.  
*Ad.*, 315 Wharton Street, Phila., Pa.
- Samuel Baron, Ph.G.**  
*Thes.*, Theobroma Cacao.  
Retail pharmacist.  
*Ad.*, 21st and Montgomery Avenue., Phila., Pa.
- Albert Abe Bass, Ph.G.**  
*Thes.*, The Physiological Standardization of Digitalis.  
Pharmacist.  
*Ad.*, 992 N. 6th Street, Phila., Pa.
- Thomas Aloyalus Beckett, Ph.G.**  
Pharmacist. Served in U. S. A. with 310th F. A., 79th Div.  
*Ad.*, East Mauch Chunk, Pa.
- James Norman Beera, P.D.**  
*Thes.*, Cold Creams.  
Served in U. S. N., Base Hosp. No. 5 in France, as Pharmacist's Mate, 1st class.  
*Ad.*, 47th and Baltimore Avenue, Phila., Pa.
- Nathan Samuel Bienstock, Ph.G.**  
*Thes.*, Retail Pharmacy Advertising.  
Retail pharmacist.  
*Ad.*, 34 Vernon Street, Hartford, Conn.
- Maurice Blumberg, Ph.G.**  
*Ad.*, 138 N. Maryland Avenue, Atlantic City, N. J.
- Lawrence Karl Boehme, P.D.**  
*Thes.*, Cod Liver Extracts.  
Pharmacist. Served in U. S. A. as Sgt., Med. Dept., Fort Myer, Va.  
*Ad.*, 46 S. Main Street, Germantown, Ohio.
- Frederick Henry Bohn, Ph.G.**  
*Thes.*, Soda Foam Producers.  
Mgr. for Powers and Reynolds. Served in U. S. A. with 52nd Pioneer Inf. in France.  
*Ad.*, Sedgley Apts., 45th and Pine Streets, Phila., Pa.
- Walter Jennings Bowman, Ph.G.**  
*Thes.*, Pill Excipients.  
Pharmacist. Served in U. S. A. at Ft. Thomas, Ky.; Camp Greenleaf, Ga.; Field Hosp. No. 35; Camp Merritt, N. J.; Camp Mills, N. Y. Sgt. Med. Dept. at time of discharge.  
*Ad.*, 1509 4th Avenue, Altoona, Pa.
- Dilley Arthur Bowron, Ph.G.**  
*Thes.*, Sterilization.  
Pharmacist. Served in U. S. A., Base Hosp., Camp Sherman, Ohio.  
*Ad.*, Caldwell, Ohio.
- Harry Aaron Bradburd, P.D.**  
*Thes.*, Industry of Chamois Skins.  
*Ad.*, 716 Race Street, Phila., Pa.
- Norman Clifton Braker, Ph.G.**  
*Ad.*, 15th and Columbia Avenue, Phila., Pa.
- Albert Braslavaky, Ph.G.**  
*Thes.*, Determination of the Purity of Sodium Sali-cylate.  
Received Ph.C. degree, 1919.  
*Ad.*, 519 S. 4th Street, Phila., Pa.
- Harry Ellsworth Brenner, P.D.**  
*Thes.*, Rheum.  
In chemical Warfare Service, Edgewood Arsenal, Edgewood, Md.  
*Ad.*, North Wales, Pa.
- Bessie Lias Brodman (Mrs.), Ph.G.**  
*Thes.*, Hydrogen Peroxide in Mixtures.  
*Ad.*, 3135 Diamond Street, Phila., Pa.
- George N. Brosius, Ph.C.**  
*Ad.*, Care of Robt. McNeil, Front and York Streets, Phila., Pa.
- Barton Gerald Brown, P.D.**  
*Thes.*, Gossypium Purificatum.  
Served in Hosp. Corps, N. Y. State Naval Militia.  
*Ad.*, 2517 S. Carlisle Street, Phila., Pa.
- Leland Nelson Brown, P.D.**  
*Thes.*, Cannabis—Its Cultivation.  
Pharmacist. Served as Sgt. 1st Class, 4th Div. U. S. A. with A. E. F. in England, France, Belgium and Germany. Received certificate and diploma from Université de Poitiers, France, for course in agricultural chemistry and food analysis.  
*Ad.*, 739 S. 58th Street, Phila., Pa.
- Paul Revere Brown, P.C.**  
*Thes.*, The Value of Pharmacognosy to the Retail Pharmacist.  
Operating Mgr. for Goodrich Rubber Co., Wash-ington, D. C.
- Evan Buchman, Ph.C.**  
Supt. Nestle's Food Co.  
*Ad.*, 64 Bennett Street, Phillipsburg, N. J.
- Samuel Lawrence Bucke, P.D.**  
*Thes.*, Elixir of Pepsin and Bismuth N. F.  
*Ad.*, Duncannon, Pa.
- Clarence Clifton Buckwalter, Ph.G.**  
*Thes.*, Stramonium Leaves.  
Salesman for William H. Raser.  
*Ad.*, Reading Pa.
- George Andrew Burbage, Ph.G.**  
*Thes.*, Sterilization.  
Retail pharmacist. Served in U. S. A. during World War.  
*Ad.*, 5700 Girard Avenue, Phila., Pa.
- \*Arthur Robert Calkins, P.D.**  
*Thes.*, Spiritus Ammoniae Aromaticus.  
Deceased, July 3, 1921.
- John Francis Carroll, Ph.G.**  
*Thes.*, Cork—Its Origin and Uses.  
Pharmacist. Served in U. S. A. as Sgt., Med. Corps, with A. E. F. in France.  
*Ad.*, 127 Prospect Avenue, Scranton, Pa.



**Paul Raymond Carroll, P.D.**

*Thes.*, Phenol.  
*Ad.*, 300 Elm Street, Conshohocken, Pa.

**William Baker Carter, Ph.G.**

*Thes.*, Veterinary Preparations.  
Pharmacist. Masonic affiliation. Mem. B. P.  
O. E.; I. O. O. F.  
*Ad.*, Ephrata, Pa.

**William Jamea Carter, Ph.G.**

*Thes.*, Nux Vomica.  
*Ad.*, 18 E. Market Street, Mahanoy City, Pa.

**Amanda Elizabeth Clapham, P.D.**

*Thes.*, The Detection of Bromides in Iodides.  
*Ad.*, 341 E. Haines Street, Germantown, Phila.,  
Penna.

**Ray Shearer Clarke, Ph.G.**

*Thes.*, Commercial Colloidal Silver.  
Pharmacist. Entered Brown Prep. Sch. to pre-  
pare for study of medicine. Served in U. S. A.,  
Auxiliary Aid No. 1, 78th Div.  
*Ad.*, 631 N. 63rd Street, Phila., Pa.

**Charles Woodson Cole, Ph.G.**

*Thes.*, Assaying of Magnesia.  
Retail pharmacist.

**Chauncey Parven Colestock, P.D.**

*Thes.*, Three Modified N. F. Preparations.  
Retail pharmacist. Served in U. S. A. with 314th  
Inf., Med. Dept., 79th Div.  
*Ad.*, 2127 S. 66th Street, Phila., Pa.

**Daniel Cooperman, Ph.G.**

*Thes.*, Merchandising.  
Pharmacist. Mem. Reading Chamber of Commerce.  
*Ad.*, Germantown and Chelton Avenues, Phila., Pa.

**Herman Lincoln Coasoy, P.D.**

*Thes.*, The Vanilla Bean and Flavoring Extracts  
Made From It.  
Served in U. S. N., Hosp. Corps.  
*Ad.*, 329 S. 63rd Street, Phila., Pa.

**Genevieve Marie Costello, P.C.**

*Thes.*, Vanilla.  
Received P.D. degree, 1918.  
*Ad.*, 183 E. Northampton Street, Wilkesbarre, Pa.

**Jamea Gilbert Cotanche, Ph.G.**

*Thes.*, The Tryptic and Peptic Power of Elixir of  
Lactopeptine and Elixir of Digestive Compound.  
Pharmacist. Served in U. S. A. during World  
War.  
*Ad.*, 24 Main Street, Rochester, N. Y.

**Charles Claggett Craft, P.D.**

*Thes.*, Urinalysis.  
Retail pharmacist. Served in U. S. A. as Sgt.,  
1st Class, Med. Dept., 813th Pioneer Inf. with  
A. E. F.  
*Ad.*, 1440 S. 20th Street, Phila., Pa.

**Frank Albert Cribbs, Ph.G.**

*Thes.*, Preservation of Volatile Oils.  
Pharmacist. Served in U. S. A. as Sgt. Warrant,  
Camp McClellan, Ala. Passed Machine Gun O.  
T. C. Commissioned 2nd Lieut.  
*Ad.*, 535 S. Oxford Avenue, Los Angeles, Cal.

**Adsm Cleveland Croff, P.D.**

*Thes.*, Liquor Ferri Peptonati, N. F. IV.  
Pharmacist. Served in U. S. A., Camp Funston,  
as regimental pharmacist and as 1st Aid Sgt. 356th  
Inf., 89th Div., U. S. A., with A. E. F.  
*Ad.*, 1106 Chestnut Street, Phila., Pa.

**Maurice Benjamin Dabney, Ph.G.**

*Thes.*, Vaccines, Serums and Other Biological  
Products.  
Retail pharmacist. Served with U. S. A. in  
France, as Sgt., Med. Dept., 92nd Div.  
*Ad.*, 43rd and Fairmount Avenue, Phila., Pa.

**Abraham Davidson, Ph.G., P.D.**

*Thes.*, Sulphur—Its Properties and Uses.  
Retail pharmacist. Served in World War.  
Wounded. Mem. Phila. Assn. Retail Druggists;  
Nat'l Assn. Retail Druggists; A. Ph. A.  
*Ad.*, 1600 N. 8th Street, Phila., Pa.

**Jamea John DeBlasio, Ph.G.**

*Ad.*, 2760 N. 22nd Street, Phila., Pa.

**Margaret A. Devera, Ph.G.**

*Thes.*, Maize Oil.  
Pharmacist for George B. Evans.  
*Ad.*, 1012 Market Street, Phila., Pa.

**John Devitt, P.C.**

*Thes.*, Digitalis.  
In charge of lab., Shoemaker and Busch, wholesale  
druggists.  
*Ad.*, 2831 Wharton Street, Phila., Pa.

**Robert George Dinklocker, P.D.**

*Thes.*, Sponges.  
Served in Edgewood Arsenal, Edgewood, Md.  
*Ad.*, 23rd and Christian Streets, Phila., Pa.

**Eliss DiSilvestro (Mrs. Joseph N. Bonglovanni),  
Ph.G.**

*Thes.*, Vitamines  
Received Phar.D. degree, 1918. *Thes.*, Actinella  
Odorata.  
*Ad.*, 6th and Washington Avenue, Phila., Pa.

**Harold Bertram Dohner, P.D.**

*Thes.*, Santonica.  
Served in U. S. A., 28th Div. with A. E. F.  
*Ad.*, 546 Franklin Street, W. Reading, Pa.

**Solomon Harry Dompf, Ph.G.**

*Thes.*, Pepsin and Its Preparations.  
Retail pharmacist.  
*Ad.*, 8th and Bristol Sts., Phila., Pa.

**Leonard Freeman Dudley, Ph.G.**

*Thes.*, The Tinctures of the Eighth and Ninth  
Revisions of the U. S. P.  
Pharmacist. Served in U. S. A., Med. Dept., as  
Sgt., 1st Class.

**Wilbert Jacob Dunmire, Ph.G.**

*Thes.*, Cost of the Tinctures of the National  
Formulary.  
Pharmacist.  
*Ad.*, Blairsville, Pa.

**William Harold Dunston, Ph.G.**

Lubricating expert, with Gulf Refining Co.  
Studied steam engineering. Served in U. S. A.,  
Aviation Dept.  
*Ad.*, 53 N. Church Street, Doylestown, Pa.

**Gullermo Enrique Duron, P.C.**

*Thes.*, Capsicum.  
Retail pharmacist. Prof. of Medical Bot. in La  
Universidad de Honduras. Prof. of English,  
Normal Sch. for Girls and Normal Sch. for Boys.  
Also in the National Institute.  
*Ad.*, Tegucigalpa, Honduras.

**Elmer Joseph Duster, P.D.**

*Thes.*, Microscopy of Morbid Urine.  
Received Special Certificate in Analysis of Oils,  
Sugar and Water, P. C. P., 1919.  
*Ad.*, 535 S. 11th Street, Phila., Pa.

**Roy Alfred Edgar, Ph.G.**

*Thes.*, Cream of Camphor.  
*Ad.*, R. F. D. 4, Easton, Pa.

**Chester Alexander Ellis, P.D.**

*Thes.*, Petrolatum Liquidum.  
Retail pharmacist.  
*Ad.*, Walnut and Charlotte Streets, Pottstown, Pa.

**Wilbur James Ellis, P.D.**

*Thes.*, Insect Powder.  
Retail pharmacist. Served in U. S. A. as Sgt.,  
1st Class, Med. Dept., with A. E. F. in France.  
*Ad.*, 1203 Asylum Avenue, Knoxville, Tenn.

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- Harold Longsdorf Ernest, P.D.**  
*Thes.*, Anesthetics.  
 Served in Embarkation Hosp., Camp Stewart,  
 Newport News, Va.  
*Ad.*, 1429 N. Broadway, Knoxville, Tenn.
- Abraham Guedalyah Ettelman, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 54th and Pine Streets, Phila., Pa.
- Hunter Leon Evans, Ph.G.**  
*Thes.*, Tincture of Strophanthus.
- Axel Alfred Evanson, Ph.G., P.D.**  
*Thes.*, Tests on Two Types of Chemical Disinfectants.  
*Ad.*, 330 Plum Avenue, Grand Forks, N. D.
- Robert Joseph Farrell, P.D.**  
*Thes.*, Characteristics of Urine.  
 Retail pharmacist. Served in U. S. A. with A. E. F. in France.  
*Ad.*, 400 W. Marshall Street, Norristown, Pa.
- Clarence Hoover Fenstermacher, P.D.**  
*Thes.*, Process for Extracting Gold by Potassium Cyanide.  
 Served with 304th Engineers, Sanitary Detachment, with A. E. F.  
*Ad.*, 132 E. Lemon Street, Lancaster, Pa.
- Howard George Folk, Ph.G.**  
 Retail pharmacist. Served in U. S. A. as Sgt., 1st Class, with A. E. F. in France.  
*Ad.*, 939 Pottsville Street, Pottsville, Pa.
- Ralph Richard Foran, P.D.**  
*Thes.*, Superfluos Drugs.  
 Instr. in chem. P. C. P. (See page 446.)  
*Ad.*, 145 N. 10th Street, Phila., Pa.
- William Clifford Forbes, P.D.**  
*Thes.*, The Sterilization of Hair and Shaving Brushes.  
 Retail pharmacist. Served in U. S. A., 167th Inf., 42nd Div. Received Certificate in Bacteriology, P. C. P., 1917.  
*Ad.*, 2320 Highland Avenue, Birmingham, Ala.
- Clarence Herr Foust, Ph.G.**  
*Thes.*, Glycyrrhiza.  
 Retail drug business. Served in U. S. A. Med. Dept.  
*Ad.*, Shippensburg, Pa.
- Bessie Carrie Belle Fox, Ph.G.**  
*Thes.*, Albuminates and Peptonates.  
 Pharmacist. Mem. Delta Omega Phi Frat.  
*Ad.*, 1915 Green Street, Phila., Pa.
- Donald Morrow Frazer, Ph.G.**  
*Thes.*, Prescription Dispensing—Powders.  
 Retail pharmacist.  
*Ad.*, Bellefontaine, Ohio.
- Charles E. Frederick, Ph.C.**  
 Chemical Supervisor, E. I. du Pont de Nemours and Co., Chemical Service Lab. Attended Phila. Textile School.  
*Ad.*, 303 N. 6th Street, Perkaspie, Pa.
- Charles Keyser Frick, P.D.**  
*Thes.*, Fluorescence of Cathartic Drugs.  
 Retail pharmacist. Served in U. S. A. with A. E. F. in France. Studied at Univ. of Marseilles, Marseilles, France.  
*Ad.*, 419 E. Wyoming Avenue, Phila., Pa.
- Charles Jonaa Friedman, Ph.G.**  
*Ad.*, 624 S. 7th Street, Phila., Pa.
- Harry Godshall Fuhr, P.D.**  
*Thes.*, Potassium Permanganate.  
 Served in U. S. N. R. F., Wissahickon Barracks, Cape May, N. J.  
*Ad.*, Lansdale, Pa.
- Florentino Lopez Fundora, Ph.G.**  
*Thes.*, Tincture of Iodine.
- Stanley Preston Gardner, Ph.G.**  
*Thes.*, The Arsenic Test of the U. S. P.
- Hyman David Garr, Ph.G.**  
*Thes.*, Limit Tests for Methyl Alcohol in Ethyl Alcohol.  
 Retail pharmacist. Received Ph.C. degree, 1918.  
*Ad.*, 59th and Media Streets, Phila., Pa.
- Frank Emanuel Garrell, P.D.**  
*Thes.*, The A. Ph. A. Recipe Book with Formulas for Toilet Creams.  
*Ad.*, 4973 Lancaster Avenue, Phila., Pa.
- \*Matthew Stanley Gehman, Ph.G.**
- \*Walter Warren Gehman, Ph.G.**  
*Thes.*, Tinctura Iodi Decolorata.  
 Deceased, 1919, as result of injuries received while in the service.
- Joseph Charles Gershenfeld, Ph.G.**  
*Thes.*, Coconut Oil.  
 Pharmacist. Served in U. S. A. with A. E. F. Wounded, Battle of the Marne.  
*Ad.*, 530 Dickinson Street, Phila., Pa.
- Martin Hollenbach Gold, P.D.**  
*Thes.*, The Diatomacea and Other Organisms in the Philadelphia Water Supply.  
 Asst. in Botany, P. C. P., 1917-18. (See page 447.)  
*Ad.*, 58th and Delancey Streets, Phila., Pa.
- Howard William Grleaing, Ph.G.**  
*Thes.*, Ambrine.  
 Pharmacist.  
*Ad.*, 446 E. Broad Street, Hazleton, Pa.
- George Richard Gross, P.D.**  
*Thes.*, Disinfectant Value of Liquor Formaldehydi.  
 Retail pharmacist. Served in U. S. A. Med. Corps during World War. Received Certificate in Bacteriology, P. C. P., 1917.  
*Ad.*, Bellwood, Pa.
- Arthur Landis Grove, P.D.**  
*Thes.*, Manufacture of Intestinal Antiseptic Tablets.  
 Served in U. S. A. Gas Defense, with A. E. F.  
*Ad.*, Waynesboro, Pa.
- Raymond Colby Hacker, Ph.G.**  
 Medical student, Univ. of Penna. Attended Haverford College. Served as Corporal in U. S. A., stationed at Vichy Hosp., Vichy, France.  
*Ad.*, 1400 Lindley Avenue, Phila., Pa.
- Leroy Irvin Hafer, Ph.G.**  
 Pharmacist. Mem. Univ. Club.  
*Ad.*, 426 N. 2nd Street, Reading, Pa.
- Glenn Arthur Haldeman, Ph.G.**  
*Thes.*, Intestinal Antiseptics and Disinfectants.  
 Retail pharmacist. Mem. Kappa Psi Frat. Served in U. S. A. with 18th F. A. in France.  
*Ad.*, 1386 W. 114th Street, Cleveland, Ohio.
- Edward Willard Hall, Ph.G.**  
*Ad.*, 901 Albert Street, Dickson City, Pa.
- Albert Jefferson Hallman, P.D.**  
*Thes.*, The Dangers Hidden in a Home Medicine Chest.  
*Ad.*, 7109 Torresdale Avenue, Tacony, Phila., Pa.
- David Ambrose Hamilton, Jr., Ph.G.**  
*Thes.*, Honey and Its Uses in Pharmacy.  
 Retail pharmacist.  
*Ad.*, 2026 Edgemont Avenue, Chester, Pa.
- Arthur Vincent Francis Hammlil, Ph.G.**  
*Thes.*, Drug Store Advertising.  
 Pharmacist. Served in U. S. A. as 1st Lieut.  
*Ad.*, 3410 F Street, Phila., Pa.
- Thomaa West Danville Harrison, P.D.**  
*Thes.*, Salvia.  
 Organized the Druggist Products Co. Pharmacist.  
*Ad.*, 5815 Jackson Street, Phila., Pa.



**Joseph Whipple Eugene Harrisson, P.D.**

*Thes.*, Alkaloids—Manufacture of By Lloyd's Reagent.  
 Chemist. Asst. to Prof. Charles H. LaWall. Asst. State Chemist, Penna. Dairy and Food Commission. Sec'y, Phila. Branch A. Ph. A., 1920. Instr. in Pharmacy, Woman's Med. College Hosp., Phila., 1920. Dept. Editor, American Druggist. Served in U. S. A. Base Hosp., Camp Dix, N. J. Ad., 636 Race Street, Phila., Pa.

**\*Omar Hawbaker, P.D.**

*Thes.*, Coriaria Myrtifolia.  
 Deceased, April 27, 1922.

**Raymond George Heath, Ph.G.**

*Thes.*, Commercial Papain.  
 Ad., North Wales, Pa.

**Paul Willard Heckman, P.C.**

*Thes.*, Some of the Lotions Suggested for the Recipe Book of the American Pharmaceutical Association.  
 Pharmacist. Served in U. S. A. with A. E. F. in France.  
 Ad., 134 N. Main Street, Nazareth, Pa.

**Edward Heine, Ph.C.**

Served in U. S. A. Base Hosp., Camp Cody, N. M.  
 Ad., 134 Olney Avenue, Phila., Pa.

**John Charles Helnore, Ph.G.**

*Thes.*, Modern Preparations and Uses of Mercury. Dealer in microscopes and optical instruments. Served with U. S. A. in France.  
 Ad., S. Oakland Avenue, Green Bay, Wis.

**Abraham L. Herman, Ph.G.**

*Thes.*, Review of Analysis of Benzaldehyde.  
 Received Ph.C. degree, 1918.  
 Ad., 2024 Ridge Avenue, Phila., Pa.

**Antonio Alejandro Hernandez Mens, Ph.G.**

*Thes.*, Kaolin—Relation to Diptheria Bacillus Growth.  
 Received Certificate in Bacteriology.  
 Ad., 7 Portela, Palmira, Sta Clara, Cuba.

**Norman Brubaker Hertzler, P.D.**

*Thes.*, Liniments Involving Saponification.  
 Pharmacist. Served in U. S. A. with A. E. F. in France. Studied at Univ. of Poitiers.  
 Ad., Lititz, Pa.

**Claude Thomas Hess, Ph.G.**

*Thes.*, Buttermilk.  
 Retail pharmacist. Served in U. S. A. as Sgt., Med. Dept.  
 Ad., 745 N. Linden Street, Bethlehem, Pa.

**William Clair Hidlay, Ph.G.**

*Thes.*, Deodorized Oleic Acid.  
 Served as Hosp. Apprentice, 1st Class, Newport News, Va.  
 Ad., Room 302, 200 Broadway, New York City.

**Alvin Roy Hocker, P.D.**

*Thes.*, The Microscopical Structure of Hyoscyamus Niger.  
 Pharmacist.  
 Ad., 1713½ N. 3rd Street, Harrisburg, Pa.

**Benjamin H. Hoffstein, Ph.G.**

*Thes.*, The Determination of Campbor Spirits and Liniment by the Polariscopes.  
 Received Ph.C. degree, 1918. Instr. in Botany, P. C. P., 1918-20. (See page 449.)  
 Ad., 37th and Chestnut Streets, Phila., Pa.

**Harry Edward Hotchkiss, Ph.G.**

Served in U. S. A., Med. Dept.  
 Ad., 795 Chenango Street, Binghamton, N. Y.

**Haig S. Hovsepian, Ph.G.**

Ad., 672 N. 41st Street, Phila., Pa.

**Hiram Franklin Huber, P.D.**

*Thes.*, Stock Preparation Costs.  
 Pharmacist. Mem. I. O. O. F.; O. of I. A.; Amer. Legion Post No. 174. Served in U. S. A. Evac. Hosp. No. 8.  
 Ad., 1121 Greenwich Street, Reading, Pa.

**Harry Godfrey Huth, P.D.**

*Thes.*, Pharmaceutical Agitation.  
 Salesman, National Drug Co. Served in U. S. A., 109th Inf. Hosp. Corps., 28th Div., A. E. F.  
 Ad., 812 Richards Avenue, Watertown, Wis.

**Charles Alphenas Hysore, Ph.G.**

*Thes.*, Fat Free Galenicals.  
 Ad., 3561 N. 11th Street, Phila., Pa.

**Fred Earl Ibherson, P.D.**

*Thes.*, Calamine.  
 Served as "Observer" 1st Provisional Highburst Ranging Station.  
 Ad., Philipsburg, Pa.

**Richard Monroe Imler, Ph.G.**

*Thes.*, Liquid Petroxolin.  
 Ad., Bedford, Pa.

**Clifford Payne Jackson, Ph.G.**

*Thes.*, The Modification of Milk for Infants.  
 Pharmacist. Enlisted in U. S. N. R. F. Served with U. S. Marines on Naval transport.  
 Ad., Swarthmore, Pa.

**Chester Kimmerer Jones, Ph.C.**

Chemist, VanCamp Packing Co. Mem. B. P. O. E.

**Herbert Light Jones, P.D.**

*Thes.*, Red Cabbage as an Indicator.  
 Retail pharmacist. Served in U. S. A., Base Hosp. No. 20.  
 Ad., 5th and Glenwood Avenue, Phila., Pa.

**Bernard Kane, P.D.**

*Thes.*, Phenol.  
 Received Special Certificate in Analysis of Industrial Products, P. C. P., 1918.  
 Ad., 2606 N. 30th Street, Phila., Pa.

**Amos William Kapler, P.D.**

*Thes.*, The Tanning of Leather.  
 Pharmacist. Served in U. S. N. during the World War.  
 Ad., Ridgway, Pa.

**John William Karn, Ph.G.**

*Thes.*, Ampoules.  
 Served in U. S. A. as 2nd Lieut., Sanitary Service.  
 Ad., 822 Hubbard Street, Green Bay, Wis.

**Lawrence Samuel Kelchner, P.D.**

*Thes.*, Commercial Glucose.  
 Pharmacist. Mem. Bethlehem Council.  
 Ad., 1811 E. 4th Street, Bethlehem, Pa.

**John Forrest Kelley, Ph.G.**

Ad., 35 Prospect Avenue, Galeton, Pa.

**Claude Raymond Klingaman, Ph.G.**

Served in U. S. A., Camp Greenleaf, Ga.  
 Ad., 1431 Diamond Street, Phila., Pa.

**Harry John Knoepfel, Ph.G.**

*Thes.*, Kieselguhr.  
 Pharmacist.  
 Ad., 967 Prescott Avenue, Scranton, Pa.

**Chauncey Astor Koch, P.D.**

*Thes.*, The Geological Formation of Sulphur and the Advancement in the Industry.  
 Pharmacist. Served in U. S. A., Med. Dept., Ft. Jay, Governor's Island, N. Y. In detached service with 22nd Inf., at Sea Girt, N. J. Served in France with 7th Anti-Aircraft.  
 Ad., 1416 Turner Street, Allentown, Pa.

**\*Edward Krsuss, P.D.**

*Thes.*, Japanese Aconite.  
 Deceased, January 16, 1919, at Camp Merritt, New Jersey.



- Max Ellia Krechmer, Ph.G.**  
*Thes.*, New Kinds of Syphons.  
 Distributor of national advertised products. Special course in business administration.  
*Ad.*, 2319 Atlantic Avenue, Atlantic City, N. J.
- Joseph Ellis Langeluttig (Now Lange), Ph.G.**  
*Ad.*, 71st and Woodland Avenue, Phila., Pa.
- Frederick Scholl Laucka, P.D.**  
*Thes.*, Comparative Methods for the Assaying of Ipecac.  
*Ad.*, 1730 State Street, Harrisburg, Pa.
- Mannell Lehrfeld, Ph.G.**  
*Thes.*, Magnesium and Its Compounds.  
 Pharmacist. Masonic affiliation.  
*Ad.*, 415 E. Girard Avenue, Phila., Pa.
- Jacob Lewis Leibowitz, P.D.**  
*Thes.*, The Quantitative Separation of Strychnine and Brucine.  
 Retail pharmacist.  
*Ad.*, 1332 N. Marshall Street, Phila., Pa.
- Melcour Restore Lippincott, Ph.G.**  
*Thes.*, The Purification of Fatty Oils.  
 Pharmacist. Served in U. S. A. with 47th Co., 12th Btn.  
*Ad.*, 12 Broad Street, Mt. Holly, N. J.
- Frederick Samuel Lowther, P.D.**  
*Thes.*, Salicylic Acid.  
 Chemist, Penna. R. R. Co.  
*Ad.*, 1107 Third Avenue, Altoona, Pa.
- Thomas Joseph McCann, Jr., P.D.**  
*Thes.*, Soda Mint and Pepsin Tablets.  
*Ad.*, 526 S. 56th Street, Phila., Pa.
- Merle McCarney, Ph.G.**  
*Thes.*, Assay of Lime Water.  
*Ad.*, 174 W. Lake Street, Chicago, Ill.
- Edward Everett Powell McClure, P.D.**  
*Thes.*, The Determination of Phosphoric Acid.  
 Pharmacist. Served in U. S. A., Med. Dept., Camp Hosp. No. 52, with A. E. F.  
*Ad.*, 718 N. Water Street, York, Pa.
- Charles Baynor McKeel, Jr., P.D.**  
*Thes.*, Products of the Southern Pine.  
 Retail pharmacist. Served in U. S. N., Med. Corps, shore and transport duty.  
*Ad.*, Columbia, N. C.
- Anna Camillus McNella, P.C.**  
*Thes.*, Ampoules.  
 Retail pharmacist. Received P.D. degree, 1920.  
*Ad.*, 461 N. Penna. Avenue, Wilkesbarre, Pa.
- Francisco P. Macías, Ph.G.**  
 Retail pharmacist.  
*Ad.*, Box 17, Aguada de Pasajeros, Cuba.
- Rose Mackler (Mrs. Makler), Ph.G.**  
*Thes.*, Magnesium Sulphate.  
*Ad.*, 1302 S. 24th Street, Phila., Pa.
- Albert Thomas Maier, P.D.**  
*Thes.*, Hydrogen Dioxide.  
 Chemist, E. I. du Pont de Nemours and Co.  
*Ad.*, Woodbury, N. J.
- Cristobal Martínez Rebelgo, Ph.G.**  
*Thes.*, Effervescing Aspirin.  
 Retail pharmacist. Formerly at Eddystone Rifle Plant; Sun Shipbuilding Co. Received doctor's degree, Univ. of Havana.  
*Ad.*, Bibara, Cuba.
- Jonas Gilbert Maust, P.D.**  
*Thes.*, Glycerole Hypophosphites Compound.  
 Pharmacist. Special course in Analyt. Chemistry P. C. P. Served in U. S. N. during World War.  
*Ad.*, 5348 Lena Street, Phila., Pa.
- Matthew Clarence Meagher, Ph.G.**  
*Thes.*, Antiseptic Dental Cream.  
 Pharmacist and chemist. Served in U. S. A., Columbus Barracks, Ohio, as Pvt. Promoted to Sgt., Med. Dept., in charge of dispensary.  
*Ad.*, 362 Main Street, Slatington, Pa.
- Jacob Loula Medvadkin, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 741 S. 4th Street, Phila., Pa.
- Louis Fred Meyera, Ph.G.**  
*Thes.*, Suppositories.  
 Pharmacist. Served in U. S. A. as pharmacist, Med. Dept.  
*Ad.*, 20th and York Streets, Phila., Pa.
- Arland Roland Milburn, Ph.G.**  
*Thes.*, Sugar Cane and By-Products.  
 Pharmacist. Served in U. S. A. as Sgt., Camp Howard.  
*Ad.*, 1000 French Street, Wilmington, Del.
- Earl Thomas Miller, Ph.G.**  
 Served in U. S. A., Med. Dept., 146th Inf., 37th Div., A. E. F.  
*Ad.*, 510 Spruce Street, Pottstown, Pa.
- Robert William Miller, Ph.G.**  
*Thes.*, Acidum Nitrohydrochloricum Dilutum.  
 Pharmacist.  
*Ad.*, 820 3rd Street, Dunmore, Pa.
- Louis Milner, P.D.**  
*Thes.*, Physiological Testing of Enteric Coating.  
 Retail pharmacist. In chemical warfare service.  
*Ad.*, 4401 Chestnut Street, Phila., Pa.
- John Herman Milla, M.D., Ph.G.**  
*Thes.*, Castela Nichelsoni var. texana (Torrey and Gray).  
 Physician and Pharmacist.  
*Ad.*, 917 17th Avenue, Tampa, Fla.
- Thomas Asaph Morgan, Ph.G.**  
*Thes.*, Benedict's Solution.  
 Pharmacist. Received Ph.C. degree, 1918.  
*Ad.*, Peckville, Pa.
- Raymond John Moyer, Ph.G.**  
*Thes.*, Chemical History.  
 Received Certificate in Bacteriology, P. C. P., 1920. Served in U. S. A. Base Hosp. No. 116, A. E. F.  
*Ad.*, 1607 Green Street, Phila., Pa.
- Joseph Aloysius Moylan, Ph.G.**  
*Ad.*, 2349 Germantown Avenue, Phila., Pa.
- Henry Kendall Mulford, Jr., P.C.**  
*Thes.*, The Deterioration of Digitalis.  
 Mfg. Chemist, H. K. Mulford Co. Entered Sanitary Corps, U. S. A. as Pvt. Served in France. Commissioned 1st Lieut. Received Certificate in Bacteriology, P. C. P., 1917.  
*Ad.*, Wayne, Pa.
- James Patrick Mulherin, Ph.G.**  
 Pharmacist. Served in U. S. A. during World War.  
*Ad.*, 145 S. Summer Street, Scranton, Pa.
- Lindley Rhea Murray, P.D.**  
*Thes.*, The Determination of Borax in Borax Soaps.  
 Pharmacist. Course in bact. and manufacture of vaccines, Army Med. Sch.  
*Ad.*, Shippensburg, Pa.
- Earl Gray Nace, P.D.**  
*Thes.*, Toilet Waters.  
 Received Certificate in Bacteriology, P. C. P., 1919.  
*Ad.*, 529 E. du Pont Street, Roxborough, Phila., Penna.
- Aaron Naff, Ph.G.**  
*Ad.*, 24th and Moore Streets, Phila., Pa.

**Philip Eugene Nsgle, P.D.**

*Thes.*, Liqueur Magnesii Citratis.  
Retail pharmacist. Served in U. S. A. Camp Meade, and in France, 316th Inf., Med. Dept.  
*Ad.*, Pottsville, Pa.

**Carl Harold Nelson, P.D.**

*Thes.*, Black Antimony.  
Served in U. S. A., Base Hosp. No. 61, with A. E. F.  
*Ad.*, Care of Hay Drug Co., DuBois, Pa.

**Leo L. Newcomer, P.D.**

*Thes.*, Colloidal Suspensions.  
Retail pharmacist.  
*Ad.*, 12th and Spruce Streets, Phila., Pa.

**Elmer Thomas Nicholl, Ph.G.**

*Thes.*, Window and Show Case Decorating.  
Pharmacist.  
*Ad.*, 601 Pacific Avenue, Atlantic City, N. J.

**Adley Bonisteal Nichola, Ph.G.**

*Thes.*, Terra Silicea Purificata.  
Received Phar.D. degree, 1918. *Thes.*, The Purification of Commercial Wool-Fat. Instr., P. C. P., (See page 451.)  
*Ad.*, 145 N. 10th Street, Phila., Pa.

**Harry Watson Null, P.D.**

*Thes.*, The Commercialization of Oxygen.  
Pharmacist. Served in U. S. A. on Mexican Border Patrol and in France with the 28th Div.  
*Ad.*, Chambersburg, Pa.

**Edwin Cyrus Parvin, P.D.**

*Thes.*, Liqueur Magnesii Citratis.  
Retail pharmacist. Masonic affiliation. Served in U. S. A. as 1st Lieut. Sanitary Corps.  
*Ad.*, Mifflinburg, Pa.

**William E. Persing, Ph.C.**

Mfr. of Pharmaceuticals with Elmira Drug and Chemical Co. In Chemical Warfare Service.  
*Ad.*, 157 Baldwin Street, Elmira, N. Y.

**Gerald Sutvan Pittman, P.D.**

*Thes.*, Face Powders.  
Served in U. S. A., Fort Hancock.  
*Ad.*, Penna. Station Pharmacy, Harrisburg, Pa.

**Earl Luther Potts, Ph.G.**

**Edyth Bird Powell (Mrs. Robert Koelsch), Ph.G.**

*Thes.*, Hydrogen Peroxide in Milk.  
*Ad.*, 1920 Spring Garden Street, Phila., Pa.

**James Clayton Powell, P.D.**

*Thes.*, Alkali Lands.  
Served in U. S. A., as Sgt. 1st Class, Camp Hosp. No. 49.

**Charles Taylor Pryor, P.D.**

*Thes.*, The History of the Volatile Oils.  
*Ad.*, Morrisville, Pa.

**Jose Ramirez Flores, Ph.G.**

Received Certificate in Bacteriology, P. C. P., 1917.  
Pharmacist. Received degree Phar.D., Havana, Univ.  
*Ad.*, Marti Sur 24, Guantanamo, Cuba.

**Walter William Rex, P.D.**

*Thes.*, Logwood.  
Pharmacist. Served in U. S. N. as Medical officer.  
*Ad.*, Slatington, Pa.

**Jose Santiago Reynes, Ph.G.**

Received Certificate in Bacteriology.  
*Ad.*, Luz Caballero 45, Guantanamo, Cuba.

**\*Samuel Thompson Richman, P.C.**

*Thes.*, The Histology of Two Spurious Cubeb.  
Pharmacist. Served in Hosp. Corps, U. S. N. R. F., Gulfport, Miss.

**Hazel Marie Rinn, Ph.G.**

*Thes.*, Suppository Making.  
*Ad.*, 2137 N. College Avenue, Phila., Pa.

**Myron Parker Rishton, Ph.G.**

*Thes.*, Plantago Rugelii.  
Retail pharmacist. Served in Med. Corps, U. S. N. R. F.  
*Ad.*, 352 Market Street, Bloomsburg, Pa.

**\*Harry Beard Rodes, P.D.**

*Thes.*, Glycerite of Hydriodic Acid.  
Deceased, May 29, 1919, in U. S. Hospital No. 5.

**Louia Rodia, Ph.G.**

*Thes.*, Facts Regarding Pennsylvania Pharmacy Laws and the Harrison Narcotic Law.

**Lawrence Marx Rosenfeld, P.D.**

*Thes.*, Cupri Sulphas.  
Received Certificate in Bacteriology and in Clinical Chemistry, P. C. P., 1920. Served in U. S. A., Gen. Hosp. No. 8.  
*Ad.*, 3720 N. 17th Street, Phila., Pa.

**Ulysses Gilbert Ruff, Jr., Ph.G.**

*Ad.*, 3740 Lancaster Avenue, Phila., Pa.

**Robert Adsm Rupp, P.D.**

*Thes.*, Moulds.  
Pharmacist. Served in U. S. N. during World War.  
*Ad.*, 44 N. 3rd Street, Hamburg, Pa.

**Walding George Rupp, P.D.**

*Thes.*, Triticum.  
Pharmacist.  
*Ad.*, 21 Kenilworth Drive, Toledo, Ohio.

**William Owen Schnock, Ph.G.**

Mgr. Lehigh Pharmacy. Served in U. S. A. with A. E. F. in France.  
*Ad.*, 723 N. Lumber Street, Allentown, Pa.

**Russell John Schoenthaler, P.D.**

*Thes.*, Acidum Hypophosphoricum.  
Pharmacist. Served in U. S. A. as Pvt., Med. Dept.  
*Ad.*, 417 Cnyler Avenue, Trenton, N. J.

**Anna L. Schultz, Ph.G.**

*Thes.*, Tooth Washes.  
*Ad.*, 2 East Main Street, Tremont, Pa.

**Harry Leat Schwartz, Ph.G.**

*Thes.*, Effervescing Salts.  
Served in U. S. A., Camp Meade, Md.  
*Ad.*, Birdsboro, Pa.

**Robert Hoode Seltzer, Ph.G.**

*Thes.*, Window Dressing.  
Pharmacist. Served in U. S. A., Ambulance Corps, during World War.  
*Ad.*, 1029 Herbert Street, Phila., Pa.

**John Franklin Shaak, Ph.G.**

*Thes.*, Cotton Seed Oil.  
Served in U. S. A. as 2nd Lieut.  
*Ad.*, 95 Elm Street, Kearny, N. J.

**John Donald Shaw, Ph.G.**

Pharmacist. Served in U. S. A., 311th Field Hosp., 78th Div., with A. E. F. in France.  
*Ad.*, 119 Summit Avenue, Phillipsburg, N. J.

**Nasi Wendle Shaw, Ph.G.**

*Thes.*, Ethyl Chloride as a General and Local Anesthetic.  
Served in U. S. A., 158th Depot Brigade, Camp Sherman, Ohio.  
*Ad.*, Wapakoneta, Ohio.

**Alexander Sherman, Ph.G.**

*Thes.*, Medicinal and Other Soaps.  
Retail pharmacist.  
*Ad.*, Passyunk Avenue and Moore Street, Phila., Penna.



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**Harry Allen Shiley, Ph.G.**

Served in U. S. A. Base Hosp., Camp Meade, Maryland.  
Ad., 3009 N. Mervine Street, Phila., Pa.

**Edward Shinn, P.D.**

*Thes.*, Cultivation of Medicinal Plants. Pharmacist. Served in U. S. N. during World War.  
Ad., Collingdale, Pa.

**James Harper Shoop, P.D.**

*Thes.*, The Drugs Affecting the Urine and Urinary Apparatus.

**Charles Francis Slegfried, P.D.**

*Thes.*, Tincture of Nux Vomica. Pharmacist. Served in U. S. A. at Central O. T. C., Camp Lee, Va.  
Ad., 3449 N. Carlisle Street, Phila., Pa.

**Sister Mary Beatrice, P.C.**

*Thes.*, Pilocarpus.  
Ad., Convent of Mercy, Merion, Pa.

**Sister Mary de Chantal, P.C.**

*Thes.*, Incompatibility.  
Ad., Convent of Mercy, Merion, Pa.

**Alexander Hamilton Butler Skeath, P.D.**

*Thes.*, Acetic Acid. Mgr. of drug store. Mem. P. O. S. of A. Served in U. S. A., 80th Div.  
Ad., Mt. Carmel Avenue, North Glenside, Pa.

**Myer Skloff, Ph.G.**

Retail pharmacist.  
Ad., 5405 Baltimore Avenue, Phila., Pa.

**Donald Benner Smith, P.C.**

*Thes.*, Hair Dyes and Color Restorers. Received Certificate in Bacteriology. Served in U. S. A., 112th Inf., Camp Hancock, Ga.  
Ad., 503 Muench Street, Harrisburg, Pa.

**Rose Frances Smith, Ph.G.**

*Thes.*, The Pharmacognosy of Green Ginger and the Superiority of Preparations of the Fresh Drug. Pharmacist.  
Ad., 2630 E. Lehigh Avenue, Phila., Pa.

**Charles A. Snyder, Ph.G.**

*Thes.*, Acidum Hypophosphorosum. Received Ph.C. degree, 1918.  
Ad., 127 Balm Street, Harrisburg, Pa.

**Richard M. Stapleton, Ph.G.**

*Thes.*, Coal and Its Marketing. Retail pharmacist. Served in Med. Dept., U. S. N., U. S. S. Alaskan.  
Ad., 5 E. Poplar Street, W. Nanticoke, Pa.

**Carl Frederick Steidle, Ph.G.**

*Thes.*, Potassium Bromide.  
Ad., Lost Creek, Pa.

**Harry Archie Steigrod, Ph.G.**

*Thes.*, Lime Water. U. S. P.  
Ad., 6th and McKean Streets, Phila., Pa.

**Barnett Steinsnyder, P.C.**

*Thes.*, Benzinum Purificatum. Pharmacist.  
Ad., Vineland, N. J.

**Morton Donaldson Stickle, P.C.**

*Thes.*, Sterilization of Camphorated Oil. Chemist, H. K. Mulford Co. Received Certificate in Bacteriology.  
Ad., Norwood, Pa.

**William Jennings Stoneback, Ph.G.**

*Thes.*, Balsam Apple. Pharmacist. Served in Med. Corps, U. S. N., as Pharmacist's Mate. Instr. P. C. P.  
Ad., 3130 N. 9th Street, Phila., Pa.

**Jesse Hartzell Sunday, Ph.G.**

*Thes.*, Solution of Peptonate of Iron and Manganese. Mgr. of drug store.  
Ad., Newport, Pa.

**William Henry Sutton, Jr., P.D.**

*Thes.*, The Chemistry of Low Freezing Brines. Retail pharmacist.  
Ad., 176 Delaware Street, Woodbury, N. J.

**Jacob Tesman, Ph.G.**

Retail pharmacist. Served in U. S. A., 154th Depot Brigade, Camp Meade, Md.  
Ad., 4th and Dickinson Streets, Phila., Pa.

**Bessie Estella Thomas, Ph.G.**

*Thes.*, Dakin Carrel Solution and Ambrine. Asst. to Roentgenologist, Germantown Hosp., Phila., Pa.  
Ad., Germantown Hosp., Germantown, Phila., Pa.

**John Carter Thomas, P.D.**

*Thes.*, Home Manufacture and Uses of Unfermented Grape Juice. In Chemical Warfare Service.  
Ad., Delaware and du Pont Streets, Wilmington, Del.

**Elizabeth Kathryne Thorne, Ph.G.**

*Thes.*, Wild Beach Plums.  
Ad., 673 Fairview Street, Camden, N.J.

**Henry Cornelius Tuck, Ph.G.**

*Thes.*, Peppermint. Retail pharmacist. Served as pharmacist, Med. Dept., U. S. A., Camp Greenleaf, Ga.  
Ad., 10 W. Market Street, Wilkesbarre, Pa.

**Jacob Homer Tyson, P.C.**

*Thes.*, Nature's Methods of Seed Dissemination. Served in U. S. A., 316th Inf., Camp Meade, Md.  
Ad., 1418 Mt. Vernon Street, Phila., Pa.

**Louis Unterberger, Ph.G.**

*Thes.*, The Manufacture of Paper.

**William Francis Usher, Ph.G.**

*Thes.*, Iodine and Official Preparations.  
Ad., 1046 Lancaster Avenue, Bryn Mawr, Pa.

**Clarence Kinney Wagner, Ph.G.**

*Thes.*, Zinc—Metallic and Oxide. Instr. Chemistry and Biology Lehighton H. S. Masonic affiliation. Served in Pharmacological and Toxicity Unit, Research Div., Chem. Warfare Service.  
Ad., 350 S. 3rd Street, Lehighton Pa.

**Raymond Charles Bernard Wagner, P.D.**

*Thes.*, The Manufacture and Uses of Serums, Bacterins and Vaccines. Salesman, Parke, Davis and Co. Studied at Univ. of Toulouse, Toulouse, France. Served in U. S. A., 316th Inf. with A. E. F.  
Ad., 518 Olive Street, Scranton, Pa.

**James Robert Warricks, Ph.G.**

*Thes.*, Comparison of Natural and Synthetic Oil of Bitter Almonds. Chemist.  
Ad., 22 S. 16th Street, Harrisburg, Pa.

**Helen Way (Mrs. Hess), P.C.**

*Thes.*, Organotherapy. Pharmacist, Howard Hosp., Phila., Pa. Received P.D. degree, 1919.  
Ad., Howard Hosp., Phila., Pa.

**Leslie Sharpless Webster, P.D.**

*Thes.*, Saturated Solution of Boric Acid. Served in U. S. A., Med. Dept.

**William Partee Weir, Ph.G.**

*Thes.*, Talc. Served in U. S. A.  
Ad., Manasquan, N. J.



**Emil Albert Wepfer, Ph.G.**

*Thes.*, Trifolium Pratense.  
Pharmacist. Served in U. S. Naval Hosp., Gulf-  
port, Miss.  
*Ad.*, Neillsville, Wis.

**Ray Ellsworth White, Ph.G.**

Retail pharmacist. Served in U. S. A. Med. Dept.  
Gen. Hosp. No. 1, during World War.  
*Ad.*, Bellefonte, Pa.

**Harry Wishnefsky (Now Harry Neff), P.D.**

*Thes.*, Caffeine, Theobromine and Theophylline.  
Retail pharmacist. Mem. Amer. Chem. Soc. Re-  
ceived Special Certificate in Analysis of Industrial  
Products, P. C. P., 1916.  
*Ad.*, 5th St. and Roosevelt Boulevard, Phila., Pa.

**Paul Philip Woehrie, Ph.C.**

*Ad.*, 34th and Spring Garden Streets, Phila., Pa.

**Joseph Roy Young, Ph.G.**

*Thes.*, Bacteriology in Pharmacy.  
Pharmacist. Served in U. S. N. with 1st Reg.  
Marines as Pharmacist's Mate, 1st Class. Also  
on transport duty.  
*Ad.*, 301 Lincoln Avenue, Collingdale, Pa.

**Charles Stanley Zercher, P.D.**

*Thes.*, Aromatic Waters.  
Pharmacist. Served in U. S. A., Camp Meade.  
*Ad.*, Littlestown, Pa.

**Paul Fleager Ziegler, P.D.**

*Thes.*, Commercial Cleaning Fluids.  
Retail pharmacist.  
*Ad.*, 353 Main Street, Steelton, Pa.

**Special Students.**

**Pedro Carbo.**

Received Certificate in Bacteriology.

**Charles L. Coble.**

Received Certificates of Proficiency in Chemistry  
and Bacteriology. Chemist. In Chemical Warfare  
Service at Edgewood Arsenal.  
*Ad.*, 553 S. 2nd Street, Chambersburg, Pa.

**John Frederick Day.**

Received Certificate in Bacteriology.

**David Flores.**

Received Certificate in Bacteriology.

**Clarence Harry Henderson.**

Certificate in Bacteriology. Received Certificate  
of Proficiency in Food and Drug Course, 1918.

**James Stanislaus Horton.**

Received Certificate in Bacteriology.

**William Menkemeller, Jr.**

Received Certificate in Bacteriology.

**Charles Norton.**

Received Certificate in Bacteriology.

**Harry P. Ottinger.**

Received Certificate of Proficiency in Food and  
Drug Course. Director, Dept. of Technical Con-  
trol, W. C. Hamilton and Sons, Paper Mfrs.  
Formerly chief chemist. Mem. Amer. Chem. Soc.  
*Ad.*, Miquon, Montgomery Co., Pa.

**Russell C. Smith.**

Received Certificate in Bacteriology.

**Benjamin A. Sorber.**

Received Certificate in Bacteriology.

**Albert Stoppel.**

Received Certificate in Bacteriology.

1918

**Henry Reuby Abrams, Ph.G.**

*Thes.*, A More Permanent Stramonium Ointment.  
Retail pharmacist. Served in U. S. A. Med. Dept.  
Received Certificate in Advanced Pharmacy and  
in Physiological Assaying, P. C. P., 1918.  
*Ad.*, 1519 N. Franklin Street, Phila., Pa.

**Guy Frederick Bair, Ph.G.**

*Thes.*, Papain.  
*Ad.*, 1433 Arch Street, Phila., Pa.

**Fernando Barreras, Ph.G.**

*Thes.*, Amygdala Dulcis.  
Received Special Certificate in Chemical Urinalysis  
and Certificate in Bacteriology, P. C. P., 1919.  
*Ad.*, Juncos, P. R.

**May Elizabeth Beechwood (Mrs. F. L. Herron), Ph.G.**

*Thes.*, Tincture of Nux Vomica.  
Received Certificate in Bacteriology, P. C. P., 1919.

**Mark John Berkenstock, Ph.G.**

*Thes.*, Adulteration of Crude Drugs.  
Pharmacist. Served in U. S. A. as Sgt., 1st Class,  
Base Hosp. 67, with A. E. F.  
*Ad.*, 2038 Cherry Street, Phila., Pa.

**Rebecca Bogroff, Ph.G.**

*Thes.*, Bitter Almonds and Their Products.  
*Ad.*, 5th and Fitzwater Streets, Phila., Pa.

**Albert Dillman Boltz, Ph.G.**

*Thes.*, Iodine and Its U. S. P. preparations.  
Pharmacist.  
*Ad.*, 1306 Brandywine Street, Lebanon, Pa.

**Curtis Humphrey Bond, Ph.G.**

*Thes.*, Cosmetics.  
Wholesale and retail pharmacist. Served in U. S.  
A. as Sgt. and pharmacist to surgeon, Port of Em-  
barkation, Newport News, Va. Graduated Tamaqua  
High School, 1908.  
*Ad.*, 246 W. Broad Street, Tamaqua, Pa.

**Roscoe Owen Brady, Ph.G.**

*Thes.*, Non-Abrasive Antiseptic Tooth Paste.  
Pharmacist. Served in U. S. A. as Sgt., 310th  
F. A., with A. E. F.  
*Ad.*, 207 N. Hanover Street, Carlisle, Pa.

**Franklin Clair Bratton, Ph.G.**

*Thes.*, The Substitution of Corn Syrup for Sugar  
in the Manufacture of Soda Fountain Syrup.  
Pharmacist. Served in U. S. A., Med. Dept.,  
Camp Lee, Va.  
*Ad.*, Christiana, Pa.

**Morris Stephen Brigol, Ph.G.**

*Thes.*, Solution of Magnesium Citrate.  
*Ad.*, 52nd and Spruce Streets, Phila., Pa.

**Reba Brody, Ph.G.**

*Thes.*, The History of Several Official South  
American Drugs.  
*Ad.*, 1635 N. 7th Street, Phila., Pa.

**Israel Brown, Ph.G.**

*Thes.*, Iodine.  
Retail pharmacist.  
*Ad.*, 3rd and George Streets, Phila., Pa.

**Leroy C. Parkman Brown, Ph.G.**

*Thes.*, The Root of Eriogonum Tomentosum.  
Served in U. S. N. Base Hosp. No. 5.  
*Ad.*, Yeagertown, Pa.

**Marie Florence Brustin, (Mrs. Bortnoff), Ph.G.**

*Thes.*, The Louisiana Sulphur.  
Retail pharmacist.  
*Ad.*, 23rd and Fairmount Avenue, Phila., Pa.

**Helen Burns, Ph.G.**

*Thes.*, The Comparative Anatomy of Nux Vomica.  
Retail pharmacist.  
*Ad.*, Montrose, Pa.

- Benjamin H. Cantor, Ph.G.**  
*Thes.*, Relations with Wholesale Druggists.  
 Pharmacist.  
*Ad.*, 1537 N. 6th Street, Phila., Pa.
- Joseph David Cartwright, Ph.G.**  
*Thes.*, Thymol.  
 Mgr. of drug store. In Chemical Corps, U. S. A.  
*Ad.*, 215 W. Columbia Avenue, Phila., Pa.
- Hiram Myers Coffey, Ph.G.**  
*Thes.*, Fourth Edition of the National Formulary.  
 Pharmacist. Served in U. S. A. Motor Corps.  
*Ad.*, Mill Hall, Pa.
- William Donald Cook, Ph.G.**  
*Thes.*, The Manufacture of Magma Magnesia by  
 the retail pharmacist.  
 Manager, Chemical and Microscopical Lab.  
*Ad.*, 5 S. 38th Street, Phila., Pa.
- Claude H. Crane, P.D.**  
*Thes.*, Antipyrin.  
*Ad.*, Lindley and Windrim Streets, Phila., Pa.
- Albert Alphonso Curran, Ph.G.**  
*Thes.*, Advertising the Professional Drug Store.  
*Ad.*, Care of Sharp and Dohme, Baltimore, Md.
- Mae Rose Davis (Mrs. Summers), Ph.G.**  
*Thes.*, Advertising in Pharmaceutical Journals.  
*Ad.*, 700 Pine Street, Phila., Pa.
- Julio Diaz Marquez, Ph.G.**  
*Thes.*, Cultivation and Industry of Coffee in Porto  
 Rico.  
*Ad.*, 54 Comercio Street, Ponce, P. R.
- Lily Duvoisin (Mrs. W. T. Peck), Ph.G.**  
*Thes.*, Oil of Betula as the Source of Salicylic  
 Acid and the Salicylates.  
*Ad.*, Summit Road, Springfield, Pa.
- Earle Kendig Eberly, Ph.G.**  
*Thes.*, Mineral Oil.  
 Retail pharmacist.  
*Ad.*, 1700 Mt. Vernon Street, Phila., Pa.
- William Mason Edwards, Ph.G.**  
 Retail pharmacist. Mem. A. Ph. A.  
*Ad.*, 15 Ashley Street, Ashley, Pa.
- Vincent Aloysius Egan, Ph.G.**  
*Thes.*, Rhus Glabra.  
*Ad.*, 18 Alexander Street, Wilkesbarre, Pa.
- R. Leslie Ellis, Ph.G.**  
*Thes.*, Chionanthus.  
 Served in U. S. A. Base Hosp. No. 218, with  
 A. E. F.  
*Ad.*, Springerton, Ill.
- Sara Eskin, Ph.G.**  
*Thes.*, The Manufacturing of Pharmaceutical  
 Glassware.  
 Retail pharmacist  
*Ad.*, Rockland and Hutchinson Streets, Phila., Pa.
- Gaetano Filippone, Ph.G.**  
*Thes.*, Urinalysis.  
 Served in U. S. A., Co. F., Camp Jackson, S. C.
- William Francis Finegan, Ph.G.**  
*Thes.*, The Pituitary Body.  
*Ad.*, 349 E. Pearl Street, Burlington, N. J.
- Herman Finkelstein, Ph.G.**  
*Thes.*, Quality of Solution of Hydrogen Dioxide.  
 Retail pharmacist. Served in U. S. A. with A.  
 E. F. in France. Wounded.  
*Ad.*, 4th and Wolf Streets, Phila., Pa.
- James John Flood, Ph.G.**  
*Thes.*, Solution of Magnesium Citrate.  
*Ad.*, 2515 E. Somerset Street, Phila., Pa.
- James Floyd Foulk, Ph.G.**  
*Thes.*, Camphor—Cultivation and Preparation in  
 the United States.  
*Ad.*, Greenville, Pa.
- Ricardo Garcia Birba, Ph.G.**  
*Thes.*, Cassava Starch.  
*Ad.*, Santa Cruz del Sur, Cuba.
- Louis Anthony Gardier, Ph.G.**  
*Thes.*, Picric Acid.  
 Retail pharmacist. Served as Hosp. apprentice, 1st  
 Class, U. S. N. Mein. Naval Reserves. Mem. B.  
 P. O. E.; Nat'l Assn. Retail Druggists; A. Ph. A.  
*Ad.*, 318 S. Main Avenue, Scranton, Pa.
- Luther Burket Garvin, Ph.G.**  
*Thes.*, The Micromorphology of Stramonium and  
 Belladonna and the Possibilities of Daturine as a  
 Substitute for Atropine.  
 Pharmacist.  
*Ad.*, Box 765, Phoenix, Ariz.
- Morris Glantz, Ph.G.**  
*Thes.*, Lime Water.  
 Retail pharmacist. Received Certificate in Bacteri-  
 ology, P. C. P., 1919. Served in U. S. A.,  
 Camp Green, N. C.  
*Ad.*, 4th and Queen Streets Phila., Pa.
- Raphael Glass, Ph.G.**  
*Thes.*, Notes on the Cultivation of Belladonna to  
 Increase the Percentage of Mydriatic Alkaloids.  
 Retail pharmacist. Formerly with Bureau of  
 Chemistry, U. S. Dept. Agriculture, and Smith,  
 Kline and French Co.  
*Ad.*, 3348 Market Street, Phila., Pa.
- Jacob Glauser, Ph.G.**  
*Thes.*, The Pharmacognosy of Two Varieties of  
 Aconite.  
 Retail pharmacist.  
*Ad.*, 4th and Girard Avenue, Phila., Pa.
- Charles Francis Godlewski, Ph.G.**  
*Thes.*, Cinchonas.  
*Ad.*, 2627 W. 2nd Street, Chester, Pa.
- Floyd R. Goodhart, Ph.G.**  
*Thes.*, Infusion of Digitalis.  
 Pharmacist.  
*Ad.*, 920 N. 6th Street, Reading, Pa.
- Harry Marshall Green, Ph.G.**  
 Pharmacist. Served in U. S. A. as Sgt., 1st  
 Class, in charge of Infirmary, Evacuation Hosp.  
 No. 24, in France.  
*Ad.*, 3217 N. Carlisle Street, Phila., Pa.
- Simon Green, Ph.G.**  
*Thes.*, Method of Standardization of Suprarenal  
 Glands.  
 Retail pharmacist. Formerly with John Wyeth  
 and Bro. Received Certificate in Physiological  
 Assaying, P. C. P., 1918.  
*Ad.*, 601 E. Allegheny Avenue, Phila., Pa.
- William P. Gubenko, Ph.G.**  
*Thes.*, The International Metric System.  
*Ad.*, 335 Mickle Street, Camden, N. J.
- J. Clement Halligan, Ph.G.**  
*Thes.*, Petrolatum Liquidum.  
 Pharmacist.  
*Ad.*, 1247 Lincoln Avenue, Tyrone, Pa.
- James Bryon Hawkins, Ph.G.**  
*Thes.*, Tincture of Iodine.  
 Pharmacist. Served in U. S. Marine Corps. Mem.  
 Legion of Honor.  
*Ad.*, Miles City, Mont.
- Albert Hollan Hayes, A.B., Ph.G.**  
*Thes.*, Capsulating.  
 Served in U. S. A. Headquarters Detachment.  
 Attended Lincoln Univ.  
*Ad.*, 1711 Arctic Avenue, Atlantic City, N. J.
- Herbert Hill Hooper, Ph.G.**  
*Thes.*, Cascara Sagrada.  
 Pharmacist. Served in U. S. A. with Motor Am-  
 bulance Corps No. 48.

- David Hymes, Ph.G.**  
*Thes.*, Pepsin—Its Preparations and Their Uses.  
 Retail pharmacist.  
*Ad.*, 5th and Somerset Streets, Phila., Pa.
- Frank Lewia Irete, Ph.G.**  
*Thes.*, Ilydrastis Canadensis.  
 Retail pharmacist. Served in Chemical Warfare Service.  
*Ad.*, 51st and Master Streets, Phila., Pa.
- Stanley Francis Jorczak, Ph.G.**  
*Thes.*, Liquid Petrolatum.  
 Retail pharmacist. Served in U. S. A. Med. Dept. as Sgt., with A. E. F. in France. Received Certificate in Bacteriology.  
*Ad.*, 140 Exchange Street, Chicopee, Mass.
- James Frederick Judd, Ph.G.**  
*Thes.*, The Official and Unofficial Galls.  
*Ad.*, 1801 Orthodox Street, Phila., Pa.
- Dennis William Karlhelm, Ph.G.**  
*Thes.*, Chain Store System (L. K. Liggett and Company).  
 Pharmacist. Served in U. S. N. as Pharmacist's Mate. Aviation Dept.
- Paul Raymond Kelsaer, Ph.G.**  
*Thes.*, "Own Make" Greaseless Creams.  
*Ad.*, 42 N. 11th Street, Reading Pa.
- Alexander George Keller, Jr., Ph.G.**  
*Thes.*, The Extraction of Wool Fat.  
 Served in U. S. A., Camp Meade. Transferred to Med. Detachment, 315th Inf., 79th Div. With A. E. F. in France. Received B.Sc. degree, 1921.  
*Ad.*, 2105 N. 17th Street, Phila., Pa.
- Robert Kerchner, Ph.G.**  
*Thes.*, Adulteration of Drugs.  
 Served in U. S. N. as Hosp. Apprentice, 1st Class.  
*Ad.*, 340 S. 5th Street, Reading, Pa.
- Standish Boardman King, Ph.G.**  
*Thes.*, Browning.  
 Retail pharmacist. Served in U. S. N. as Pharmacist's Mate. Masonic affiliation.  
*Ad.*, 370 Grove Street, Chicopee Falls, Mass.
- Bernard Klebanoff, Ph.G.**  
*Thes.*, Magma Bismuthi.  
*Ad.*, 1530 Market Street, Phila., Pa.
- Jane Lacktman, Ph.G.**  
*Thes.*, Serums and Vaccines.  
*Ad.*, 2121 S. 11th Street, Phila., Pa.
- Joseph Lester Lee, Ph.G.**  
*Thes.*, Cryolite.  
 Pharmacist. Served in U. S. A., Med. Dept., Gen. Hosp. No. 24, Parkview Station, Pittsburgh, Pa.  
*Ad.*, Duval and McCallum Streets, Germantown, Phila., Pa.
- Elwood Henry Leh, P.C.**  
*Thes.*, Inexpensive Liquid Soaps.  
 Served in U. S. A., 330th Inf., with A. E. F.  
*Ad.*, Catasauqua, Pa.
- John Wealey Lower, Ph.G.**  
*Thes.*, Calx Chlorinata.  
 Telegraph Operator, Delaware and Hudson R. R. Company.  
*Ad.*, 500 S. Grove Street, Avoca, Pa.
- Kwai Shoon Lung, Ph.G.**  
*Thes.*, Four Typical Chinese Crude Drugs.  
 Served in U. S. A., Med. Dept.  
*Ad.*, Kilauea, Hawaii.
- Thomas Leroy McBride, Ph.G.**  
*Thes.*, Gossypium.  
 Pharmacist. Served in U. S. A. with A. E. F. during World War.  
*Ad.*, Marshville, N. C.
- William James McKendrick, Ph.G.**  
*Thes.*, Pituitary Substance.  
*Ad.*, Windber, Pa.
- John R. McLaughlin, Jr., Ph.C.**  
*Thes.*, The Direct Estimation of Sodium Benzene Sulphonate.  
 Analytical chemist.  
*Ad.*, 104 Irvine Street, Warren, Pa.
- Benjamin Mandelbaum, Ph.G.**  
*Thes.*, Alcohol and Some of Its Effects on the Human System.  
*Ad.*, 440 Cross Street, Phila., Pa.
- \*William Crauthers Marshall, Ph.G.**  
*Thes.*, Proximate Analysis of Coal.  
 Asst. in pharmacy lab., 1917-18. Died at Camp Lee, Va., October 10, 1918.
- Harold Clifford Matthews, Ph.G.**  
*Thes.*, Humulus Lupulus.  
 In wholesale drug business.  
*Ad.*, Care of C. D. Smith Drug Co., St. Joseph, Missouri.
- Solomon S. Melamed, Ph.G.**  
*Thes.*, Tests on Soaps Sold for Castile Soap.  
 Retail pharmacist. Served in U. S. A. as pharmacist, Gen. Hosp. No. 24, Debarkation Hosp. No. 51.  
*Ad.*, 1344 N. 5th Street, Phila., Pa.
- Ruth Carolina Menger (Mrs. Homer E. Yarp), Ph.G.**  
*Thes.*, Face Creams.  
 Mem. A. Ph. A.; Penna. Pharm. Assn.; Lambda Kappa Sigma Frat.  
*Ad.*, 1502 N. 29th Street, Phila., Pa.
- Isrsel E. Markin, Ph.G.**  
*Thes.*, Prunus Serotina and Its Chief Adulterant.  
 Served in U. S. Naval Hosp.  
*Ad.*, 436 Market Street, Phila., Pa.
- George McCrea Miller, P.D.**  
*Thes.*, Angustura Bark.  
 Served in U. S. Naval Hosp.  
*Ad.*, Lewistown, Pa.
- Conrad Morales, Ph.G.**
- Frank Anthony Murphy, Ph.G.**  
*Thes.*, Iodine.  
 Pharmacist.  
*Ad.*, 304 Washington Street, Huntingdon, Pa.
- Henry Clay Newsome, Ph.G.**  
*Thes.*, Aspidium.  
 Pharmacist. Served in U. S. A., Med. Dept., with A. E. F. in France.  
*Ad.*, Mooresville, N. C.
- Karleen Packard, Ph.G.**  
*Thes.*, The History of Important African Drugs.  
*Ad.*, New Albany, Pa.
- Bertha Parria (Mrs. Solomon S. Malamed), Ph.G.**  
*Thes.*, Collection of Leguminous Drugs.  
 Retail pharmacist. Formerly in prescription dept., Univ. of Penna. and Howard Hosp.  
*Ad.*, 1344 N. 5th Street, Phila., Pa.
- William Tall Phillipy, Jr., Ph.G.**  
*Thes.*, Rabies and the Pasteur Treatment.  
 Served in U. S. A., Med. Dept., Camp Greenleaf, Georgia.  
*Ad.*, Carlisle, Pa.
- John Wealey Price, P.D.**  
*Thes.*, The Relations Between the Pharmacist and Physician.  
 Served in U. S. A., Med. Dept., 803rd Pioneer Inf., A. E. F.  
*Ad.*, 1801 Arctic Avenue, Atlantic City, N. J.
- Frederick R. Pritchard, Ph.G.**  
*Thes.*, Phenol and a Fallacy thereof.  
 Served in U. S. A.  
*Ad.*, 232 Chestnut Street, Kingston, Pa.



**Charles Promislo, Ph.G.**

*Thes.*, Belladonna and Its Adulterations.  
Retail pharmacist.  
*Ad.*, 1254 S. 45th Street, Phila., Pa.

**Jose Antonio Puget, Jr., Ph.G.**

*Thes.*, Tuberculin.  
*Ad.*, Prado 77 A Bajos, Havana, Cuba.

**Edward Schley Francia Quinn, Ph.G.**

*Thes.*, The Cultivation of Castor Oil Plants.  
Mgr. of drug store. Private, Co. No. 8, Univ. of Penna. Unit, S. A. T. C.  
*Ad.*, 1947 Christian Street, Phila., Pa.

**William Hagedorn Rabin, Ph.G.**

*Thes.*, Facts Regarding Arsenic Trioxide on the Horse and Rat.  
*Ad.*, R. F. D. 6, Bridgeton, N. J.

**Charlotte Gertrude Rabinowitz, Ph.G.**

*Thes.*, Phenol.  
*Ad.*, 38 S. Salford Street, Phila., Pa.

**Hermogenes Ramirez Cabrera, Ph.G.**

Received Certificate in Bacteriology, P. C. P., 1917.

**Isadore Rappaport, Ph.G.**

*Thes.*, Sulphur in Ointments.  
Retail pharmacist.  
*Ad.*, 2012 S. 10th Street, Phila., Pa.

**Nathaniel Herman Rappaport, Ph.G.**

*Thes.*, Unguentum Hydrargyri Nitratiss.  
Mgr. of drug store.  
*Ad.*, 56th and Larchwood Avenue, Phila., Pa.

**Herbert Carl Raubenheimer, Ph.D.**

*Thes.*, Churchill's Tincture of Iodine—History, Experiments and Improved Formulas.  
Pharmacist. Received Ph.G. degree, College of Jersey City. Served in U. S. A., Med. Dept., Gen. Hosp. No. 38, Eastview, N. Y.  
*Ad.*, 17 Agate Court, Brooklyn, N. Y.

**Robert Floyd Reubush, Ph.G.**

*Thes.*, The Comparison of Prescriptions.  
Salesman, H. K. Mulford Co.  
*Ad.*, Ridge and Lehigh Avenues, Phila., Pa.

**Reuben Abraham Rohr, Ph.G.**

*Thes.*, Acetphenetidinum—Its Manufacture and Uses.  
Pharmacist.  
*Ad.*, 1629 Walnut Street, Phila., Pa.

**Hymen Rosenwald, Ph.G.**

*Thes.*, Dichloramine T.  
*Ad.*, 362 Ritner Street, Phila., Pa.

**Harry Rotman, Ph.G.**

*Thes.*, Ergot Preparations—Standardization and Uses.

**Joseph William Sackaloucas, Ph.G.**

*Thes.*, The Cultivation of Solanaceous Drugs.  
Pharmacist.  
*Ad.*, 616 Ferdinand Street, Scranton, Pa.

**Morris Granville Schadt, Ph.G.**

*Thes.*, Iodine.  
Retail pharmacist. Served in U. S. A. Med. Dept. as Sgt., 1st Class.  
*Ad.*, 501 N. 10th Street, Allentown, Pa.

**Alvin Lester Schlegel, Ph.G.**

*Thes.*, Modern Merchandising.  
*Ad.*, 4401 Frankford Avenue, Phila., Pa.

**Ida Seidelman (Mrs. W. C. Kramer), Ph.G.**

*Thes.*, The Commercial Varieties of Capsicum Annuum.  
*Ad.*, 10th and Morris Streets, Phila., Pa.

**Herman S. Shafer, Ph.G.**

*Thes.*, Emulsum Olei Morrhuæ.  
Pharmacist.  
*Ad.*, 4th and Noble Streets, Phila., Pa.

**Alfred Weikel Shoemaker, P.D.**

*Thes.*, Window and Show Case Trimming.  
Retail pharmacist. Served with U. S. A. in Chemical Warfare Service.  
*Ad.*, 1240 Hamilton Street, Allentown, Pa.

**Ralph Ritter Shumaker, P.D.**

*Thes.*, Artificial Maple Flavoring.  
Retail pharmacist. Served in U. S. A. as 2nd Lieut., Chemical Warfare Service.

**Joseph Shute, Ph.G.**

*Thes.*, Rheum.  
Received Certificate in Bacteriology, P. C. P., 1919. Retail pharmacist.  
*Ad.*, 2758 N. 15th Street, Phila., Pa.

**Pauline M. Siemiontkowski, (now Siemion), Ph.G.**

*Thes.*, Perfumery.  
Retail pharmacist.  
*Ad.*, 5416 Chester Avenue, Phila., Pa.

**George Ammon Slothower, Ph.G.**

*Thes.*, Detection of Mercuric Chloride in Calomel.  
Received B.Sc. degree, P. C. P., 1920. *Thes.*, Rhus Venenata.  
*Ad.*, P. O. Box 87, Folcroft, Pa.

**Charles Franklin Slotter, Ph.G.**

*Thes.*, Emetine.  
Chemist. Received B.Sc. degree, P. C. P., 1920. *Thes.*, Studies on commercial varieties of Nux Vomica.  
*Ad.*, 2959 N. 12th Street, Phila., Pa.

**George Leo Smith, Ph.G.**

*Thes.*, Possibilities of a Modern Ethical Pharmacy.  
Pharmacist. Served in U. S. A. with 128th Inf. in France and Germany. Cited in Gen. Order for D. S. C.  
*Ad.*, 516 Jones Street, Hollidaysburg, Pa.

**Harold Berlin Snyder, Ph.G.**

*Thes.*, Drug Store Policies.  
Retail pharmacist. Attended Univ. of Penna. Pre-medical Course. Studied medicine one year. Mem. A. Ph. A.; Penna. Pharm. Assn.; K. of P.; I. O. O. F.; S. A. T. C. Masonic affiliation.  
*Ad.*, 73 W. Goepp Street, Bethlehem, Pa.

**Ruth Everest Sparks, Ph.G.**

*Thes.*, Emulsions.  
Retail pharmacist.  
*Ad.*, 117 E. Union Street, Burlington, N. J.

**Milton Stein, Ph.G.**

*Thes.*, Advertising in Pharmacy Today Compared with Thirty Years Ago.  
Retail pharmacist.  
*Ad.*, 400 W. Susquehanna Avenue, Phila., Pa.

**Roy Albert Stock, Ph.G.**

*Thes.*, A Few Facts About the More Important Vaccines.  
Pharmacist. Special courses, P. C. P., bact. and chemistry. Served in U. S. A.  
*Ad.*, Littlestown, Pa.

**Charles Hayden Alexander Streamer, P.D.**

*Thes.*, The Chemistry of Iron.  
Pharmacist. Graduated Susquehanna Univ., 1914, with B. S. degree. Received M. S. degree from same institution, 1917.  
*Ad.*, South Fork, Pa.

**John Joseph Swabon, Ph.G.**

*Thes.*, Cultivation of Belladonna.  
*Ad.*, Shenandoah, Pa.

**John Aubrey Thomas, P.D.**

*Thes.*, Sterilization.  
Served in U. S. A. as Sgt., Evacuation Hosp. No. 43.  
*Ad.*, 2300 N. 21st Street, Phila., Pa.

**Aaron J. Trotman, Ph.G.**

*Thes.*, A Pharmacist in a Small Town.  
*Ad.*, 553 W. Fisher Avenue, Phila., Pa.

**Kuen-Hua H. Tu, Ph.G.**

*Thes.*, The Manufacture of Rice Starch.  
*Ad.*, Lihun, Ningkuohfu, via Wuhn, China.

**Charles Chester Carrington Turner, Ph.G.**

*Thes.*, Glucose.  
Retail pharmacist.  
*Ad.*, 5745 Wyalusing Avenue, Phila., Pa.

**Ernest Edward Vehrs, Ph.G.**

*Thes.*, The Solubility of Cocaine and Codeine in Oils.  
Pharmacist. Served in U. S. A. as Sgt., Med. Corps, in England and France.  
*Ad.*, Elgin, Ore.

**Lynne D. Walker, Ph.G.**

*Thes.*, Drug Store Advertising.  
Served in U. S. N.

**William John Walter, Ph.G.**

**Marburg Downin Weagley, P.D.**

*Thes.*, Ambrine.  
Pharmacist.  
*Ad.*, 121 Mulberry Street, Bristol, Pa.

**Edward Louis Welss, P.D.**

*Thes.*, Liquor Plumbi Subacetatis Dilutus.  
*Ad.*, 2914 Frankford Avenue, Phila., Pa.

**Sydney Alsn Weltzmsn, Ph.G.**

*Thes.*, Attracting the Public.  
Pharmacist and student of medicine at Temple Univ., Phila.  
*Ad.*, 3126 Columbia Avenue, Phila., Pa.

**John Alfred Wenner, Ph.G.**

*Thes.*, Aspidosperma.  
Student, pre-medical course, Lebanon Valley College.  
*Ad.*, 150 S. Washington Street, Wilkesharre, Pa.

**Theodore David Witman, Ph.G.**

*Thes.*, Camouflaged Pharmaceuticals.  
Pharmacist. Served in U. S. N. as Pharmacist.  
*Ad.*, 354 S. 4th Street, Reading, Pa.

**John Thomas Yoh, Ph.G.**

*Thes.*, Physiological Action and Therapeutic Uses of Atropine.  
Served in U. S. A., Med. Dept.  
*Ad.*, 1028 S. Washington Avenue, Scranton, Pa.

**Christlan Boyd Zacharias, Ph.G.**

*Thes.*, Know the Drugs You Sell.  
Retail pharmacist. Served in U. S. A. during World War.  
*Ad.*, 272 S. Main Street, Chambersburg, Pa.

**Special Students.**

**Mercedes Elvira Comas.**

Received Certificate in Bacteriology.

**Leonard A. Feeny.**

Certificate in Bacteriology. Received Certificate of Proficiency in Chemistry, 1919. Asst. to Plant Supt. E. F. Drew and Co., Oils and Chemicals.  
*Ad.*, 1334 Pike Street, Phila., Pa.

**Cyrril C. Folkrod.**

Received Certificate in Bacteriology.

**Arnold Gulcl.**

Received Certificate in Physiological Assaying.

**Florence Vatie Inman.**

Received Certificate in Bacteriology.

**Leo Joseph McCorristin.**

Received Certificate of Proficiency in Chemistry and in Bacteriology.  
*Ad.*, Millville, N. J.

**Donald C. Margerum.**

Received Certificate in Bacteriology.

**Joseph Mervine.**

Received Special Certificate in Analysis of Industrial Products.

**Percy Ingham Needl.**

Received Certificate of Proficiency in Chemistry.  
*Ad.*, 826 65th Avenue, Oak Lane, Phila., Pa.

**Everett Joseph Roberts.**

Received Special Certificate in Analysis of Fuels, Oils and Water.

**Arthur S. Schulhoff.**

Received Certificate of Proficiency in Chemistry. Chemist, National Aniline and Chemical Co. Attended Mass. Inst. of Tech. Mem. Amer. Chem. Society.  
*Ad.*, 2228 N. 17th Street, Phila., Pa.

**A. Schuyler Slack.**

Received Certificate of Proficiency in Chemistry.

**Russell Edward Whitehead.**

Received Certificate in Bacteriology.

**1919**

**Samuel Abrahams, Ph.G.**

*Thes.*, Elixir Terpin Hydrate.  
Pharmacist.  
*Ad.*, 1519 N. Franklin Street, Phila., Pa.

**Samuel Benson Altschuler, Ph.G.**

*Thes.*, Linimentum Calcis.  
Retail pharmacist.  
*Ad.*, 341 N. 18th Street, Phila., Pa.

**Benjamin Baker, Ph.G.**

*Thes.*, Gossypium Purificatum.  
Pharmacist.  
*Ad.*, 520 DeLancey Street, Phila., Pa.

**John Luther Baker, Ph.G.**

*Thes.*, Colloids.

**Luis Berguldo, Ph.G.**

*Thes.*, The Adulteration of Matricaria Chamomilla by Anthemis Cotula.  
With H. K. Mulford Co., Phila., Pa. Studied Chemistry at Univ. of Penna. Mem. Union Club, Panama City; Beta Phi Sigma Frat.; Alchemist Soc.  
*Ad.*, 4532 Chestnut Street, Phila., Pa.

**Russell Thorn Blackwood, Jr., Ph.G.**

*Thes.*, Perfumery.  
Retail pharmacist.  
*Ad.*, 52nd and Girard Avenue, Phila., Pa.

**Walter Franklin Bloes, Ph.G.**

*Thes.*, American Grown Belladonna.  
Pharmacist. Served with Northern Bombing Squad in France, U. S. N., Aviation Dept.  
*Ad.*, Peckville, Pa.

**Raymond Joseph Buchanan, Ph.G.**

*Thes.*, Incompatibility in Prescriptions.  
Pharmacist. Received Certificate in Bacteriology, P. C. P., 1920. Director Allegheny Avenue Progressive Bldg. and Loan Assn.  
*Ad.*, 2252 E. Allegheny Avenue, Phila., Pa.

**Amos Reeves Collins, Ph.G.**

*Thes.*, Notes on Arnica Montana.  
Pharmacist.  
*Ad.*, Weaver's Pharmacy, Easton, Pa.

**Hayes Merrill Dixon, Ph.G.**

*Thes.*, Starch Grains of the Leguminosæ Family.  
Pharmacist.  
*Ad.*, 535 Coleman Avenue, Johnstown, Pa.

# 652 First Century of the Philadelphia College of Pharmacy

## David Dorln, Ph.G.

*Thes.*, The Developing Industry of Potassium in the United States.  
Retail pharmacist. Served in U. S. A. as Pvt., Med. Dept.  
*Ad.*, 200 N. 61st Street, Phila., Pa.

## Herbert Martin Emig, Ph.G.

*Thes.*, Enteric Pill Coating.  
Pharmacist. Mem. Beta Phi Sigma Frat.  
*Ad.*, 861 N. 20th Street, Phila., Pa.

## Joseph Aloysius Eppley, Ph.G.

*Thes.*, The Preparations of Dichloramine-T.  
Pharmacist.  
*Ad.*, 2053 N. 13th Street, Phila., Pa.

## Allen Hornberger Fasnacht, Ph.G.

*Thes.*, Liquor Magnesii Citratis.  
*Ad.*, 6th and Main Streets, Bethlehem, Pa.

## Paul William Finkeni, Ph.G.

*Thes.*, Disinfectants and Their Uses.  
Teacher of Music. Post. Grad. Course in Bact., P. C. P.  
*Ad.*, Audubon, N. J.

## William Leonard Friedman, Ph.G.

*Thes.*, Manna and Mannite.  
Pharmacist. Mem. P. O. S. of A. Received Certificate in Clinical Chemistry, P. C. P., 1920. Sgt., State Fencibles.  
*Ad.*, 1752 N. 20th Street, Phila., Pa.

## Joseph Bernard Goldin, Ph.G.

*Thes.*, Eusol.  
Pharmacist. Mem. K. of P.

## Edward Mann Hellerman, Jr., Ph.G.

*Thes.*, Use of Iodine in Treatment of Pyorrhea.  
*Ad.*, 144 N. Peach Street Phila., Pa.

## John Lewis Henrie, Ph.G.

*Thes.*, The Cultivation of the Mushroom Commercially.  
*Ad.*, Colonial Pharmacy, Red Bank, N. J.

## Wilbur Bloom Hoy, Ph.G.

*Thes.*, The Characteristics of Angostura and Surinam Tonka Beans.  
Retail pharmacist.  
*Ad.*, 1636 Venango Street, Phila., Pa.

## John Joseph Hughes, Ph.G.

*Thes.*, The Histology of Xanthoxylum.  
Pharmacist.  
*Ad.*, 79 McLean Street, Wilkesbarre, Pa.

## George Albert Hurst, Ph.G.

*Thes.*, Pollen Extracts and Their Use.  
*Ad.*, 156 W. 8th Street, Erie, Pa.

## Aaron Harry Josephs, Ph.G.

*Thes.*, Purified Petroleum Benzin, U. S. P. IX.  
Retail pharmacist.  
*Ad.*, 4312 Germantown Avenue, Phila., Pa.

## Jacob Herman Katsky, Ph.G.

*Thes.*, Camphor and Its Polariscopical Determinations.  
Pharmacist.  
*Ad.*, 433 Mifflin Street, Phila., Pa.

## Eugene Ignatius Kiely, Ph.G.

*Thes.*, The Seidlitz Powder.  
*Ad.*, 2321 E. Clearfield Street, Phila., Pa.

## Otto Louls Koenig, Jr., Ph.G.

*Thes.*, Two Pharmaceuticals—Emulsions of Silver Iodide and Ointment of Picric Acid.  
Pharmacist. Received Certificate in Bacteriology, P. C. P., 1920.

## Joseph Koffs, Ph.G.

*Thes.*, Pulverization of Boric Acid.  
*Ad.*, 4850 Parkside Avenue, Phila., Pa.

## Sarah Levin, Ph.G.

*Thes.*, The Peppermint Industry.  
Pharmacist.  
*Ad.*, 1859 N. 8th Street, Phila., Pa.

## Ethel Liss, Ph.G.

*Thes.*, Aerial or Gaseous Disinfection.  
*Ad.*, 2118 N. 31st Street, Phila., Pa.

## Maurice Axe McClure, Ph.G.

*Thes.*, Eupatorium Perfoliatum a Success in "Spanish Influenza."  
Pharmacist.  
*Ad.*, 708 N. Water Street, York, Pa.

## Harry Oscar Mayer, Ph.G.

*Thes.*, Digitalis Siberica.  
Chemist, Wm. R. Warner and Co., N. V. Received Certificate in Bacteriology and in Physiological Assaying, P. C. P., 1919.  
*Ad.*, Sheffield, Pa.

## Jacob Meserofsky (Now Jacob Messey), Ph.G.

*Thes.*, Diphtheria Antitoxin, U. S. P.  
Retail pharmacist.  
*Ad.*, 61st and Elmwood Avenue, Phila., Pa.

## David Molofsky, Ph.G.

*Thes.*, Drug Assays.  
*Ad.*, 624 Landis Avenue, Vineland, N. J.

## Lloyd Rickert Moyer, Ph.G.

*Thes.*, Adonis Vernalis.  
Junior mem. of firm, "First National Pharmacy," wholesale and retail pharmacists.  
*Ad.*, 143 N. 1st Street, Lehighton, Pa.

## Michael Pachuta, Jr., Ph.G.

*Thes.*, Tablet Triturate Bases.  
Retail pharmacist.  
*Ad.*, 204 East Avenue, Mt. Carmel, Pa.

## Harriet Florence Pinsky, Ph.G.

*Thes.*, Soy Beans.  
Pharmacist.  
*Ad.*, 4110 Viola Street, Phila., Pa.

## Maurice Albert Posnansky, Ph.G.

*Thes.*, Drug Store Advertising.  
Pharmacist.  
*Ad.*, 7th and Wharton Streets, Phila., Pa.

## Samuel Howard Price, Ph.G.

*Thes.*, Passiflora Incarnata.  
Pharmacist.  
*Ad.*, Mooresville, N. C.

## Israel Samuel Promisloff, Ph.G.

*Thes.*, Disadvantage of Sodium Bicarbonate Tablet in Liquor Magnesii Citratis.  
Retail pharmacist.  
*Ad.*, 59th and Addison Streets, Phila., Pa.

## John Roanoke Randolph, Ph.G.

*Thes.*, Scutellaria and Its Substitutes  
Pharmacist. Received Ph.C. degree, 1920. *Thes.*, Composition of Manganese Dioxide, U. S. P.  
*Ad.*, 426 Linden Street, Camden, N. J.

## William Erle Reighter, Ph.G.

*Thes.*, Coconut Products.  
Retail pharmacist. Received Ph.B. degree, 1920.  
Director Fairhill Improvement Assn. Mem. A. Ph. A.; Penna. Pharm. Assn.  
*Ad.*, 5th and Cumberland Streets, Phila., Pa.

## George Hager Retter.

Pharmacist. Masonic affiliation. Served in U. S. A. Med. Dept. during World War. Received Certificate in Bacteriology, P. C. P., 1918.  
*Ad.*, 248 Mercer Street, Phillipsburg, N. J.

## Pedro Manuel Rodriguez Oquendo, Ph.G.

*Thes.*, Carica Papaya.  
Pharmacist. Received Certificate in Bacteriology, P. C. P., 1919.  
*Ad.*, Calle di Marti 33, Manzanillo, Cuba.

## George William Rohrbach, Ph.G.

*Thes.*, Ipecacuanha.  
*Ad.*, 420 S. Broad Street, Phila., Pa.



**Annetta Mildred Sanders, Ph.G.**

*Thes.*, Bird Foods.

**William Clement Scott, Ph.G.**

*Thes.*, Paste.  
Pharmacist. Served in U. S. A. with Sanitary Detachment in England, France and Belgium.  
*Ad.*, 1012 Market Street, Phila., Pa.

**Joseph Pincus Seltzer, Ph.G.**

*Thes.*, Serums and Vaccines.  
Retail pharmacist. Mem. A. Ph. A.  
*Ad.*, 2701 S. Mervine Street, Phila., Pa.

**Jacob Silk, Ph.G.**

*Thes.*, Ferrous Iodide in Syrup.  
Pharmacist. Mem. A. Ph. A.  
*Ad.*, 6244 Larchwood Avenue, Phila., Pa.

**Samuel Albert Slipakoff, Ph.G.**

*Thes.*, The Olive and Its Oil.  
Retail pharmacist.  
*Ad.*, 19th and Susquehanna Avenue, Phila., Pa.

**Albert H. Smith, Ph.G.**

Served in U. S. N. R. F.  
*Ad.*, 118 Main Street, Colwyn, Pa.

**Marcus Samuel Smith, Ph.G.**

*Thes.*, Sterilization of Camphorated Oil.  
Student at Georgetown Univ. Pharmacist. Mem. Phi Alpha Frat. Received Certificate in Bacteriology, P. C. P., 1919.  
*Ad.*, 41 T Street, N. W., Washington, D. C.

**Aitha Raymond Springer, Ph.G.**

*Thes.*, The Clinical Laboratory of the United States Army.  
Pharmacist. Served in U. S. A. as 1st Lieut., Sanitary Corps. Bact. work, Army Med. Sch., Wash., D. C. Also at Dijon, France.  
*Ad.*, 2 E. Main Street, Uniontown, Pa.

**Lillian Roberts Stam, Ph.G.**

*Thes.*, Water Softening.  
*Ad.*, 1403 31st Street, Washington, D. C.

**Russell Stanley Trumbower, Ph.G.**

*Thes.*, Carrel-Dakin Solution.  
Pharmacist.  
*Ad.*, 618 Columbia Avenue, Lansdale, Pa.

**Albert Herman Ulmer, Ph.G.**

*Thes.*, Extemporaneous Pill Coatings.  
Pharmacist.  
*Ad.*, 221 S. Delaware Avenue, Minersville, Pa.

**Harold Russell Waidelich, Ph.G.**

*Thes.*, Lobelia Inflata.  
*Ad.*, 142 N. 10th Street, Allentown, Pa.

**John Aloysius Wallace, Ph.G.**

*Thes.*, Milk as a Clarifying Agent.  
Retail pharmacist.  
*Ad.*, 407 Grove Street, Avoca, Pa.

**Isadore Binder Weinberg, Ph.G.**

*Thes.*, Assay of Acetyl Salicylic Acid.  
Pharmacist. Served in U. S. A. during World War.  
*Ad.*, 121 E. Marshall Street, Norristown, Pa.

**Daniel Thomas Williams, Ph.G.**

*Thes.*, Salvia Lavandula Folia Substituted for Salvia Officinalis.  
Pharmacist.  
*Ad.*, 226 Blackman Street, Wilkesbarre, Pa.

**Special Students.**

**Henry M. Cunningham.**

Received Certificate of Proficiency in Chemistry.

**Wallace H. Dickhart.**

Received Certificate of Proficiency in Chemistry, Chemist for N. Y. Produce Exchange. Graduated Univ. of Penna., 1914. Received Certificate in Bacteriology, P. C. P., 1917.  
*Ad.*, 8630 124th Street, Richmond Hill, Long Island, N. Y.

**Herbert Carlyle Dixon.**

Received Certificate in Bacteriology.

**Leroy H. Goinez.**

Received Certificate in Physiological Assaying.

**Anna Mae Griggs.**

Received Certificate in Bacteriology.

**Lena Londa.**

Received Certificate in Bacteriology.

**Guy R. Luongo, Ph.G.**

Received Certificate in Bacteriology.

**Manuel Francisco Nunez.**

Received Special Certificate in Analysis of Oils, Sugar and Water and in Chemical Urinalysis. Also Certificate in Bacteriology.

**Pearl M. Ott.**

Received Certificate in Bacteriology.

**Stanley R. Stephens.**

Received Certificate in Bacteriology.

**Abrsham J. Sunshine.**

Received Certificate of Proficiency in Chemistry.  
*Ad.*, 813 S. 5th Street, Phila., Pa.

**Sokichi Tamura.**

Received Special Certificate in Cosmetics and Perfumes.

**Eleanor H. Wells.**

Received Certificate in Bacteriology.

**Margaret R. Whalen.**

Received Certificate in Bacteriology.

**Anthony Zsajkowski, Ph.G.**

Received Certificate in Bacteriology.

**1920**

**Oscar Abrahamson, Ph.G.**

*Thes.*, Modern Merchandising.  
Retail pharmacist. Served in U. S. N. as Pharmacist's Mate, 1st Class, Phila. Navy Yard Disp. and on U. S. S. Houston.  
*Ad.*, 436 Market Street, Phila., Pa.

**Philip Lincoln Aidenbaum, Ph.G.**

*Thes.*, Retail Drug Store Advertising.  
*Ad.*, 71st and Buist Avenue, Phila., Pa.

**Oliver Henry Antes, Ph.G.**

*Thes.*, Atmospheric Fractionation.  
*Ad.*, Coatesville, Pa.

**Harry Groff Aument, Ph.G.**

*Thes.*, Paraffin Dressings.  
*Ad.*, 281 Willis Street, East Detroit, Mich.

**Harry Bell, Ph.G.**

*Thes.*, Alcohol.  
*Ad.*, 2013 S. 4th Street, Phila., Pa.

**Carlos Manuel Benedetti, Ph.G.**

*Thes.*, Notes on Solanum Dulcamara.  
Received Certificate in Cosmetics and Perfumes, P. C. P., 1920.  
*Ad.*, Box 176, Panama City, R. P.

**Benjamin Berman, Ph.G.**

*Thes.*, Economic Lichens.  
*Ad.*, 114 E. 30th Street, Norfolk, Va.

**Elton McCoy Best, Ph.G.**

*Thes.*, Mercurochrome 220.  
*Ad.*, 245 Sommerville Street, Phila., Pa.

**Rose Blesden, Ph.G.**

*Thes.*, The Manufacture of Brushes.  
*Ad.*, 1327 S. 27th Street, Phila., Pa.

**Morris Bloomfield, Ph.G.**

*Thes.*, Glyceride Tinctures.  
*Ad.*, 2509 N. 28th Street, Phila., Pa.

- Rebecca Bornstein, Ph.G.**  
*Thes.*, Sponges.  
*Ad.*, Atlantic City Hospital, Atlantic City, N. J.
- Chester William Bricker, Ph.G.**  
*Thes.*, Tolu as a Coating for Pills.  
*Ad.*, 1307 Girard Avenue, Phila., Pa.
- Edwin Tyson Brown, Ph.G.**  
*Thes.*, Stable and Palatable Emulsions of Benzyl Benzoate.  
*Ad.*, Philipsburg, Pa.
- Russell Leo Brown, Ph.G.**  
*Thes.*, The Cut Rate Drug Store.  
Served in U. S. A., 154th Depot Brigade, 79th Div., Camp Meade, Md.  
*Ad.*, 1628 Green Street, Phila., Pa.
- Harry Harris Buch, Ph.G.**  
*Thes.*, Blood Transfusion.  
Served in U. S. A., with A. E. F.  
*Ad.*, 2nd and State Streets, Harrisburg, Pa.
- Barnett Budfn, Ph.G.**  
*Thes.*, A Bitter Extract of Coffee.  
*Ad.*, 3125 Diamond Street, Phila., Pa.
- Luther Alexander Buehler, Ph.B.**  
*Thes.*, Japan Wax in Ointments and Cerates.  
Asst. in Pharmacy Lab., P. C. P. (See page 456.)  
*Ad.*, 145 N. 10th Street, Phila., Pa.
- Robert Jefferson Burton, Ph.G.**  
*Thes.*, Non-Alcoholic Flavors.  
Served in U. S. A., Base HOSP. No. 38.  
*Ad.*, 1306 Girard Avenue, Phila., Pa.
- Wayne Emmanuel Byers, Ph.G.**  
*Thes.*, The Pharmacological Studies of the Ipecac Alkaloids.  
*Ad.*, 520 Hollywell Avenue, Chambersburg, Pa.
- Rose Cantarow, Ph.G.**  
*Thes.*, Cork.  
*Ad.*, 335 Franklin Avenue, Hartford, Conn.
- James Cowling Carstater, Ph.G.**  
*Thes.*, Compressed Tablets.  
*Ad.*, 101 W. Independence Street, Shamokin, Pa.
- Hubert Lee Cline, Ph.G.**  
*Thes.*, Assaying Phosphoric Acid.  
*Ad.*, Orbisonia, Pa.
- Charles Wayne Coffman, Ph.G.**  
*Thes.*, Chamois Skins.  
Served in U. S. A., Med. Dept.  
*Ad.*, Waynesboro, Pa.
- Hassie D. G. Cohen (Mrs.), Ph.G.**  
*Thes.*, Fluidextract of Bitter Orange Peel.  
*Ad.*, 2238 Callowhill Street, Phila., Pa.
- David Coleman, Ph.G.**  
*Thes.*, Cold Cream.  
*Ad.*, 534 Reed Street, Phila., Pa.
- Richard Edward Cramer, Ph.G.**  
*Thes.*, Virus Vaccinicum.  
Served in U. S. A., 4th Reg., 7th Engineers.  
*Ad.*, Florence, N. J.
- Thomas Joseph Daly, Ph.G.**  
*Thes.*, Dichloramine T and Its Allied Products.  
*Ad.*, 2329 N. Howard Street, Phila., Pa.
- Walter Hughlee Delle, Ph.G.**  
*Thes.*, Variations of the Teaspoon.  
*Ad.*, 1 S. Lansdowne Avenue, Lansdowne, Pa.
- George Coyle Derick, Ph.G.**  
*Thes.*, Reducing the Alcohol in Tinctures.  
Served in U. S. A., 111th Hosp. Corps, Camp Hancock, Ga., and with 28th Div., A. E. F.  
*Ad.*, Sunbury, Pa.
- Robert Levi Dry, Ph.G.**  
*Thes.*, Prescription Filling and Incompatibilities.  
Pharmacist. Served in Panama in U. S. A., Med. Dept., as Sgt.  
*Ad.*, 610 N. Shamokin Street, Shamokin, Pa.
- Nicholas Joseph Edge, Ph.G.**  
*Thes.*, Mercurochrome 220.  
*Ad.*, 1834 S. 22nd Street, Phila., Pa.
- Percival Norman Fenton, Ph.G.**  
*Thes.*, Benzyl Benzoate and Ways of Administration.  
In S. A. T. C., Princeton, N. J.  
*Ad.*, West Collingswood, N. J.
- Richard Cyril Flaherty, Ph.G.**  
*Thes.*, A Commercial Source of Tragacanth and Detection of Its Adulterants.  
*Ad.*, 252 Scott Street, Wilkesbarre, Pa.
- Joseph Charles Fleisher, Ph.G.**  
*Thes.*, Insecticides—Their Preparations and Applications.  
Retail pharmacist.  
*Ad.*, 13th and Master Streets, Phila., Pa.
- Joseph Maurice Forman, Ph.G.**  
*Thes.*, Hydrocyanic Acid Gas.  
Retail pharmacist.  
*Ad.*, 15th and Columbia Avenue, Phila., Pa.
- Lewis Good Freeman, Ph.G.**  
*Thes.*, Saturated Solutions.  
Asst. in Pharmacy Lab., P. C. P. 1921—  
*Ad.*, 1644 Allengrove Street, Frankford, Phila., Penna.
- Frank Hageubuch Furman, Ph.G.**  
*Thes.*, Buchu Leaves and Adulterants.  
*Ad.*, 6015 Kingessing Avenue, Phila., Pa.
- Clarence Moore Galloway, Ph.G.**  
*Thes.*, The Microscope—A Scientific Adjunct to Pharmacy.  
Served as Bacteriologist, Camp A. A. Humphreys, Virginia.  
*Ad.*, 5540 Wyalusing Avenue, Phila., Pa.
- Maurice George Gold, Ph.G.**  
*Thes.*, Histology of Cocillana Bark.  
Retail pharmacist.  
*Ad.*, 3234 Ridge Avenue, Phila., Pa.
- Samuel Green, Ph.G.**  
*Thes.*, Streptococcus Hemolyticus and Its Significance in Diseases.  
Retail pharmacist. Received Certificate in Bacteriology, P. C. P., 1919.  
*Ad.*, 629 Courtland Street, Phila., Pa.
- Florence Minerva Greeninger, Ph.G.**  
*Thes.*, Rubber Goods.  
*Ad.*, 8th Street and Oak Lane, Phila., Pa.
- Ambrose Rea Haberstroh, Ph.G.**  
*Thes.*, Adulterations and Identifications of Drugs.  
*Ad.*, 909 4th Street, Juniata, Pa.
- Howard Jacob Haines, Ph.G.**  
*Thes.*, Liquid Petrolatum.  
Served in U. S. A., Med. Dept., Camp Gordon, Georgia.  
*Ad.*, 1414 N. 11th Street, Reading, Pa.
- Lottie Hargreaves, Ph.G.**  
*Thes.*, The Assay of Commercial Varieties of Hydrogen Peroxide.  
*Ad.*, 2725 N. Front Street, Phila., Pa.
- Jennings Bryan Hartman, Ph.G.**  
*Thes.*, Depilatories and Deodorants.  
Received Certificate in Cosmetics and Perfumes, P. C. P., 1920.  
*Ad.*, Dallastown, Pa.
- John Parker Harvey, Ph.G.**  
*Thes.*, Dental Drugs and Chemicals.  
Retail pharmacist. Served in U. S. Naval Hosp.  
*Ad.*, 6075 Santa Monica Blvd., Los Angeles, Cal.

- Paul Franklin Heckert, Ph.G.**  
*Thes.*, Cane Sugar—History and Composition.
- Helen Lanning Hoey, Ph.G.**  
*Thes.*, The Exit of Alcohol in Pharmacy.  
*Ad.*, 1438 N. Peach Street, Phila., Pa.
- Daniel LeRoy Jacobs, Ph.G.**  
*Thes.*, Drugs that Enslave.  
Served in U. S. A., Camp Lee, Va.  
*Ad.*, 269 S. Pitt Street, Carlisle, Pa.
- Marie Gertrude Jaeger, Ph.G.**  
*Thes.*, The Evolution of Certain Pharmaceuticals.  
*Ad.*, Elkins Park, Pa.
- Charles Emerson Johnson, Ph.G.**  
*Thes.*, *Elaeagnus Longipes*.  
*Ad.*, Pennsgrove, N. J.
- Joseph Thomas Keuper, Ph.G.**  
*Thes.*, Organization of the Pharmacists in a Small City.  
*Ad.*, 412 Ardmore Avenue, Trenton, N. J.
- John Allan Knouse, Ph.G.**  
*Thes.*, Compounding and Dispensing Rectal Suppositories.  
*Ad.*, 218 N. 15th Street, Harrisburg, Pa.
- Charles Nicholas Koch, Ph.G.**  
*Thes.*, Biological Products.  
*Ad.*, 4924 Aspen Street, Phila., Pa.
- Matthew Kramer, Ph.G.**  
*Thes.*, *Drosera*, N. F.  
*Ad.*, 36th and Wallace Streets, Phila., Pa.
- Nathan Henry Kramer, Ph.G.**  
*Thes.*, The Antiseptic, Flavine.  
*Ad.*, 2217 S. 7th Street, Phila., Pa.
- William Rsbold Kurtz, Ph.G.**  
*Thes.*, Cotton.  
*Ad.*, Denver, Pa.
- Adam John Kwiatkowski, Ph.G.**  
*Thes.*, Monohydrated Sodium Carbonate.  
*Ad.*, 4774 Melrose Street, Frankford, Phila., Pa.
- Adolph Leon Laskowski, Ph.G.**  
*Thes.*, The Discoveries of Louis Pasteur.  
*Ad.*, 2714 E. Lehigh Avenue, Phila., Pa.
- Harold Noble Law, Ph.G.**  
*Thes.*, Ichthyol.  
*Ad.*, Bridgeport, Pa.
- William Harland Lswall, Ph.G.**  
*Thes.*, Intestinal Parasites.  
Served in U. S. A., Med. Dept., Gen. Hosp. No. 10.
- William Jennings Bryan Leh, Ph.G.**  
*Thes.*, Making Soap from Olive Oil that has been Used in the Preparation of Nuts.  
Served in Hosp. Corps.  
*Ad.*, Pennsburg, Pa.
- Francis Bernard Leigh, Ph.G.**  
*Thes.*, Modern Pharmacies.  
*Ad.*, 1603 E. State Street, Trenton, N. J.
- Joseph Lowenthal, Ph.G.**  
*Thes.*, My Experience in an Italian Drug Store.  
*Ad.*, 1630 S. Franklin Street, Phila., Pa.
- Lory Curley McAllister, Ph.G.**  
*Thes.*, Serum and Vaccine Therapy.  
*Ad.*, 401 N. Charlotte Street, Lancaster, Pa.
- William Aloysius McCauley, Ph.G.**  
*Thes.*, Ambrine.  
*Ad.*, 1913 E. Orleans Street, Phila., Pa.
- John Thomas McGavin, Ph.G.**  
*Thes.*, Pollenation of Plants.  
Served in Med. Detachment.  
*Ad.*, 222 N. Penna. Avenue, Wilkesbarre, Pa.
- Lester Mahlon McWilliams, Ph.G.**  
*Thes.*, Benzyl Benzoate.  
Served in Jeff. Hosp. Unit No. 38, with A. E. F.  
*Ad.*, 33 S. 7th Street, Sunbury, Pa.
- Joseph Manus, Ph.G.**  
*Thes.*, The Amount of Alkaloids in Various Preparations of Elixir Iron, Quinine and Strychnine.  
*Ad.*, 431 Durfor Street, Phila., Pa.
- \*Richard Manns, Ph.G.**  
*Thes.*, The Making of Syrup of Wild Cherry by Maceration.  
Deceased, June 17, 1920.
- Reuben Kaufman Martin, Ph.G.**  
*Thes.*, Arsenic; Its Toxicology and Therapeutics.  
Served in Med. Dept., U. S. A., Tank Corps, with A. E. F.  
*Ad.*, 1209 Scotland Avenue, Chambersburg, Pa.
- Carmen Aurors Martinez, Ph.G.**  
*Thes.*, *Convolvulus Scammonia* and *Ipomea Orizabensis*.  
Received Certificate in Bacteriology, P. C. P., 1918.  
*Ad.*, Marta Abreu 15, Sta. Clara, Cuba.
- Matilde Martinez, Ph.G.**  
*Thes.*, *Dioscorea*.  
Received Certificate in Bacteriology, P. C. P., 1918.  
*Ad.*, Marta Abreu 15, Sta. Clara, Cuba.
- Acisclo Marxuach, Ph.C.**  
*Thes.*, *Bixa Orellana*.  
Received Certificate in Bacteriology, P. C. P., 1917. Served in U. S. A., Camp Las Cassas, P.R.  
*Ad.*, 4 San Jose Street, San Juan, P. R.
- James Frederick Mesr, Ph.G.**  
*Thes.*, Manufacture of Pottery.  
Served in U. S. A., Camp Pitt.
- Benjamin Franklin Merkle, Ph.G.**  
*Thes.*, Cochineal.  
*Ad.*, Audubon, N. J.
- John Harold Miller, Ph.G.**  
*Thes.*, Acriflavine.  
Served in U. S. A. Field Hosp. No. 22, Camp Greenleaf, Ga.
- Clair Channell Moore, Ph.G.**  
*Thes.*, Manufacture and Uses of Pyralin.  
*Ad.*, 1017 E. Market Street, York, Pa.
- Rose Mary Moran, Ph.G.**  
*Thes.*, Drug Store Advertising.  
*Ad.*, 220 S. 46th Street, Phila., Pa.
- Ferdinand Motley, Ph.G.**  
*Thes.*, Mercury.  
Retail pharmacist.  
*Ad.*, 2453 W. Gordon Street, Phila., Pa.
- Irvin Moyer, Ph.G.**  
*Thes.*, Manufacture of Perfumes.  
Mem. Co. I, Penna. National Guard.  
*Ad.*, 1306 Pricetown Road, Reading, Pa.
- David Samuel Muchnick, Ph.G.**  
*Thes.*, Apothesine—Local Anesthesia.  
Retail pharmacist.  
*Ad.*, 51st and Aspen Streets, Phila., Pa.
- William Bryan Myers, Ph.G.**  
*Thes.*, *Helleborus Niger*.  
Received Certificate in Bacteriology, P. C. P., 1918. Served in U. S. A., Camp Greenleaf, Ga.  
*Ad.*, Spring Grove, York Co., Pa.
- Roy Augustus Nauman, Ph.G.**  
*Thes.*, Effect of Prohibition on Medicines.  
*Ad.*, 3126 N. Park Avenue, Phila., Pa.



**Grover Wellington Neiffer, Ph.G.**

*Thes.*, Poisons and Their Antidotes.  
Retail pharmacist. Received Certificate in Bacteriology, P. C. P., 1917. Served in U. S. A. with A. E. F.  
*Ad.*, Venice Blvd. and Bagley Street, Culver City, California.

**Ellwood Ervin Nicholl, Ph.G.**

*Thes.*, Show Windows.  
*Ad.*, 659 E. Tioga Street, Phila., Pa.

**Anthony Cyril Gawald, Ph.G.**

*Thes.*, Hyoscyamus.  
*Ad.*, 24th and Lombard Streets, Phila., Pa.

**William Luther Pawling, Ph.G.**

*Thes.*, Sugar—Its Sources and Commercial Manufacture.  
Served in U. S. N., Base Hosp. No 1, in France.  
*Ad.*, Highland Avenue, Downingtown, Pa.

**Cyrus Adam Peters, Ph.G.**

*Thes.*, Spiritus Aetheris Nitrosi.  
Served in 109th Inf., Med. Dept., U. S. A., with A. E. F.  
*Ad.*, Steinsville, Pa.

**Lynwood Carleton Pine, Ph.G.**

*Thes.*, Possible Sources of Potash.  
Served in U. S. N.  
*Ad.*, 302 Bridgesboro Street, Riverside, N. J.

**Charles Henry Pitt, Ph.G.**

*Thes.*, The Manufacture of Ethyl Nitrite.  
*Ad.*, 944 Fairview Street, Camden, N. J.

**Henry Simon Raymond, Ph.G.**

*Thes.*, Does the Chemical Test for Fluidextract of Conium Parallel the Physiologic Activity of the Preparation?  
Retail pharmacist. Received Certificate in Physiological Assaying, P. C. P., 1920.  
*Ad.*, 209 Carpenter Street, Phila., Pa.

**Isidor Rebarber, Ph.G.**

*Thes.*, Microscopical Differences in Stramonium Leaves and Its Adulterant, Xanthium Strumarium.  
*Ad.*, 6 Allen Street, New York City.

**Robert Elmer Reber, Ph.G.**

*Thes.*, Vulcanization of Rubber.  
Served in U. S. A., Med. Dept., Gen. Hosp. No. 30.  
*Ad.*, 1421 Arch Street, Phila., Pa.

**Charles Christian Reeae, Ph.G.**

*Thes.*, Celluloid.  
*Ad.*, Bringham Street and Rubicam Avenue, Germantown, Phila., Pa.

**Joanna Stretch Reeves, Ph.G.**

*Thes.*, Sphagnum Moss—A Substitute for Cotton as a Surgical Dressing.  
*Ad.*, 1118 Mt. Vernon Street, Phila., Pa.

**Lawrence Earnest Reidinger, Ph.G.**

*Thes.*, Assay of Aspirin.  
Student in chiropody, Temple Univ.  
*Ad.*, 610 N. Shamokin Street, Shamokin, Pa.

**Irene Esther Rice (Mrs. Van De Boe), Ph.G.**

*Thes.*, Douglas Balsam of Fir.  
*Ad.*, 845 N. 48th Street, Phila., Pa.

**Karl Hobart Roatch, Ph.G.**

Received Certificate in Clinical Chemistry, P. C. P., 1920. Served in U. S. N. as Chief Pharmacist's Mate.  
*Ad.*, 2444 S. Bancroft Street, Phila., Pa.

**Herbert Leon Roae, Ph.G.**

*Thes.*, Cultivation of Camphor and Its Home Economics.  
Served in U. S. A., Med. Dept., Gen. Hosp. No. 24.  
*Ad.*, 5050 Walnut Street, Phila., Pa.

**Herbert Joseph Roth, Ph.G.**

*Thes.*, Rennets.  
Received Certificate in Bacteriology, P. C. P., 1919.  
*Ad.*, 406 W. Dauphin Street, Phila., Pa.

**John Albert Ruplis, Ph.G.**

*Thes.*, Phenolphthalein.  
Served in Med. Corps, Camp Lee, Va.  
*Ad.*, East Greenville, Pa.

**Samuel Frederick Sacha, Ph.G.**

*Thes.*, Toilet Lotions with Benzoin.  
Retail pharmacist.  
*Ad.*, 5459 Walnut Street, Phila., Pa.

**Joseph William Schaefer, Ph.G.**

*Thes.*, The Deterioration of Ethyl Nitrite Content in Spirit of Nitrous Ether.  
Received Certificate in Physiological Assaying, P. C. P., 1920.  
*Ad.*, 2219 Bannock Street, Boise, Idaho.

**Charles Raymond Schaeffer, Ph.G.**

*Thes.*, The Cascara Industry in the United States.  
*Ad.*, 429 North Street, Emaus, Pa.

**Alexander Schampans, Ph.G.**

*Thes.*, Fluidextract of Conium.  
*Ad.*, 1417 N. 3rd Street, Harrisburg, Pa.

**George Bruce Search, Ph.G.**

*Thes.*, Veronica Officinal.  
*Ad.*, Towanda, Pa.

**Thomas Chester Seiple, Ph.G.**

*Thes.*, Glycerinum.  
Served in U. S. A., 316th Inf., 79th Div., Sanitary Detachment.  
*Ad.*, 3952 Lancaster Avenue, Phila., Pa.

**William Oscar Seitzinger, Jr., Ph.G.**

*Thes.*, Industrial Uses of Ethyl Alcohol.  
*Ad.*, Gordon, Pa.

**Ladialaus Anthony Senkowaki, Ph.G.**

*Thes.*, Olive Oil.  
Retail pharmacist. Served in U. S. A., Debarkation Hosp. No. 5.  
*Ad.*, Ontario and Almond Streets, Phila., Pa.

**William Thomas Senseman, Jr., Ph.G.**

*Thes.*, The Vulcanization of Rubber.  
Served in U. S. A., Field Artillery, Camp Jackson, S. C.  
*Ad.*, 154 Sylvan Terrace, Harrisburg, Pa.

**Enrique Aulet Seraballs, Ph.G.**

*Thes.*, Psidium Pomifer.  
Received Certificate in Cosmetics and Perfumes, P. C. P., 1920.  
*Ad.*, 902 Spruce Street, Phila., Pa.

**Robert William Shenk, Ph.G.**

*Thes.*, Salvia Triloba versus Salvia Officinalis.  
*Ad.*, 118 Chester Avenue, Coatesville, Pa.

**Orrin Shorr, Ph.G.**

*Thes.*, Hydrocarbon Salicylate—A Remedy for Rheumatism.  
*Ad.*, 2217 Arctic Avenue, Atlantic City, N. J.

**Mae Jennison Sidler, Ph.G.**

*Thes.*, Ballota Nigra.  
*Ad.*, 845 N. 48th Street, Phila., Pa.

**Ernest Biddle Simpson, Ph.G.**

*Thes.*, Vanilla and Its Preparation—Tinctura Vanilla, N. F. IV.  
*Ad.*, 2402 N. Fairhill Street, Phila., Pa.

**Frank MacFarland Smith, Ph.G.**

*Thes.*, Soft Soap.  
*Ad.*, 3521 New Queen Street, East Falls, Phila., Penna.

**Samuel Leater Smith, Ph.G.**

*Thes.*, Toluene.  
Served in U. S. A. as Sgt., Camp Greenleaf, Ga.

**Lorance Robert Spencer, Ph.G.**

*Thes.*, Advertising.  
*Ad.*, 511 Wyoming Avenue, West Pittston, Pa.

**Isaac Wayne Starkey, Ph.G.**

*Thes.*, The Use of Hydrogenated Fats as an Ointment Base.  
 Served in U. S. A. as Sgt., Camp Meade, Md.  
*Ad.*, 30 Main Street, Newbern, N. C.

**Bertram Clarence Steves, Ph.C.**

*Thes.*, The Saponification of Fats with Alkali Carbonates.  
*Ad.*, 20 E. 130th Street, New York City.

**Charles Robert Steward, Ph.C.**

*Thes.*, Relative Sensitiveness of Some of the Tests Used in the Detection of Dextrose in Urine.  
 Served in U. S. A., Sanitary Corps, as 2nd Lieut.  
 Received Certificate in Technical Microscopy. Received Certificate in Bacteriology, 1918. Mem. Faculty, Baylor Univ. Coll. of Pharmacy.  
*Ad.*, 5309 Bryan Street, Dallas, Tex.

**Loula Sukonick, Ph.G.**

*Thes.*, Hydrogen Dioxide.  
*Ad.*, 4821 N. Front Street, Phila., Pa.

**Arthur Paul Suttly, Ph.G.**

*Thes.*, Poison Gases.  
*Ad.*, Jenkintown, Pa.

**Leon William Swavelly, Ph.G.**

*Thes.*, Tincture of Cardamom.  
*Ad.*, 31 E. 2nd Street, Pottstown, Pa.

**Miguel Ocroa Tamayo, Ph.G.**

*Thes.*, Picramnia pentandra.  
 Received Certificate in Clinical Chemistry, P. C. P., 1920.  
*Ad.*, Banes, Oriente, Cuba.

**Saturnino Vidauretta, Ph.G.**

*Thes.*, Colloids.  
*Ad.*, Santa Barbara, Honduras, C. A.

**Mary Lynch Vogel (Mrs.), Ph.G.**

*Thes.*, Practical Disinfection in the Sickroom.  
 Retail pharmacist.  
*Ad.*, 3629 Haverford Avenue, Phila., Pa.

**Isaac Suader Weldman, Ph.G.**

*Thes.*, The Influenza Bacillus and Its Relation to the Pandemic of 1918.  
 Received Certificate in Bacteriology, P. C. P., 1919.  
*Ad.*, 2938 N. Bailey Street, Phila., Pa.

**Warren Rawson Weidemann, Ph.G.**

*Thes.*, An Examination of Solanum Nigrum Leaves.  
*Ad.*, 2130 Green Street, Phila., Pa.

**Isadore Thomas Weinberg, Ph.G.**

*Thes.*, Spiritus Aetheris Nitrosi.  
*Ad.*, 700 S. 55th Street, Phila., Pa.

**Maurice Weinberg, Ph.G.**

*Thes.*, Barium Sulphate.  
*Ad.*, 742 S. 4th Street, Phila., Pa.

**Leonard Weisbard, Ph.G.**

*Thes.*, Psycho-Therapy and Quackery.  
*Ad.*, 100 E. Allegheny Avenue, Phila., Pa.

**Frank Herman Weise, Ph.G.**

*Thes.*, Grindelia.  
*Ad.*, 2119 Bannock Street, Boise, Idaho.

**Walter Williams White, Ph.G.**

*Thes.*, Argyrol.  
*Ad.*, 1214 N. 56th Street, Phila., Pa.

**Hollis McCarrell Whible, Ph.G.**

*Thes.*, The Presence of Boric Acid and Borax in Commercial Talcum Powders.  
 Received B.Sc. degree, P. C. P., 1922.  
*Ad.*, Camp Hill, Pa.

**Lester Francis Widmann, Ph.G.**

*Thes.*, Althaea.  
 Retail pharmacist.  
*Ad.*, 26th and Liberty Streets, Erie, Pa.

**Stuart Eugene Wien, Ph.G.**

*Thes.*, A French Pharmacy.  
*Ad.*, Boyertown, Pa.

**Morria Faust Wilson, Ph.G.**

*Thes.*, Alcohol, Next to Water, the Most Valuable Chemical.  
 Served in U. S. A., Med. Dept., 32nd Machine Gun Btn., 11th Div.  
*Ad.*, Belvidere, N. J.

**Weasley Worrall, Ph.G.**

*Thes.*, Ichthyol.  
 Received Certificate in Bacteriology, P. C. P., 1919.  
*Ad.*, Downingtown, Pa.

**Harry Blake Young, Ph.G.**

*Thes.*, Cork.  
*Ad.*, Manheim, Pa.

**Matthias Augustus Zapp, Jr., Ph.G.**

*Thes.*, Senecio Aureus.  
*Ad.*, 253 E. 8th Street, N., Portland, Ore.

**Carl Elliott Zook, Ph.G.**

*Thes.*, Veratrum Viride vs. Symplocarpus Foetidus.  
*Ad.*, Lewistown, Pa.

**Special Students.**

**Nita N. Bernstein.**

Received Certificate in Bacteriology.

**Ruth A. Boasart.**

Received Certificate in Bacteriology.

**Thomas F. Curtis.**

Received Certificate of Proficiency in Chemistry.  
*Ad.*, Lakehurst, N. J.

**Alphonse Groblewaki.**

Received Certificate in Technical Microscopy.

**Paul G. Harnly.**

Received Certificate of Proficiency in Chemistry.  
*Ad.*, 107 W. Greenwich Street, Reading, Pa.

**Charlea Kahn.**

Received Certificate in Bacteriology.

**Brooke Bryon Kantner.**

Received Certificate of Proficiency in Chemistry.  
*Ad.*, 521 Buttonwood Street, Reading, Pa.

**Raymond Harold Kopp.**

Received Certificate in Bacteriology.

**Perce! Hayden Little.**

Received Certificate in Bacteriology.

**Abraham R. Lubarsky, Ph.G.**

Received Certificate in Bacteriology.

**Allen Foater Murray.**

Received Certificate of Proficiency in Chemistry.  
 Instr. Chemistry, Baylor Univ., Dallas, Tex.  
*Ad.*, 1904 Orleans Street, Phila., Pa.

**Robert Milton Nicholl.**

Received Certificate in Bacteriology.

**G. Emerson Rickart.**

Received Certificate of Proficiency in Chemistry.  
 Chemist for E. I. duPont de Nemours and Co.  
*Ad.*, 365 Howard Street, So. Williamsport, Pa.

**John C. Scott.**

Received Certificate in Bacteriology.

**Edward J. Steinel.**

Received Certificate in Bacteriology.

**John S. Tamplin.**

Received Certificate in Bacteriology.

# 658 First Century of the Philadelphia College of Pharmacy

## Frances Van Norden.

Received Certificate in Bacteriology and in Clinical Chemistry.

## Arturo De Virgillis.

Received Certificate in Physiological Assaying.

## Harry Woodall Wetzel.

Received Certificate in Bacteriology.

1921

## Howard Ruby Adams, Ph.G.

*Thes.*, The History of Absorbent Cotton.  
*Ad.*, 6021 Walnut Street, Phila., Pa.

## John Wesley Allen, Ph.G.

*Thes.*, The Chlorine Antiseptics.  
*Ad.*, 2003 14th Avenue, Altoona, Pa.

## Harry Althouse, Ph.G.

*Thes.*, Methods of Detecting Methyl Alcohol.  
*Ad.*, 1662 N. Lindenwood Street, Phila., Pa.

## Morris Arkans, Ph.G.

*Thes.*, Glycerin and Its Uses.  
*Ad.*, 5166 Columbia Avenue, Phila., Pa.

## Alfred William Arnold, Ph.G.

*Thes.*, Advertising.  
*Ad.*, 4811 Kingsessing Avenue, Phila., Pa.

## Martin I. Askin, Ph.G.

*Thes.*, Wild Cherry Barks.  
*Ad.*, 1534 N. 6th Street, Phila., Pa.

## George Joseph Bausher, Ph.G.

*Thes.*, A Comparison of *Aspidium Spinulosum* and *Aspidium Marginale*.  
Served in U. S. A., Med. Dept., 20th Engineers, with A. E. F.  
*Ad.*, 605 N. 3rd Street, Pottsville, Pa.

## Enrico R. Beauchamps, Ph.G.

*Thes.*, Volumetric Analysis of U. S. P. Manganese Dioxide.  
*Ad.*, 1809 Arch Street, Phila., Pa.

## Ralph Beaver, Ph.G.

*Thes.*, The Cultivation of Belladonna.  
*Ad.*, 439 S. 16th Street, Harrisburg, Pa.

## Abraham Belov, Ph.G.

*Thes.*, Cohesion Figures of the Fixed Oils.  
*Ad.*, 2451 N. 32nd Street, Phila., Pa.

## Ida Bernholz, Ph.G.

*Thes.*, Elixir Aromaticum.  
*Ad.*, 631 S. 9th Street, Phila., Pa.

## Abe Meyer Bernstein, Ph.G.

*Thes.*, Basham's Mixture.  
*Ad.*, 764 N. 38th Street, Phila., Pa.

## Howard Lukens Bill, Ph.G.

*Thes.*, The Chemical Rust Proofing of Iron and Steel.  
Served in U. S. N. as Pharmacist's Mate, 3rd Class.  
*Ad.*, 1220 Herbert Street, Phila., Pa.

## Richard Mathias Bitner, Ph.G.

*Thes.*, Flavored and Colored Elixirs for the N. F.  
*Ad.*, Lansdale, Pa.

## Lardner Clark Boyd, Ph.G.

*Thes.*, The Development of the Pharmaceutical Still.  
*Ad.*, Care of M. L. Smith, Doylestown, Pa.

## Edward A. Brill, Ph.G.

*Thes.*, Drug Store Advertising.  
*Ad.*, 71st and Elmwood Avenue, Phila., Pa.

## Sara Brown, Ph.G.

*Thes.*, Preparing and Dispensing Powders.  
*Ad.*, 559 Ferry Avenue, Camden, N. J.

## Edward Douglas Bruce, Ph.G.

*Thes.*, Prohibition and Its Effect on Pharmacy.  
Served in U. S. A., 1st Heavy Tank Corps, with A. E. F. Received Russian Service Medal.

## Joseph Leo Burns, Ph.G.

*Thes.*, Ipecacuanha—Its Alkaloids and Their Uses.  
*Ad.*, 64 Moyallen Avenue, Wilkesbarre, Pa.

## Archie Lee Caldwell, Ph.G.

*Thes.*, The Physical Characteristics of Volatile Oils.  
*Ad.*, 354 S. Hill Street, West Plains, Mo.

## Ralph Leonard Calvert, Ph.G.

*Thes.*, A Discussion on the U. S. P. IX and the N. F. IV.  
Assistant in Pharmacy, P. C. P.  
*Ad.*, Vosburg, Pa.

## Michael John Cardamone, Ph.G.

*Thes.*, Ichthyol.  
*Ad.*, 124 Maple Street, Conshohocken, Pa.

## Mildred Frances Carlisle, Ph.G.

*Thes.*, Mordants and Their Application.  
*Ad.*, Norwood Avenue and Gravers Lane, Germantown, Phila., Pa.

## Ellen Cawley, Ph.G.

*Thes.*, Camphor.  
*Ad.*, 284 Washington Street, Morrisville, Pa.

## George Edward Chambliss, Ph.G.

*Thes.*, Acriflavine and Proflavine.  
*Ad.*, 623 W. Hill Avenue, Knoxville, Tenn.

## David Champaine, Ph.G.

*Thes.*, Making Castor Oil More Palatable for Administration.  
*Ad.*, 2626 S. 9th Street, Phila., Pa.

## Rollin Earl Clewell, Ph.G.

*Thes.*, The Chemistry and Pharmacology of the Chloramines.  
*Ad.*, 126 W. Front Street, Berwick, Pa.

## Frank Patrick Colahan, Ph.G.

*Thes.*, Lime Water—Best Conditions for Making and Keeping.  
*Ad.*, 3459 Chestnut Street, Phila., Pa.

## Edwin John Connor, Ph.G.

*Thes.*, Cold Cream.  
*Ad.*, 424 Walnut Street, Coatesville, Pa.

## Lee Garfield Cordier, Ph.G.

*Thes.*, Vitamines.  
Asst. in Chem. Lab., P. C. P., 1921.  
*Ad.*, 1800 Green Street, Phila., Pa.

## Samuel Coult, Ph.G.

*Thes.*, Hydrogenation of Oils.  
*Ad.*, 1524 E. Moyamensing Avenue, Phila., Pa.

## Sanford Joseph Davenport, Ph.G.

*Thes.*, Use of Intoxicating Liquor in the Manufacture of Alcoholic Medicinal Preparations and Other Alcoholic Compounds.  
*Ad.*, 206 E. Ogden Street, Girardville, Pa.

## Robert V. S. Davis, Ph.G.

*Thes.*, The Diamond Drill.  
*Ad.*, 738 Bromley Avenue, Scranton, Pa.

## John Deans, Ph.G.

*Thes.*, Commercialism and Ethics.  
Served in U. S. N., Base HOSP. No. 5, Brest, France.  
*Ad.*, 900 Saville Avenue, Eddystone, Pa.

## Howard Werstler Detweiler, Jr., Ph.G.

*Thes.*, Cotton.  
*Ad.*, 729 N. Charlotte Street, Pottstown, Pa.

## David R. Detwiler, Ph.G.

*Thes.*, Investigation of the Manufacture of Glycerin by the Fermentation Process.  
*Ad.*, 403 Hellam Street, Wrightsville, Pa.



- Thomas Joseph Devine, Ph.G.**  
*Thes.*, Mercurochrome.  
*Ad.*, 745 Monroe Avenue, Scranton, Pa.
- Carl Donald DeVittorio, Ph.G.**  
*Thes.*, Biologicals in Pharmacy.  
*Ad.*, Cardott Street, Ridgway, Pa.
- David Bainbridge Dixon, Ph.G.**  
*Thes.*, Ichthyol.  
*Ad.*, 298 Strayer Street, Johnstown, Pa.
- Henry Joseph Dombrowski, Ph.G.**  
*Ad.*, 2550 Orthodox Street, Phila., Pa.
- Walter Ephrem Donovan, Ph.G.**  
*Thes.*, Inspection of Milk Production.  
*Ad.*, 166 Shiers Lane, Wissahickon, Phila., Pa.
- David Leonard Dyen, Ph.G.**  
*Thes.*, Unguentum Iodi.  
*Ad.*, 3025 Berks Street, Phila., Pa.
- Wilmer Morrison Eby, Ph.G.**  
*Thes.*, Acetic Acid.  
*Ad.*, 39½ W. King Street, Lancaster, Pa.
- Thomas L. Eddy, Ph.G.**  
 Served in U. S. A., Camps Lee and Zachary Taylor.  
*Ad.*, 209 Commerce Street, Shamokin, Pa.
- Harry N. Episcopo, Ph.G.**  
*Thes.*, Methods in Dealing with Italian Customers.  
*Ad.*, 481 Hamilton Avenue, Trenton, N. J.
- Charles Henry Ewing, M.D., Ph.G.**  
*Thes.*, Influences Upon the Skin of Certain Drugs and Poisonous Plant Principles.  
*Ad.*, 1330 S. 17th Street, Phila., Pa.
- Edward Thomas Finegan, Ph.G.**  
*Thes.*, Gentian.  
*Ad.*, 349 E. Pearl Street, Burlington, N. J.
- Louis Fox, Ph.G.**  
*Thes.*, Commercial Soaps.  
 Served in U. S. A., 146th Inf., with A. E. F.  
*Ad.*, 1110 N. 41st Street, Phila., Pa.
- Ray Linaham Fox, Ph.G.**  
*Thes.*, Emulsion of Creosote Carbonate.  
*Ad.*, National Park, N. J.
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*Thes.*, Characteristics of Emulsions.  
*Ad.*, 8033 Rowland Avenue, Phila., Pa.
- Jacob Freedman, Ph.G.**  
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*Ad.*, 613 W. Montgomery Avenue, Phila., Pa.
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*Thes.*, By-Products in Coal.  
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- Margaret Gertrude Funcheon, Ph.G.**  
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- Hallie Jackson Garber, Ph.G.**  
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*Ad.*, 1950 N. 18th Street, Phila., Pa.
- Herman Gershenfeld, Ph.G.**  
*Thes.*, Mistura Creta.  
*Ad.*, 530 Dickinson Street, Phila., Pa.
- Adolph E. Gold, Ph.G.**  
*Thes.*, Face Cream.  
*Ad.*, 418 S. 54th Street, Phila., Pa.
- Anne Goldberg, Ph.G.**  
*Thes.*, Sweet Marjoram—Its Adulteration with *Coriaria Myrtifolia*.  
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*Thes.*, Fertilizer Industry in Philadelphia.  
*Ad.*, 248 S. 56th Street, Phila., Pa.
- Jack Kendall Golland, Ph.G.**  
*Thes.*, Acidum Phenylcinchonicum, U. S. P.  
*Ad.*, 5412 W. Girard Avenue, Phila., Pa.
- Jacob Goodman, Ph.G.**  
*Thes.*, Benzyl Benzoate—Its Pharmaceutical Preparations.  
*Ad.*, 287 S. 5th Street, Phila., Pa.
- Thomas A. Gorgas, Jr., Ph.G.**  
*Thes.*, Zinc.  
*Ad.*, 1823 Poplar Street, Phila., Pa.
- Eli Nosh Green, Ph.G.**  
*Thes.*, Window Advertising.  
*Ad.*, 901 N. 66th Street, Phila., Pa.
- Sterling Myers Griesing, Ph.G.**  
*Thes.*, Coal and Its Substitutes.  
*Ad.*, 589 N. Church Street, Hazleton, Pa.
- William Shakespeare Groff, Ph.G.**  
*Thes.*, Oral Prophylaxis.  
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*Ad.*, Cynwyd, Pa.
- David Gross, Ph.G.**  
*Thes.*, Cold Cream.  
 Served in Med. Supply Depot, Camp Meade, Md.  
*Ad.*, 1946 S. 10th Street, Phila., Pa.
- William Henry Gross, Ph.G.**  
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*Thes.*, Lac Fermentatum, N. F.  
*Ad.*, 463 Winona Avenue, Germantown, Phila., Pa.
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*Thes.*, Chamois Skins.  
*Ad.*, 1645 N. 29th Street, Phila., Pa.
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*Ad.*, 321 N. 7th Street, Camden, N. J.
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*Ad.*, 300 Mahoning Street, Punxsutawney, Pa.
- Benjamin Handelsman, Ph.G.**  
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- Ernest Robert Harper, Ph.G.**  
*Thes.*, Spiritus Aetheris Nitrosi.  
*Ad.*, 257 N. 52nd Street, Phila., Pa.
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*Ad.*, 322 Centre Street, Ashland, Pa.
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*Thes.*, Incompatibilities.  
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*Ad.*, Stevens Block, Butte, Mont.
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*Thes.*, Modified Boric Acid Ointment.
- Walter Reuben Hodnett, Ph.G.**  
*Thes.*, The Manufacture, Uses and Incompatibilities of Adrenalin.

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- Albert Herman Hoffstein, Ph.G.**  
*Thes.*, Pollen as a Diagnostic in Crude Drug Identification.  
*Ad.*, 3842 Poplar Street, Phila., Pa.
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*Thes.*, Zinc Oxide.  
*Ad.*, 609 Grove Avenue, Johnstown, Pa.
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*Thes.*, Pepsin.
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- Hyman Jaffe, Ph.G.**  
*Thes.*, Practical Insecticidal Preparations.  
*Ad.*, 3212 W. Dauphin Street, Phila., Pa.
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*Ad.*, 3510 N. 17th Street, Phila., Pa.
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*Thes.*, Yeast.  
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 Retail pharmacist.  
*Ad.*, 18th and Morris Streets, Phila., Pa.
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 Received Certificate in Physiological Assaying, P. C. P., 1921.  
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- Albert Bert Mokes, Ph.G.**  
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*Ad.*, Dorranceton, Pa.
- William Taylor Mower, Ph.G.**  
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*Thes.*, Terpin Hydrate and Its Preparations.  
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*Thes.*, Green Soft Soap.  
 Asst. in Pharmacy Lab., P. C. P., 1921-  
*Ad.*, 2810 N. 11th Street, Phila., Pa.
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*Ad.*, 1100 N. 3rd Street, Harrisburg, Pa.
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*Thes.*, Unofficial Ointments.  
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*Thes.*, Muira-Puama.  
*Ad.*, 633 Parson Street, Easton, Pa.
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*Thes.*, Prunus Virginiana and Its Adulterants.  
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*Ad.*, 1201 Center Street, Ashland, Pa.
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*Ad.*, Lebanon, Pa.
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*Ad.*, 17 Evergreen Street, Harrisburg, Pa.
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*Thes.*, Business Ethics in a Drug Store.  
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*Thes.*, The Therapeutic Inactivity of Solution of Hydrogen Peroxide when Admixed.  
*Ad.*, 908 Bergen Street, Newark, N. J.
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- Philip Ash Teah, Ph.G.**  
*Thes.*, Suggestions on Compound Cresol Solution.  
*Ad.*, 26th and Liberty Streets, Erie, Pa.
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*Ad.*, 2413 N. 31st Street, Phila., Pa.
- H. Jane Train, Ph.G.**  
*Thes.*, Hevea Brasiliensis.
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*Ad.*, 3861 Cambridge Street, Phila., Pa.
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*Ad.*, 51 N. Main Street, Chambersburg, Pa.
- Vernon Wilbert Wagner, Ph.G.**  
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*Thes.*, Cotton Root Bark and Its Value to Medicine.  
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- Leah Weinstein, Ph.G.**  
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*Ad.*, 331 Washington Avenue, Phila., Pa.
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*Thes.*, Optical Rotation of Solutions of Volatile Oils.  
*Ad.*, 1 N. Auburn Avenue, Richmond, Va.
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*Thes.*, Artificial Dyes in Food.  
*Ad.*, 1038 S. 4th Street, Phila., Pa.
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*Thes.*, Carron Oil as an Ointment.  
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*Thes.*, Tests for the Detection of Methyl Alcohol as an Adulterant.  
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*Thes.*, Crotalin.  
*Ad.*, 600 S. 15th Street, Phila., Pa.

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*Thes.*, Vitamines.  
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**Morris Bern.**

Received Certificate in Bacteriology and in Clinical Chemistry.

**Charles A. Bright.**

Received Certificate in Physiological Assaying.

**Donald Charles A. Butts.**

Received Certificate in Physiological Assaying.

**Clarence Carl Conold.**

Received Certificate in Bacteriology.  
*Ad.*, 305 Manhattan Blvd., W., Toledo, O.

**Katharine H. Crenshaw.**

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*Ad.*, 6616 Emlen Street, Germantown, Phila., Pa.

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Received Certificate in Bacteriology and in Clinical Chemistry.

**Wilbur P. Lutz.**

Received Certificate in Bacteriology and in Clinical Chemistry.

**Frank M. Mc Nerney.**

Received Certificate of Proficiency in Chemistry.  
Asst. in Technical Lab., P. C. P., 1921.

**Francis J. MacMahon.**

Received Certificate in Bacteriology and in Clinical Chemistry.

**George Alvin Miller.**

Received Certificate in Physiological Assaying.

**Fred Leroy Moody.**

Received Certificate in Bacteriology.

**Paul Frederick Rupp.**

Received Certificate in Advanced Commercial Training.

**Walter Douglas Sholl.**

Received Certificate in Clinical Chemistry.

**Sylvia Fay Stephens.**

Received Certificate in Bacteriology.

**Thomas Vaile.**

Received Certificate in Bacteriology.

GRADUATES OF THE DEPARTMENT OF PHARMACY AND CHEMISTRY OF  
THE MEDICO-CHIRURGICAL COLLEGE

(CLASS LIST)

1899

**J. B. Hagenbuch, Ph.G.**  
*Ad.*, 51st and Baltimore Avenue, Phila., Pa.**William Alvin Lum, Ph.G.**  
*Ad.*, 1416 Venango Street, Phila., Pa.**Frank Mills Mooney, Ph.G.**  
Pharmacist.  
*Ad.*, 7963 Oxford Avenue, Fox Chase, Pa.**\*Harvey Eugene Wenner, Ph.G.****George Cookman Wilson, Jr., Ph.G.**  
*Ad.*, 998 N. 7th Street, Phila., Pa.

1900

**George C. Anderson, M.D., Ph.G.**  
*Ad.*, 1504 Lincoln Avenue, Pittsburgh, Pa.**Albert B. Armstrong, Ph.G.**  
California Mgr. Henry Tetlow Co. Retail pharmacist until 1908. Served in U. S. A., Ordnance Dept.  
*Ad.*, 2521 S. 62nd Street, Phila., Pa.**H. L. Bowers, Ph.G.**  
*Ad.*, Ridge and Butler Streets, Easton, Pa.**E. V. Brennan, Ph.G.**  
*Ad.*, 311 W. Market Street, Scranton, Pa.**George V. Ciccone, Ph.G.**  
*Ad.*, 7th and Christian Streets, Phila., Pa.**Norvin A. Corbett, Ph.G.**  
Retail pharmacist.  
*Ad.*, New Bethlehem, Clarion Co., Pa.**L. Stanley Dobson, Ph.G.**  
Retail pharmacist.  
*Ad.*, 6201 Vine Street, Phila., Pa.**Charles M. Feicht, Ph.G.**  
*Ad.*, Reynoldsville, Pa.**George Knight, Ph.G.**  
Physician. Graduated in medicine, Medico-Chi. College, 1905.  
*Ad.*, 3409 Federal Street, Camden, N. J.**Herbert G. Lilly, Ph.G.**  
Retail pharmacist.  
*Ad.*, 29th and Thompson Streets, Phila., Pa.**John E. Minehart, Ph.G.**  
Received degree M.D., 1903. Mem. Phila. Council, 1912-16. Now Dean, Pharmacy Dept., Temple Univ.  
*Ad.*, Temple Univ., 18th and Buttonwood Streets, Phila., Pa.**\*Frank J. Parrish, Ph.G.****Vincent G. Reynolds, Ph.G.**  
Retail pharmacist. Masonic affiliation. Mem. Nat'l Assn. Retail Druggists; Johnstown Retail Druggists Assn.  
*Ad.*, 205 Franklin Street, Johnstown, Pa.**William T. Ryan, Ph.G.**  
*Ad.*, Honesdale, Pa.**Samuel G. Shepherd, Ph.G.**  
*Ad.*, 2nd and Dickinson Streets, Phila., Pa.**William A. Stidham, Ph.G.**  
*Ad.*, Vineland, N. J.**\*Stewart L. Unanget, Ph.G.****Harvey L. Wertley, Ph.G.**Retail pharmacist. Mem. Germantown Unit of Retail Druggists Assn.; Chm. 2 years.  
*Ad.*, Greene and Loudon Streets, Germantown, Phila., Pa.

1901

**William S. Baer, Ph.G.****Walter E. Boyer, Ph.G.**  
Physician and surgeon. Graduated in medicine Medico-Chi. College, 1907. Served in U. S. A. as 1st Lieut., Med. Dept.  
*Ad.*, 861 East 3rd Street, Williamsport, Pa.**Edward B. Connor, Ph.G.****Alonzo Boyer Farr, Ph.G.**  
*Ad.*, 7 S. 5th Street, Phila., Pa.**William R. Fretz, Ph.G.**  
Retail pharmacist.  
*Ad.*, Arkansas City, Kansas.**Edward W. Giles, Ph.G.**  
Retail pharmacist. Pres. Southwark Neighborhood House Men's Club, 3 years.  
*Ad.*, 2nd and Federal Streets, Phila., Pa.**William F. Hennings, Ph.G.****George B. Hinkley, Ph.G.****Boris Kaschedin, Ph.G.****Harvey E. Kendig, Ph.G.**  
*Ad.*, 5328 Baynton Street, Germantown, Phila., Pa.**\*Charles Tomlinson King, Ph.G.****John Loutfian, Ph.G.**  
*Ad.*, Cocksackie, N. Y.**Charles M. J. Malloy, Ph.G.****H. K. Metcalf, Ph.G.**  
*Ad.*, Greencastle, Pa.**H. G. Portner, Ph.G.**  
*Ad.*, Gap, Pa.**Charles Norman Rife, Ph.G.**  
Retail pharmacist.  
*Ad.*, 21st and Vine Streets, Phila., Pa.**Joseph F. Schlotterer, Ph.G.**  
*Ad.*, 186 Green Lane, Manayunk, Phila., Pa.**Benjamin B. Truax, Ph.G.**  
*Ad.*, 247 W. Diamond Street, Hazleton, Pa.**Harry Voorhees, Ph.G.**  
*Ad.*, 61 Elwood Avenue, Montclair, N. J.**Walter L. Wenck, Ph.G.****Henry C. Woelke, Ph.G.**

1902

**Harold Bayard Allen, Ph.G.**  
Retail pharmacist.  
*Ad.*, 42 Main Street, Mt. Holly, N. J.**Joseph Massey Armstrong, Ph.G.****Henry G. Bille, Ph.G.**  
*Ad.*, 6th and Luzerne Streets, Phila., Pa.**Harry F. Brunhouse, Ph.G.**  
*Ad.*, 11 W. Main Street, Mechanicsburg, Pa.**Lloyd W. Conrad, Ph.G.**  
*Ad.*, 28th and Columbia Avenue, Phila., Pa.



- John H. Davis, Ph.G.**  
*Ad.*, Lansdowne, Pa.
- George W. Eyster, Ph.G.**
- Howard A. Feather, Ph.G.**  
*Ad.*, 1016 Chestnut Street, Reading, Pa.
- Joseph T. Fisher, Ph.G.**  
*Ad.*, 18th and Market Streets, Phila., Pa.
- Alfred Griggs, Ph.G.**  
Retail pharmacist.  
*Ad.*, 18th and McKean Streets, Phila., Pa.
- Clarence S. Hain, Ph.G.**  
*Ad.*, 501 S. 5th Street, Reading, Pa.
- Charles Henry Hargreaves, Ph.G.**
- George L. Lilly, Ph.G.**
- Charles T. Maclay, Ph.G.**  
*Ad.*, Chambersburg, Pa.
- \***Robert W. McMurtrie, Ph.G.**
- \***Joseph B. Mitchell, Ph.G.**  
Deceased, April 19, 1922.
- Theodora L. Morgan, Ph.G.**  
*Ad.*, Church Lane and Beechwood Street, Phila., Penna.
- Howard C. M. Ott, Ph.G.**  
*Ad.*, Portland, Pa.
- Arthur W. Post, Ph.G.**  
*Ad.*, 505 Genesee Street, Buffalo, N. Y.
- Elmer O. Prosser, Ph.G.**  
Retail pharmacist.  
*Ad.*, 717 N. High Street, Bethlehem, Pa.
- Tolbert Prowell, Ph.G.**  
Retail pharmacist.  
*Ad.*, 385 S. Front Street, Steelton, Pa.
- Herbert L. Quickel, Ph.G.**  
*Ad.*, Morgantown, Berks Co., Pa.
- Elmer E. Riley, Ph.G.**  
*Ad.*, Laurel Springs, N. J.
- Floyd A. Shimer, Ph.G.**
- \***M. Joseph A. Simmons, Ph.G.**  
Deceased, May 11, 1915.
- John H. Stiteler, Ph.G.**  
*Ad.*, 21st and Mt. Vernon Streets, Phila., Pa.

1903

- William Earl Beamer, Ph.G.**
- \***George A. Beltz, Ph.G.**
- Charles S. Bentz, Ph.G.**  
Retail pharmacist.  
*Ad.*, 1033 High Street, Pottstown, Pa.
- Maurice S. Brubaker, Ph.G.**  
Retail pharmacist. Also engaged in farming and raising horses and cattle.  
*Ad.*, 22 N. Prince Street, Lancaster, Pa.
- Cyrus W. Davis, Ph.G.**  
Retail pharmacist.  
*Ad.*, 330 First Street, Conemaugh, Pa.
- William Allison Davis, Ph.G.**  
*Ad.*, 1537 South Street, Phila., Pa.
- George W. Dreibelbis, Ph.G.**  
Retail pharmacist. Director Tower City Nat'l Bank.  
*Ad.*, Tower City, Pa.
- John T. Enslinger, Ph.G.**  
Retail pharmacist.  
*Ad.*, 1507 N. 6th Street, Harrisburg, Pa.

- Rozier L. Francis, Ph.G.**  
*Ad.*, Laurel, Del.
- Edgar L. Fregoe, Ph.G.**  
*Ad.*, 31 Main Street, Massena, N. Y.
- \***William E. Gibbs, Jr., Ph.G.**  
Deceased, July 2, 1917.
- William F. Kelly, M.D., Ph.G.**  
*Ad.*, 807 N. 11th Street, Phila., Pa.
- Harry J. Koch, Ph.G.**  
*Ad.*, Richmond and Indiana Avenue, Phila., Pa.
- Charles E. Koons, Ph.G.**  
*Ad.*, Camp Hill, Cumberland Co., Pa.
- Edward M. Lauther, Ph.G.**
- George K. Levan, Ph.G.**  
*Ad.*, 300 S. 5th Street, Reading, Pa.
- \***Freeman Guy Lithgow, Ph.G.**
- A. Francis Mc Nerney, M.D., Ph.G.**  
*Ad.*, 1716 N. 23rd Street, Phila., Pa.
- Leon S. Marshall, Ph.G.**  
Physician and surgeon. Penna. R. R. surgeon. Mem. Dauphin Co. Med. Soc.; Penna. Med. Soc.; Amer. Med. Assn.  
*Ad.*, 6047 Christian Street, Phila., Pa.
- Edward F. Menger, M.D., Ph.G.**  
*Ad.*, Indian School, Lawrence, Kansas.
- C. Stanley Mylrea, Ph.G.**  
*Ad.*, Bahrein, Arabia, via Bombay.
- William H. Ort, Ph.G.**  
*Ad.*, 3340 N. 18th Street, Phila., Pa.
- D. Samuel Rhone.**  
*Ad.*, 1202 Haddon Avenue, Camden, N. J.
- William B. Riegel.**  
*Ad.*, 51st and Arch Streets, Phila., Pa.
- J. Irvin Ruff, Ph.G.**  
*Ad.*, Hummelstown, Pa.
- Samuel D. Shull, Ph.G.**  
Physician and surgeon. Graduated in medicine, Medico-Chi College, 1908. Mem. staff, Chambersburg Hosp.  
*Ad.*, 75 N. Main Street, Chambersburg, Pa.
- John Brown Spencer, Ph.G.**  
*Ad.*, 346 Jefferson Street, Bristol, Pa.
- Robert A. Sphar, Ph.G.**  
*Ad.*, W. Brownsville, Pa.
- Charlea S. Voorhees, Ph.G.**  
*Ad.*, 10th and Washington Avenue, Easton, Pa.
- J. Allen Wales, Ph.G.**  
*Ad.*, 516 Washington Street, Cape May, N. J.
- Joseph J. Widmann, Ph.G.**  
Retired from active business.  
*Ad.*, 27th and Montgomery Avenue, Phila., Pa.

1904

- \***Harry G. Adams, Ph.G.**
- John Howard Adams, Ph.G.**  
Retail pharmacist.  
*Ad.*, 1326 N. 10th Street, Phila., Pa.
- \***Merle E. Arnold, Ph.G.**
- I. Allen Conrad, Ph.G.**  
*Ad.*, 28th and Columbia Avenue, Phila., Pa.
- Arthur W. Crawford, Ph.G.**  
*Ad.*, 28 N. Robinson Street, Phila., Pa.

# 666 First Century of the Philadelphia College of Pharmacy

- George W. Deltz, Ph.G.**  
*Ad.*, 1744 Orthodox Street, Phila., Pa.
- \*Samuel R. Ewing, Ph.G.**  
**Chester W. Fugate, Ph.G.**  
*Ad.*, Mahaffey, Pa.
- J. Clark Gamble, M.D., Ph.G.**  
*Ad.*, Clairsville, Pa.
- \*Samuel Gamble, Ph.G.**  
**B. Forrest Ginder, Ph.G.**  
*Ad.*, Sharon Hill, Pa.
- Harry M. Gingrich, Ph.G.**  
*Ad.*, 334 Penn Street, Reading, Pa.
- Harry J. Gwinner, Ph.G.**  
*Ad.*, St. Clair, Pa.
- Calvin L. Hughes, Ph.G.**  
*Ad.*, 15 West Broad Street, Hazleton, Pa.
- Robert J. Hunt, Ph.G.**  
*Ad.*, 706 1st Avenue, Minncapolis, Minn.
- Edward T. Johnson, Ph.G.**  
*Ad.*, 1553 N. 9th Street, Phila., Pa.
- Harrison A. Keiser, Ph.G.**  
*Ad.*, West Milton, Pa.
- E. H. Kloman, Ph.G.**
- Charles S. Lebo, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 835 S. 59th Street, Phila., Pa.
- William R. Levering, Ph.G.**  
 Physician. Graduated in medicine, Medico-Chi. College, 1908.  
*Ad.*, 31 N. 7th Street, Stroudsburg, Pa.
- William E. Lucas, Ph.G.**
- Francis O'Kane, Ph.G.**  
 Pres. Biddle and Co., Investment Brokers. Mem. Old Colony Club.  
*Ad.*, 1541 N. 19th Street, Phila., Pa.
- Elmer T. Pinker, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 130 E. Pine Avenue, Wildwood, N. J.
- Elmer D. Quickel, Ph.G.**  
*Ad.*, 1308 N. George Street, York, Pa.
- \*Karl P. Reifsnyder, Ph.G.**
- \*Martin W. Rodawig, Ph.G.**  
 Deceased, April 1, 1907.
- Daniel J. Rothermel, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 26th and Federal Streets, Phila., Pa.
- William Scallella, Ph.G.**
- Robert W. Schewing, Ph.G.**  
*Ad.*, Glenside, Pa.
- Merritt B. Schultz, M.D., Ph.G.**  
*Ad.*, 602 Park Avenue, Moxham, Johnstown, Pa.
- Leopold L. Smith, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 2630 E. Lehigh Avenue, Phila., Pa.
- W. Pearce Smith, Ph.G.**  
*Ad.*, 2244 E. Fletcher Street, Phila., Pa.
- James H. Stanton, Ph.G.**  
*Ad.*, 26th and Lehigh Avenue, Phila., Pa.
- Thomas J. Thousin, Ph.G.**  
*Ad.*, 2721 Columbia Avenue, Phila., Pa.
- S. Wilmer Tunnell, Ph.G.**  
 Physician. Served in U. S. A. as Capt., Camp Lee, Va.  
*Ad.*, 1831 Chestnut Street, Phila., Pa.
- W. Clarence W. Zepp, Ph.G.**  
 Dentist and pharmacist. Graduated in dentistry, Geo. Washington Univ., 1913.  
*Ad.*, 148 11th Street, S. E., Washington, D. C.

## 1905

- Merritt Clay Berger, Ph.G.**  
*Ad.*, 731 N. 17th Street, Phila., Pa.
- T. B. Bordner, Ph.G.**  
*Ad.*, 4437 Germantown Avenue, Phila., Pa.
- John O. Bower, M.D., Ph.G.**  
*Ad.*, Wyncote, Pa.
- Henry W. Bowers, Ph.G.**  
 Physician and surgeon. Interne St. Luke's Hosp.  
*Ad.*, Nevada, Iowa.
- \*Thomas M. Cook, Ph.G.**
- William Rose Gibble, Ph.G.**  
*Ad.*, 733 Eric Avenue, Phila., Pa.
- John I. Harvey, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 110 Sunbury Street, Minersville, Pa.
- Harry C. Helm, Ph.G.**  
*Ad.*, 5520 Woodland Avenue, Phila., Pa.
- Lee Ellsworth Hyres, Ph.G.**  
*Ad.*, 1305 N. 52nd Street, Phila., Pa.
- Paul H. Langner, Ph.G.**  
*Ad.*, 1726 Sansom Street, Phila., Pa.
- \*William Smithers Lank, Ph.G.**  
 Deceased, November 30, 1915.
- Maurice L. Lewis, Ph.G.**  
*Ad.*, 60th and Chester Avenue, Phila., Pa.
- Benjamin M. Lum, Ph.G.**  
*Ad.*, 20th and Tioga Streets, Phila., Pa.
- John T. MacDonald, Ph.G.**  
 Physician and surgeon. Interne Samaritan Hosp., 1909. Instr. Bacteriology, Medico-Chi. College 1905-09. Pathologist Bloomsburg Hospital, 1911. Univ. of Vienna, 1914; Univ. of Paris, 1918. Served in U. S. A. as 1st Lieut., Capt. and Major, Med. Dept. Director F. H., 78th Div., A. E. F.  
*Ad.*, 137 W. Main Street, Bloomsburg, Pa.
- Harry H. Searl, Ph.G.**  
*Ad.*, Village and Grove Streets, Johnstown, Pa.
- \*Harvey Whitney Springer, Ph.G.**  
 Deceased, September 13, 1912.
- Edwin Qulnn Thayer, Ph.G.**  
*Ad.*, Care of H. K. Mulford Co., Kansas City, Mo.
- Charles E. Thrush, Ph.G.**  
*Ad.*, 3849 Lancaster Avenue, Phila., Pa.
- Edwin H. Yeagley, Ph.G.**  
*Ad.*, 22nd and Indiana Avenue, Phila., Pa.
- Heber W. Youngken, Ph.G.**  
 Prof. of Botany and Pharmacognosy, P. C. P. (See page 418.)  
*Ad.*, 456 Winona Street, Germantown, Phila., Pa.

## 1906

- William L. Calvert, Ph.G.**  
*Ad.*, 15th and Loudon Streets, Phila., Pa.
- James S. Catterson, Ph.G.**  
*Ad.*, 4808 N. 13th Street, Phila., Pa.
- Claude Culver, Ph.G.**
- Thomas B. Doud, Ph.G.**  
*Ad.*, Winona Avenue, Norwood, Del. Co., Pa.
- James J. Fertick, Ph.G.**

**Harry Kimmelman, Ph.G.**  
*Ad.*, 57th and Spruce Streets, Phila., Pa.

**Harry E. Klingaman, M.D., Ph.G.**  
*Ad.*, Emaus, Pa.

**Claude H. Kratzer, Ph.G.**  
 Retail pharmacist. Mem. B. P. O. E.  
*Ad.*, 448 N. 2nd Street, Allentown, Pa.

**John P. Lonadorf, Ph.G.**  
*Ad.*, 25th and Cambria Streets, Phila., Pa.

**Charles E. Miller, Ph.G.**

**E. W. Moss, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 6247 Elmwood Avenue, Phila., Pa.

**Jamea J. Nurkin, Ph.G.**

**John W. Rogers, Ph.G.**  
*Ad.*, 108 N. 9th Street, Reading, Pa.

**Nahman Rosensweet, M.D., Ph.G.**

**Percy H. Shaw, Ph.G.**  
 Served in U. S. A.  
*Ad.*, 424 W. Cbelten Avenue, Germantown, Phila., Penna.

**E. L. Slataper, Ph.G.**  
*Ad.*, 1410 Milby Street, Houston, Tex.

**Walter E. Smith, Ph.G.**  
*Ad.*, Palmyra, N. J.

**Crosby L. Smith, Ph.G.**  
 Served in U. S. A., Base Hosp. No. 38, with A. E. F.  
*Ad.*, Media, Pa.

**Charles Leroy Steels, Ph.G.**  
 In contracting and trucking business.  
*Ad.*, Huntingdon, Pa.

1907

**Joseph H. Abrahamson, Ph.G.**  
*Ad.*, 7th and Ritner Streets, Phila., Pa.

**Oliver F. Adams, Ph.G.**  
*Ad.*, 159 W. Oley Street, Reading, Pa.

**Elmer M. Apple, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 22nd and Berks Streets, Phila., Pa.

**William T. Bartholomew, Ph.G.**  
 Assistant to Weigh Clerk, U. S. Mint, Phila.  
*Ad.*, Care of U. S. Mint, 17th and Spring Garden Streets, Phila., Pa.

**Edwin C. Boyer, Ph.G.**

**George Lance Brown, Ph.G.**

**Thomsa J. Csmphell, Ph.G.**  
*Ad.*, Nesquehoning, Pa.

**John M. Cannon, Ph.G.**  
*Ad.*, 1901 Delaware Avenue, Wilmington, Del.

**Harry J. Carroll, Ph.G.**  
*Ad.*, 38th and Wallace Streets, Phila., Pa.

**Walter D. Cox, Ph.G.**  
*Ad.*, Care of Sands Drug Store, Hallstead, Pa.

**Glen W. Darling, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 102 North Yakima Avenue, Tacoma, Wash.

**Harry J. Davidheiser, Ph.G.**  
*Ad.*, 65th and Kingsessing Avenue, Phila., Pa.

**John J. Duffy, Ph.G.**  
*Ad.*, 322 W. Hansberry Street, Phila., Pa.

**John G. Eby, Ph.G.**  
 Retail pharmacist. Received Ph.C. degree, 1909.  
*Ad.*, 1520 Mt. Ephraim Avenue, Camden, N. J.

**Louls Entine, Ph.G.**  
*Ad.*, 310 N. 34th Street, Phila., Pa.

**William T. Evans, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 1553 W. Market Street, York, Pa.

**Albert R. Flanigan, Ph.G.**  
*Ad.*, 6 E. Market Street, Williamsport, Pa.

**I. Edward Frank, Ph.G.**

**Clarence R. Getz, Ph.G.**  
*Ad.*, 19th and Christian Streets, Phila., Pa.

**Brus C. Goodhart, Ph.G.**  
 Pharmacist. Secy. Medico-Chi. Alumni Assn., 3 years. Pres. Phila. Branch A. Ph. A. Enrolling Agt. U. S. Merchant Marine.  
*Ad.*, 613 N. 16th Street, Phila., Pa.

**Hugh Gray, Ph.G.**

**S. Miller Greenawalt, Ph.G.**  
 Received Ph.C. degree, 1909.  
*Ad.*, Chambersburg, Pa.

**Glenn C. Horner, Ph.G.**  
 Retail pharmacist.  
*Ad.*, Chambersburg, Pa.

**Corbin C. Hutchison, Ph.G.**  
 Retail pharmacist. Enrolling Agt. U. S. Merchant Marine.  
*Ad.*, E. Downingtown, Pa.

**Lee David Jenkins, Ph.G.**  
*Ad.*, 5532 Upland Street, Phila., Pa.

**Joseph P. Klingaman, Ph.G.**  
*Ad.*, 16th and Diamond Streets, Phila., Pa.

**Joseph W. Knobel (now Noble), Ph.G.**  
 Retail pharmacist. Pres. Southwestern Assn. Retail Druggists.  
*Ad.*, 1701 S. 22nd Street, Phila., Pa.

**George P. Lowman, Ph.G.**  
*Ad.*, Athens, Pa.

**W. Wilson McNeary, Ph.G.**  
 Chief pharmacist, Polyclinic Section, Univ. of Penna. Instr. in Pharmacy, Medico-Chi. College, 2 years; Adjunct Prof. of Botany, 1 year. Instr. in Chemistry, Ursinus College, 3 years. Past Pres. Phila. Branch A. Ph. A. Scout Master Troop 155. Masonic affiliation. Received Ph.C. and Phar.D. degrees Medico-Chi. College; Ph.M., P. C. P., 1918.  
*Ad.*, 1719 Mt. Vernon Street, Phila., Pa.

**Daniel S. Meyera, Ph.G.**

**Mortimer H. Miller, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 2051 Ridge Avenue, Phila., Pa.

**R. E. Mills, Ph.G.**  
*Ad.*, Glenside, Pa.

**Clarence E. Neipling, Ph.G.**  
*Ad.*, 3060 Frankford Avenue, Phila., Pa.

**Haydn P. Prout, Ph.G.**  
 Retail pharmacist. Formerly sugar chemist in Porto Rico. Received Ph.C. degree, 1909.  
*Ad.*, Mauch Chunk, Pa.

**John A. H. Prum, Ph.G.**

**\*Alvin J. Raker, Ph.G.**  
 Deceased, October, 1918.

**Charles M. Shenk, Ph.G.**  
*Ad.*, 15th and Ritner Streets, Phila., Pa.

**James Silverman, Ph.G.**  
*Ad.*, 1420 N. 6th Street, Phila., Pa.



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- \*Bernard S. Spriasler, Ph.G.**  
Deceased, February 15, 1920.
- Clarence Eli Stover, Ph.G.**  
Retail pharmacist. Alderman, City of Easton.  
*Ad.*, Washington, N. J.
- Raymond H. Stutzman, Ph.G.**  
Physician. Surg. to Williams Valley Hosp. Surg. Phila. and Reading Coal and Iron Co. Pres. Board of Health. Medical Inspector of Schools.  
*Ad.*, 7th and Grand Avenue, Tower City, Pa.
- Ernest F. Syphax, Ph.G.**
- E. Francia Taylor, M.D., Ph.G.**  
*Ad.*, 915 Spruce Street, Phila., Pa.
- Raymond W. Thomas, Ph.G.**
- Clayton S. Warner, Ph.G.**  
*Ad.*, Mohnton, Berks Co., Pa.
- Saul S. Welas, Ph.G.**  
Retail pharmacist.  
*Ad.*, 1120 Rockland Street, Phila., Pa.
- \*William H. Williams, Ph.G.**  
Deceased, August 5, 1907.
- Willis W. Wirth, Ph.G.**  
*Ad.*, 3249 N. Newkirk Street, Phila., Pa.
- William Welsh Wittmer, Ph.G.**  
Retail pharmacist. Mem. National Pharmaceutical Service Assn.  
*Ad.*, 23rd and Somerset Streets, Phila., Pa.
- Gilbert T. Wolfe, Ph.G.**
- Harry Yellin, Ph.G.**  
*Ad.*, 60th and Locust Streets, Phila., Pa.
- Joseph William Ritter, M.D.**  
Special graduate.  
*Ad.*, 3315 N. Broad Street, Phila., Pa.
- 1908
- Joseph Anselm Albert, Ph.G.**
- Walter William Arnold, Ph.G.**  
*Ad.*, Care of Liggett's Drug Store, Front and York Streets, Phila., Pa.
- Samuel W. Baker, Ph.G.**  
*Ad.*, Care of Bolton Pharmacy, Chew and Chelton Avenue, Germantown, Phila., Pa.
- Guy Z. Baum, Ph.G.**  
*Ad.*, 54th and Girard Avenue, Phila., Pa.
- Ferdinand E. Caballero, Ph.G.**  
Retail pharmacist.  
*Ad.*, 52nd and Walnut Streets, Phila., Pa.
- Lorenzo Carlucci, Ph.G., Ph.C.**  
*Ad.*, 823 Christian Street, Phila., Pa.
- Harry Cherasshore, M.D., Ph.G.**  
*Ad.*, 843 N. 6th Street, Phila., Pa.
- Daniel W. Darrab, Ph.G.**  
*Ad.*, 11th and Montgomery Avenue, Phila., Pa.
- Claude Davia, Ph.G.**  
*Ad.*, Shenandoah, Pa.
- Frederick Y. Donn, Ph.C.**  
Physician. Received Ph.D., and M.D. degrees. Instr. Obstetrics, Geo. Washington Univ.  
*Ad.*, 1207 New Jersey Avenue, N. W., Washington, D. C.
- William Eglof, Ph.G.**  
*Ad.*, 5813 Florence Avenue, Phila., Pa.
- Harry E. Enderlein, Ph.G.**  
Retail pharmacist.  
*Ad.*, 323 Fountain Street, Roxborough, Phila., Pa.
- Orville C. Eshelman, Ph.G.**  
Retail pharmacist and postmaster.  
*Ad.*, Shillington, Pa.
- William F. J. Fiedler, Ph.G.**  
*Ad.*, Narberth, Pa.
- William Finkel, Ph.G.**  
*Ad.*, 6th and Diamond Streets, Phila., Pa.
- Benjamin F. Foote, Ph.G.**
- James Emmet Fox, Ph.G.**  
Retail pharmacist.  
*Ad.*, Osceola Mills, Pa.
- John C. Gallagher, Ph.G.**  
*Ad.*, Care of Keenan's Pharmacy, 17th and Ritner Streets, Phila., Pa.
- Walter Gartrell, Ph.G.**
- Ralph H. Gilbert, Ph.G.**  
*Ad.*, Chambersburg, Pa.
- \*Elmer C. Gildroy, Ph.G.**
- Roy Samuel Gledhill, Ph.G.**  
*Ad.*, 2945 N. Franklin Street, Phila., Pa.
- Joseph Goldberg, Ph.G.**  
*Ad.*, 320 Federal Street, Phila., Pa.
- William S. Howard, Ph.G.**  
Retail pharmacist.  
*Ad.*, Narberth, Pa.
- Ambrose Hunsberger, Ph.G.**  
Retail pharmacist. Secy. and Mem. Council, Phila. Branch A. Ph. A., 1909-12; Pres., 1918. Pres. Phila. Assn. Retail Druggists, 1921. Pres. Nat'l Assn. Retail Druggists, 1921-22. Mem. Board of Trustees, P. C. P.; Secy., P. C. P., 1921. . . Chm. War Defense Com., Phila. Branch, A. Ph. A. Chm. Com. War Defense and Reconstruction. Penna. Pharm. Assn. Author.  
*Ad.*, 1600 Spruce Street, Phila., Pa.
- Fulton C. Hutchison, Ph.G.**  
Retail pharmacist.  
*Ad.*, 314 Main Street, Parkesburg, Pa.
- Thomas L. Kenney, Ph.G.**  
*Ad.*, Box 55, Gilberton, Pa.
- Walter H. Leedom, Ph.G.**  
Retail pharmacist.  
*Ad.*, Hollidaysburg, Pa.
- George L. Leister, Ph.G.**
- Alexander Livingstone, Ph.G.**  
*Ad.*, Pennsgrove, N. J.
- Arthur H. Martin, Ph.G.**  
Retail pharmacist.  
*Ad.*, 6414 Rising Sun Avenue, Phila., Pa.
- Christian Mayer, Ph.G.**  
Retail pharmacist.  
*Ad.*, 11th and Cotton Streets, Reading, Pa.
- Jose Meunier, Ph.G.**  
Wholesale and retail pharmacist.  
*Ad.*, Farmacia "La Altagracia," Bojaborico, Republica Dominicana.
- Frank M. Nealon, Ph.G.**
- John J. Nichols, Ph.G.**
- Roydon Hoffman Patterson, Ph.G.**
- William L. Pratt, Ph.C.**  
*Ad.*, Plainfield, N. J.
- Abraham Rabinowitz, Ph.G.**  
*Ad.*, 931 Fairmount Avenue, Phila., Pa.
- Antonio Ricca, Ph.G.**  
*Ad.*, 11th and Catharine Streets, Phila., Pa.

**Harry B. Roshon, Ph.G.**

Veterinarian. Graduated in veterinary medicine, Univ. of Penna., 1915. Chief meat and milk inspector, City of Reading, 1916-17. Served in Veterinary Corps, 4th Div. Commissioned 2nd Lieut. With A. E. F. in France.  
*Ad.*, 1131 Greenwich Street, Reading, Pa.

**John Louis Ruhl, Ph.G.**

Retail pharmacist.  
*Ad.*, 5th and Erie Avenue, Phila., Pa.

**Frank Selb, Ph.G.**

*Ad.*, 58th and Ashland Streets, Phila., Pa.

**William A. Seybert, Ph.G.**

**Frank G. Smith, Ph.G.**

Retail pharmacist.  
*Ad.*, 23 N. High Street, West Chester, Pa.

**\*Moe B. Sotoloff, Ph.G.**

Deceased, February 7, 1917.

**Henry C. Strins, Ph.G.**

*Ad.*, 152 E. Indiana Street, Shamokin, Pa.

**Israel Subin, Ph.G.**

*Ad.*, 7th and Montgomery Avenue, Phila., Pa.

**Ernest A. Truitt, Ph.G.**

*Ad.*, Middletown, Del.

**\*Edward M. Van Leer, Ph.G.**

Deceased, October 11, 1918.

**Jacob Wallfield, Ph.G.**

*Ad.*, 2600 Germantown Avenue, Phila., Pa.

**John H. Weber, Ph.G.**

*Ad.*, 344 Penn Street, Reading, Pa.

**Charles Watsbard, Ph.G.**

Retail pharmacist.  
*Ad.*, 3215 N. Front Street, Phila., Pa.

**Harry Willmann, Ph.G.**

*Ad.*, 825 Park Place, Williamsport, Pa.

**Eugene W. Youngken, Ph.G.**

Retail pharmacist.  
*Ad.*, 15th and Tioga Streets, Phila., Pa.

1909

**E. Arthur Aston, Ph.G.**

Retail pharmacist.  
*Ad.*, 453 N. Main Street, Wilkesbarre, Pa.

**\*William L. Baker, Ph.C.**

**Charles A. Barron, Ph.G.**

*Ad.*, Shamokin, Pa.

**Herman H. Bram, Ph.G.**

Special representative, E. I. duPont De Nemours and Co., Chemical Products Div  
*Ad.*, 2844 N. 26th Street, Phila., Pa.

**Jacob E. Charles, Ph.G.**

Retail pharmacist. Graduate in optometry.  
*Ad.*, Ephrata, Pa.

**John A. Clewell, Ph.G.**

*Ad.*, 54th and Chestnut Streets, Phila., Pa.

**Carl S. Cooper, Ph.G.**

**Milton H. Cowperthwaite, Ph.G.**

Received Ph.C. degree, 1910.

**Robert J. Deltcher, Ph.G.**

Retail pharmacist.  
*Ad.*, 258 S. 37th Street, Phila., Pa.

**John Philip Dippre, Ph.G.**

**Joseph C. Dreibelbis, Ph.G.**

*Ad.*, Chelton Avenue and Limekiln Pike, Phila., Pa.

**Lew R. Dunfee, Ph.C.**

**Arthur Henry Edwards, Ph.G.**

**Frank Egendorf, Ph.G.**

*Ad.*, 50 S. 4th Street, Phila., Pa.

**Alfred M. Evana, Ph.G.**

Retail pharmacist.  
*Ad.*, 4322 Lauriston Street, Roxborough, Phila., Pa.

**Meyer L. Feldman, Ph.G.**

*Ad.*, 5th and Pine Streets, Phila., Pa.

**D. Franklin Fisher, Ph.G.**

Research Chemist, Van Camp Packing Co. Instr. in chemistry, Purdue Univ. College of Pharmacy, 1 year; Asst. Instr. Purdue Univ. Sch. of Chemistry, 1 year.  
*Ad.*, 1149 College Avenue, Indianapolis, Ind.

**Elmer H. Geddis, Ph.G.**

*Ad.*, Logan Avenue, Tyrone, Pa.

**\*Fred A. Genth, Ph.C.**

**Jacob C. Gibbs, Ph.G.**

*Ad.*, Box 59, Clementon, N. J.

**Earl V. Godfrey, Ph.C.**

*Ad.*, 3629 Haverford Avenue, Phila., Pa.

**Harry L. Goldberg, Ph.G.**

*Ad.*, 1935 N. 33rd Street, Phila., Pa.

**Samuel J. Goldberg, Ph.G.**

*Ad.*, Broad and Porter Streets, Phila., Pa.

**John C. Grove, Ph.G.**

**John Harper, M.D., Ph.C.**

Lient., U. S. N.

**\*Robert Fields Harper, Ph.G.**

**John T. Harrison, Ph.G.**

Pharmacist. Served in U. S. N. R. F. Hosp. Corps. as Pharmacist's Mate.  
*Ad.*, 5649 Market Street, Phila., Pa.

**Edson B. C. Holland, Ph.G.**

Pharmacist.  
*Ad.*, 2337 Christian Street, Phila., Pa.

**Amos Jones, Ph.G.**

Retail pharmacist.  
*Ad.*, 543 E. Thompson Street, Phila., Pa.

**Charles A. Jonea, Ph.G.**

Retail pharmacist.  
*Ad.*, Youngsville, Pa.

**William C. Kessler, Ph.G.**

Physician. Graduated in medicine, Jeff. Med. College, 1913. Asst. Surg. Genito-Urinary Disp., Univ. of Penna. Hosp. Served in U. S. A. as Capt., Med. Dept., 75th Art. With A. E. F. in France.  
*Ad.*, 1130 S. 56th Street, Phila., Pa.

**Charles H. Kline, Jr., Ph.G.**

Retail pharmacist. Received Ph.C. degree, 1910.  
*Ad.*, 6122 Chestnut Street, Phila., Pa.

**J. Buren Leidy, Ph.G.**

*Ad.*, 66th and Woodland Avenue Phila., Pa.

**Nathan M. Levey, Ph.G.**

Retail pharmacist.  
*Ad.*, 31st and Cumberland Streets, Phila., Pa.

**Arthur Lewia, Ph.G.**

**William F. Longendyke, Ph.G.**

*Ad.*, Bridgeville, Del.

**Levi Hoffman Lukens, Ph.G.**

*Ad.*, P. O. Box 271, Jenkintown Pa

670 First Century of the Philadelphia College of Pharmacy

- James J. McAleer, Ph.G.**  
*Ad.*, 222 N. 9th Street, Phila., Pa.
- J. S. MacHale, Ph.C.**  
*Ad.*, Forest City, Pa.
- Hudson O. Mann, Ph.G.**  
*Ad.*, Bloomsburg, Pa.
- Joshua E. Marsden, Ph.C.**  
*Ad.*, St. Louis, Mo.
- Arnold W. Nidecker, Ph.G.**  
Retail pharmacist.  
*Ad.*, 3600 Richmond Street, Phila., Pa.
- Paul S. Pittenger, Ph.G.**  
Instr. Biologic Assaying, P. C. P. (See page 445.)  
*Ad.*, 5833 Florence Avenue, Phila., Pa.
- \***E. M. Rentschler, Ph.G.**
- C. A. Roney, D.D.S., Ph.G.**  
*Ad.*, 5622 Germantown Avenue, Phila., Pa.
- Ulysses G. Ruff, Ph.G.**  
*Ad.*, 728 S. Broad Street, Phila., Pa.
- Elmer W. Scargle, Ph.C.**
- Percy H. Schultz, Ph.G.**  
Pharmacist.  
*Ad.*, 827 S. Alden Street, Phila., Pa.
- Milton B. Schwartz, Ph.G.**  
*Ad.*, Renovo, Pa.
- William H. Scott, Ph.G.**  
*Ad.*, 131 E. Tulpehocken Street, Germantown, Phila., Pa.
- P. Leon Semmell, Ph.C.**  
Received Phar.D. degree, 1910.
- Calvin D. Shuman, Ph.G.**  
*Ad.*, Care of J. A. Miller, 56 N. Queen Street, Lancaster, Pa.
- Ray Signor, M.D., Ph.C.**
- William Silverman, Ph.G.**  
*Ad.*, 7th and Porter Streets, Phila., Pa.
- \***Thomas R. Slaterry, Ph.G.**  
Deceased, January, 1916.
- Edmund C. H. Steinkle, Ph.G.**  
*Ad.*, 506 Harrison Avenue, Scranton, Pa.
- C. Irvin Whitaker, Ph.G.**
- Lewis B. Whitehead, Ph.C.**
- 1910
- Max Baum, Ph.G.**  
*Ad.*, 11th and Girard Avenue, Phila., Pa.
- William A. Bentz, Ph.G.**  
Retail pharmacist. Received Phar.D. degree, 1912.  
Instr. Pharmacy and Organic Chemistry, Medico-Chi. College, 1910-12. Mem. P. C. P. Advisory Council.  
*Ad.*, Williamsport, Md.
- Joseph H. Bickert, Ph.G.**  
*Ad.*, 422 Church Street, Huntingdon, Pa.
- Edwin B. Blair, Ph.G.**  
*Ad.*, Chambersburg, Pa.
- William Borgos, Ph.G.**  
*Ad.*, 1321 N. 15th Street, Phila., Pa.
- Morris W. Brenner, Ph.G.**  
*Ad.*, Front and Jackson Streets, Phila., Pa.
- J. Edward Brewer, Ph.C.**  
Instr. P. C. P., 1916-17. (See page 445.)  
*Ad.*, 215 Summit Street, Norristown, Pa.
- Robert C. Callen, Ph.C.**
- B. B. Drapiewski, Ph.G.**  
*Ad.*, 22 W. Greene Street, Nanticoke, Pa.
- Francis E. Eltnier, Ph.G.**  
*Ad.*, Care of Bell's Drug Store, 857 Penn Street, Reading, Pa.
- \***George W. Elder, Ph.G.**  
Deceased, November 3, 1920.
- Harry Farber, Ph.G.**  
*Ad.*, Care of Gatchell Pharmacy, 10th and Spring Garden Streets, Phila., Pa.
- Louis Freedman, Ph.G.**
- Samuel Freedman, Ph.G.**
- Howard W. Gardner, Ph.G., Ph.C.**  
*Ad.*, 505 W. 140th Street, New York City.
- Matthew J. Ginsburg, Ph.G.**  
*Ad.*, 1807 N. Marshall Street, Phila., Pa.
- Samuel Glick, Ph.G.**  
*Ad.*, 7th and Spring Garden Streets, Phila., Pa.
- A. Stuart Hall, Ph.G.**
- Philip Hanopolsky, Ph.G.**  
Retail pharmacist. Mem. Phila. Assn. Retail Druggists. Masonic affiliation.  
*Ad.*, 37th and Woodland Avenue, Phila., Pa.
- Max Heller, Ph.C.**  
*Ad.*, 2614 Kensington Avenue, Phila., Pa.
- Grover C. Hendricks, Ph.G.**
- Charles T. Hoch, Ph.G.**  
Retail pharmacist.  
*Ad.*, 379 N. 8th Street, Lebanon, Pa.
- Elias Israelvitz, Ph.G.**  
*Ad.*, 1221 Belmont Avenue, Phila., Pa.
- C. Roy Johnson, Ph.G.**  
Retail pharmacist.  
*Ad.*, 347 W. Broad Street, Hazleton, Pa.
- Solomon I. Jonkus, Ph.G.**  
*Ad.*, 204 Oak Street, Mt. Carmel, Pa.
- Abraham P. Karsh, Ph.G.**  
Retail pharmacist. Two years in Army Med. School, Typhoid Vaccine Dept.  
*Ad.*, 15th and Race Streets, Phila., Pa.
- Herbert W. Kintner, Ph.G.**  
*Ad.*, Easton, Pa.
- \***Stewart L. Kleckner, Ph.G.**  
Deceased, December 18, 1918.
- J. A. N. Leingang, Ph.G.**  
*Ad.*, 5214 Stiles Street, Phila., Pa.
- E. J. McCormick, Ph.G.**  
*Ad.*, Patton, Pa.
- Eugene L. Maines, Ph.C.**  
Supt. R. C. Williams and Co. Special Student, College of Physicians and Surgeons, Columbia Univ. and College of the City of New York. Masonic affiliation. Received Ph.G. degree, 1912; Phar.D., 1913.  
*Ad.*, 245 Quincy Street, Brooklyn, N. Y.
- Conrad C. Mayer, Ph.G.**  
Retail pharmacist. Mem. Nat'l Assn. Retail Druggists; Penna. Pharm. Assn.  
*Ad.*, 1408 Ash Street, Scranton, Pa.
- John Miles, Ph.G.**  
*Ad.*, 717 E. Centre Street, Mahanoy City, Pa.
- Harry A. Moon, Ph.C.**



- \*Tudor A. Morgan, Ph.G.**  
Deceased, October, 1921.
- William J. Morgan, Ph.G.**  
Retail pharmacist.  
*Ad.*, Peckville, Pa.
- Joseph L. Murray, Ph.C.**  
*Ad.*, 3954 Terrace Street, Wissahickon, Phila., Pa.
- Justus O'Brien, Ph.G.**  
*Ad.*, Avoca, Luzerne Co., Pa.
- David M. Olmstead, Ph.C.**  
*Ad.*, Carbondale, Pa.
- Morris R. Ost, Ph.G.**  
Retail pharmacist.  
*Ad.*, 300 Pacific Avenue, Atlantic City, N. J.
- Harold C. Parish, Ph.C.**  
Asst. Chief Analyst, Arthur H. Little, Inc.  
*Ad.*, 298A Boston Avenue, Medford Hillside, Mass.
- \*John W. Purcell, Ph.G.**  
Deceased, May 20, 1915.
- John J. Quinn, Ph.G.**  
*Ad.*, Lansford, Pa.
- Leo N. Reynolds, Ph.G.**  
Retail pharmacist.  
*Ad.*, Nicholson, Pa.
- \*Robert Riegel, Ph.C.**
- Leo A. Ruth, Ph.G.**  
*Ad.*, 746 Railroad Street, Johnstown, Pa.
- Charles L. Schelbly, Ph.G.**  
*Ad.*, Fremont, Schuylkill Co., Pa.
- Carl N. Schmitt, Jr., Ph.G.**  
*Ad.*, 3600 Old York Road, Phila., Pa.
- Earl D. Seisa, Ph.G.**  
Pharmacist.  
*Ad.*, 1213 W. Erie Avenue, Phila., Pa.
- John J. Shovlin, Ph.G.**  
Pharmacist.  
*Ad.*, Wilkesbarre, Pa.
- Jay A. S. Simpson, Ph.G.**
- Adam I. Smith, A.B., Ph.G.**  
Private secretary.  
*Ad.*, N. E. Cor. Front and McKean Streets, Phila., Penna.
- Paul R. Smith, Ph.G.**  
*Ad.*, 521 Pacific Avenue, Atlantic City, N. J.
- Charles A. Snyder, Ph.C.**
- John S. Span, Ph.G.**
- Israel Spiers, Ph.G.**  
Physician.  
*Ad.*, 3031 Diamond Street, Phila., Pa.
- Anthony F. A. Stedem, Ph.G.**  
*Ad.*, Citizen's Nat'l Bank Bldg., Los Angeles, California.
- \*Daniel Stevens.**  
Deceased, April 4, 1913.
- William H. Stoner, A.B., Ph.C.**  
Associate Prof. of Biochemistry, Univ. of Penna. Grad. School of Medicine. Graduated in medicine, Medico-Chi. College. Instr. in Chem., Medico-Chi. and Univ. of Penna., 1915-1919. Served in U. S. A. as Capt., Med. Dept. Received Phar.D. degree, 1913.  
*Ad.*, Graduate School of Medicine, Univ. of Penna., Phila., Pa.
- Albert J. Storm, M.D., Ph.G.**
- Benjamin R. Wagner, Ph.G.**
- Michael G. Waschko, Ph.G.**  
*Ad.*, 113 Hallett Street, Bridgeport, Conn.
- E. P. Wenzelberger, Ph.C.**  
*Ad.*, 22 E. Cedar Avenue, Merchantville, N. J.
- Beddoe J. Williams, Ph.C.**
- Albert B. Willmann, Ph.G.**  
*Ad.*, 825 Park Place, Williamsport, Pa.
- 1911
- Cesar D. Andrade, Ph.G., Ph.C.**  
*Ad.*, Guayaquil, Ecuador, S. A.
- Howard E. Aston, Ph.G.**  
Pharmacist. Masonic affiliation. Served in U. S. N. as Pharmacist's Mate, 1st Class.  
*Ad.*, 451 Main Street, Wilkesbarre, Pa.
- John L. Ballentine, Ph.G.**  
*Ad.*, 5439 Malco Street, Phila., Pa.
- Joseph H. Becker, Ph.G.**  
*Ad.*, Care of F. W. Woolworth Co., Hanover, Pa.
- Myer B. Bloomfield, Ph.G.**  
*Ad.*, 601 E. 7th Street, Chester, Pa.
- Frank E. Boston, Ph.G.**  
Physician. Graduated in medicine Medico-Chi. College, 1915. Res. Phys. Roosevelt Hosp., 1915-16. Served in U. S. A. as Capt., Med. Dept., 317th Engineers, with A. E. F. Mem. Amer. Med. Assn; Assn. Military Surgeons; Phila. Co. Med. Soc. Associate in Gastro-Enterology, Amer. Hosp. for Diseases of Stomach. Visiting Surg. Mercy Hosp.  
*Ad.*, 813 N. 16th Street, Phila., Pa.
- Samuel J. Brahlin, Ph.G.**  
Pharmacist.  
*Ad.*, 10th and Jefferson Streets, Phila., Pa.
- Baker J. Burnett, Ph.G.**
- William A. Burt, Ph.G.**  
Retail pharmacist.  
*Ad.*, Tamaqua, Pa.
- Anthony Cavenas, Ph.G.**  
*Ad.*, 407 Coal Street, Shenandoah, Pa.
- Benjamin A. Cramer, Ph.G.**  
Retail pharmacist.  
*Ad.*, 1286 Dewey Avenue, Rochester, N. Y.
- \*S. Guy Davies, Ph.G.**  
Deceased, October 20, 1913.
- William F. DeLansy, Ph.G.**  
*Ad.*, 189 S. Terrace, Carbondale, Pa.
- Nelson M. Elshy, Ph.G.**  
Retail pharmacist.  
*Ad.*, 2431 N. Main Street, Scranton, Pa.
- Frank J. Ernest, Ph.G.**  
*Ad.*, St. Mary's, Pa.
- Robert P. Fischelis, Ph.G.**  
Lecturer on Commercial Pharmacy, P. C. P. (See page 427.)  
*Ad.*, 220 Roseville Avenue, Newark, N. J.
- George A. Flsher, B.S., Ph.C.**  
Received Phar.D. degree, 1913.  
*Ad.*, Van Camp Packing Co., Indianapolis, Ind.
- Malcolm Murray Follmer, Ph.G.**  
Wholesale and retail druggist.  
*Ad.*, 635 E. Broadway, Milton, Pa.
- Ralph E. Gray, Ph.G.**  
*Ad.*, South Paris, Maine.

**Chester P. Guthrie, Ph.C.**

Broker (Food Products). Asst. State Chemist, No. Dakota until 1919. Courses in physical, physiological and organic chemistry. Instr. in Army School, State Agricultural College during World War. Received Ph.G. degree, 1912.  
*Ad.*, Fargo, North Dakota.

**Thomas W. Hardy, Ph.G.****Wilson Bregy Hart, B.S., Ph.C.**

Received Phar.D. degree, 1912.  
*Ad.*, 8305 Ridge Avenue, Phila., Pa.

**Ralph Hassenplug, Ph.G.****Bruce M. Hicks, Ph.G.**

Retail pharmacist.  
*Ad.*, Laurel and Green Streets, Hazleton, Pa.

**Ralph C. Holmes, Ph.C.**

Received Phar.D. degree, 1912.  
*Ad.*, Care of Bristol Myers Co., Brooklyn, N. Y.

**\*John C. Householder, Ph.G.**

Deceased, February 4, 1914.

**Harry H. Johnson, Ph.G., Ph.C.**

Retail pharmacist. Served in U. S. A. as Sgt., 1st Class, Hosp. Corps, Camp McClellan, Ala. Masonic affiliation.  
*Ad.*, Avondale, Pa.

**Richard Knowles, Ph.G.**

*Ad.*, Millville, N. J.

**George C. Kolb, Ph.C.****J. Franklin Kratz, Ph.G.**

Pharmacist.  
*Ad.*, 520 N. Irving Street, Scranton, Pa.

**Gerald A. Lee, Ph.G.**

Received Ph.C. degree, 1914.  
*Ad.*, N. W. Cor. 20th and Cherry Streets, Phila., Penna.

**Eugene V. McCawley, Ph.G.**

Dental surgeon. Graduated in dentistry Univ. of Penna., 1918. Served in U. S. A. as 1st Lieut., Dental Corps.  
*Ad.*, M. and M. Bank Bldg., Carbondale, Pa.

**Francesco Megaro, Ph.G.**

*Ad.*, 823 Christian Street, Phila., Pa.

**John B. Mockaitis, Ph.C.****Andrew L. Nealon, M.D., Ph.G.**

Served in U. S. A., Med. Supply Dept.  
*Ad.*, Carbondale, Pa.

**Lafayette P. Noaker, Ph.G.**

*Ad.*, 5848 Carpenter Street, Phila., Pa.

**John M. O'Donnell, Ph.G.**

Chief chemist, Geo. D. Wetherill and Co. Received Ph.C. degree, 1913.  
*Ad.*, Yeadon, Pa.

**Israel Paul, Ph.G.**

Retail pharmacist.  
*Ad.*, 2nd and Poplar Streets, Phila., Pa.

**Isador P. Salinsky (Now Salin), Ph.G.**

Retail pharmacist.  
*Ad.*, S. E. Cor. Atlantic and Arkansas Avenues, Atlantic City, N. J.

**J. H. Schreffler, Ph.G.**

*Ad.*, 303 S. Market Street, Shamokin, Pa.

**Edward Seldes, Ph.G.**

*Ad.*, 707 Dudley Street, Phila., Pa.

**John P. Snyder, B.S., Ph.C.**

*Ad.*, Norwich Pharmacal Co., Norwich, N. Y.

**J. Richard Sterner, Ph.G.**

Retail pharmacist.  
*Ad.*, Perkasic, Pa.

**William H. Sternthal, Ph.G.**

*Ad.*, S. E. Cor. 12th and Vine Streets, Phila., Pa.

**Carl E. Stone, A.B., Ph.G., Ph.C.**

Chemist, Van Camp Packing Co. Mem. Exec. Com. Indiana Branch Amer. Chem. Soc.  
*Ad.*, 5601 Lowell Avenue, Indianapolis, Ind.

**Cornelius A. Walsh, Ph.G.**

*Ad.*, Freeland, Pa.

**Arthur F. Weaver, Ph.G.**

*Ad.*, Pen Argyl, Pa.

**E. Leonard Weisgerber, Ph.G.**

*Ad.*, 5th and N. E. Blvd., Phila., Pa.

**Robert W. Wheeler, Ph.G.**

Pharmacist until 1914. Insurance, Pianos and Organs. Mem. B. P. O. E. Masonic affiliation. Served in U. S. A. as Sgt., 1st Class, Med. Dept., 5th Anti-Aircraft Sector. With A. E. F. in France.  
*Ad.*, South Paris, Maine.

**Leon M. Wolchek (Now Wolfe), Ph.G.**

*Ad.*, 40th and Poplar Streets, Phila., Pa.

**Guy O. Zehner, Ph.C.**

Chief chemist, Bristol-Myers Mfg. Chemists. Mem. Amer. Chem. Soc.; A. Ph. A.  
*Ad.*, Tamaqua, Pa.

## 1912

**\*Frank M. Apple, Ph.G., Phar.D.**

Deceased, July 19, 1919.

**John B. Bader, Ph.G.**

Retail pharmacist.  
*Ad.*, 1 W. Southern Avenue, Williamsport, Pa.

**Samuel D. Baylinson, Ph.G.**

*Ad.*, 517 W. Girard Avenue, Phila., Pa.

**Earl O. Brong, Ph.G.**

*Ad.*, 4467 Frankford Avenue, Phila., Pa.

**Jacob H. Broude, Ph.G.**

*Ad.*, 812 S. 2nd Street, Phila., Pa.

**Arthur F. Brown, Ph.G.**

Received Ph.C. degree, 1914.  
*Ad.*, Care of Griswold Worsted Co., Darby, Pa.

**Maurice Brown, Ph.G.**

*Ad.*, 21st and Dickinson Streets, Phila., Pa.

**Earl A. Burnite, Ph.G.**

*Ad.*, 10 S. Clayton Street, Wilmington, Del.

**Edward J. Campbell, Ph.G.**

Served in U. S. N. R. F.  
*Ad.*, Nesquehoning, Pa.

**Francis F. Cosgrove, Ph.G.**

Representative, Capudine Chemical Co.  
*Ad.*, 60 Alfred Street, Biddeford, Maine.

**Gerson W. Cournos, Ph.G.**

*Ad.*, 1500 N. 2nd Street, Phila., Pa.

**Victor Dorszewski, Ph.G.**

*Ad.*, 2342 Orthodox Street, Phila., Pa.

**Edward Eisenstein (Now Edward Stone), Ph.C.**

Attorney-at-Law. Graduated Univ. of Penna. with degree LL.B., 1916. Served in Quartermaster's Corps, as Sgt., 1st Class.  
*Ad.*, 4611 N. 12th Street, Phila., Pa.

**Morris Elikofsky, Ph.G.****Edward Karl Estin, A.B., Ph.C.****Louis L. Filar, Ph.G.**

Retail pharmacist. Served in U. S. A. as 1st Lieut.  
*Ad.*, 766 N. Washington Street, Wilkesbarre, Pa.

- Harry R. Gehres, Ph.G.**  
*Ad.*, Care of Dietrich Pharmacy, 60th and Girard Avenue, Phila., Pa.
- Albert F. Gorsuch, Ph.G.**  
*Ad.*, 821 A Street, S. E., Washington, D. C.
- Charles H. Hagan, Ph.C.**  
*Ad.*, 2251 Sharswood Street, Phila., Pa.
- Guy R. Herriman, Ph.G.**  
 Manager, Stone's Drug Store.  
*Ad.*, 197 Main Street, Norway, Me.
- Thomas D. Heginbotham, Ph.G.**  
*Ad.*, Cottman Street & Oxford Avenue, Phila., Pa.
- Clarence J. Herrley, Ph.C.**  
*Ad.*, 319 S. Fairmount Avenue, Pittsburgh, Pa.
- W. Wallace Hollenback, Ph.G.**  
 Retail pharmacist.  
*Ad.*, Shamokin, Pa.
- Jacob W. Houser, Ph.G.**  
*Ad.*, 361 E. Catherine Street, Chambersburg, Pa.
- Frank W. Isles, Ph.G., Ph.C.**  
*Ad.*, Mechanicsville, N. Y.
- Percy H. Jackson, Ph.G.**  
 Pres. Jackson Drug Co. Mem. Board of Governors, Wildwood Board of Trade; Board of Directors P. C. F. Alumni Assn., 1919-21. Recruiting Agt., U. S. Merchant Marine.  
*Ad.*, Wildwood, N. J.
- Thomas F. Joyce, Ph.G.**  
*Ad.*, 302 Fellows Street, Scranton, Pa.
- John H. Kintner, Ph.G.**  
*Ad.*, College Hill, Easton, Pa.
- Curtis B. Klapp, Ph.G.**  
*Ad.*, Care of T. R. Clarkson & Co., Shamokin, Pa.
- John Levin, Ph.G.**  
*Ad.*, 920 N. 31st Street, Phila., Pa.
- Morris I. Lopoten, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 5642 Boyer Street, Phila., Pa.
- Alexander P. MacPhee, Ph.G.**  
*Ad.*, 16 N. 11th Street, Phila., Pa.
- N. J. Mandarino, Ph.G.**  
*Ad.*, 906 Montrose Street, Phila., Pa.
- Myer Matrick, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 600 N. 55th Street, Phila., Pa.
- Carl E. Medde, Ph.C.**  
 Research chemist, E. I. DuPont de Nemours & Co. Received B. S. degree Temple Univ., 1915. Student at Phila. Textile School.  
*Ad.*, 2239 Reed Street, Phila., Pa.
- Joseph P. Milliken, Ph.C.**  
*Ad.*, Lodi, N. J.
- Harry G. Mitchell, Ph.G.**
- Frank B. Ourchay, Ph.G.**  
 Retail pharmacist. Received Ph.C. degree, 1914. Served in U. S. A. at Camp Devens, Mass.  
*Ad.*, Bridgeport, Conn.
- Harry Promisloff, Ph.G.**  
*Ad.*, 10th & York Streets, Phila., Pa.
- Roscoe Ellsworth Riegner, Ph.C.**  
 Received Ph.D. degree, 1913.
- Max Rosencoff, Ph.G.**  
*Ad.*, 2033 Atlantic Avenue, Atlantic City, N. J.
- L. E. Rothberg, Ph.G.**  
*Ad.*, 5th & McKean Streets, Phila., Pa.
- I. M. Rudminas, Ph.G.**  
*Ad.*, 1815 Moyamensing Avenue, Phila., Pa.
- Henry E. Schellenger, Ph.G.**
- August A. Smith, Ph.G.**  
*Ad.*, 1230 Turner Street, Allentown, Pa.
- M. L. Snyderman, Ph.G.**  
*Ad.*, 60th and Locust Streets, Phila., Pa.
- Henry A. Stauffenberg, Ph.G.**  
*Ad.*, Port Carbon, Pa.
- William N. Thomas, Ph.G.**  
 Retail pharmacist. Served in U. S. N. as Pharmacist's Mate, 1st Class.  
*Ad.*, 308 Parrish Street, Wilkesbarre, Pa.
- Jesse Scholl Tyson, Ph.G.**  
 Pharmacist. Served in U. S. A. as 2nd Lieut., Sanitary Corps.  
*Ad.*, 326 Washington Avenue, East Downingtown, Pa.
- Otto W. Wickham.**  
 Pharmacist. Served in U. S. A. as 2nd Lieut., Field Artillery.  
*Ad.*, Seaside Park, N. J.

1913

- Gennaro Amoroso, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 416 E. Main Street, Norristown, Pa.
- Ivin DeWitt Atkinson, Ph.G.**  
*Ad.*, Stroudsburg, Pa.
- Henry Bellitz, Ph.G.**  
*Ad.*, 27th and Montgomery Ave., Phila., Pa.
- Malcolm Boyd Brouse, Ph.G.**  
 Retail pharmacist. Mem. Acad. of Fine Arts.  
*Ad.*, 2101 W. Somerset Street, Phila., Pa.
- Leo Cantor, Ph.G.**
- Hyman W. Cohen, Ph.G.**  
*Ad.*, 420 S. 4th Street, Phila., Pa.
- Harry Cooke, Ph.G.**  
 Received Ph.C. degree, 1914.
- Max Coplin, Ph.G.**  
*Ad.*, 1228 S. 21st Street, Phila., Pa.
- Hatten LeRoy Crowl, Ph.G.**  
*Ad.*, E. Independence Street, Shamokin, Pa.
- Oscar Eugene Detrick, Ph.G.**  
*Ad.*, Coaldale, Pa.
- Roscoe C. Drake, Ph.C.**  
*Ad.*, 147 S. Broad Street, Norwich, N. Y.
- Herbert M. Elcock, Ph.C.**
- Frank Elkins, Ph.G.**  
*Ad.*, 15th and Ritner Streets, Phila., Pa.
- Aloysius Augustus Fiedler, Ph.G.**  
*Ad.*, 4243 Ridge Avenue, Phila., Pa.
- James Theodore Fiedler, Ph.G.**  
*Ad.*, 4243 Ridge Avenue, Phila., Pa.
- Charles Devere Field, Ph.G.**  
*Ad.*, Conemaugh, Pa.
- Ralph Andrew Fisher, Ph.G.**  
 Physician.  
*Ad.*, 1306 Washington Street, Easton, Pa.
- Samuel B. Friedman, Ph.G.**  
*Ad.*, 17th and Diamond Streets, Phila., Pa.
- Meyer Samuel Glanser, Ph.G.**  
*Ad.*, 6th and Diamond Streets, Phila., Pa.
- Joseph Harry Goodfriend, Ph.G.**  
*Ad.*, Norria and Orianna Streets, Phila., Pa.
- Warren B. Gross, Ph.G.**  
*Ad.*, Royal Oak, Mich.



- John Lloyd Hess, Ph.G.**  
Received Ph.C. degree, 1915. Chemist, Whittall Tatum Co.  
*Ad.*, 110 N. Second Street, Millville, N. J.
- George W. Hinkson, D.D.S., Ph.C.**  
*Ad.*, 211 S. 12th Street, Phila., Pa.
- John Irvin Hoffman, Ph.G.**  
*Ad.*, Coaldale, Pa.
- Ralph A. Hurley, Ph.G.**  
*Ad.*, Easton, Pa.
- Amos W. Huyett, Ph.C.**  
*Ad.*, 727 N. 4th Street, Reading, Pa.
- John Szymon Jorczak, Ph.G.**  
Retail pharmacist.  
*Ad.*, 134 Parker Street, Indian Orchard, Mass.
- \***Herbert Albert Kamppe, Ph.G.**  
Deceased, January 30, 1914.
- Lurayne E. Kline, Ph.C.**  
*Ad.*, VanCamp Packing Co., Indianapolis, Ind.
- Paul K. Lawrence, Ph.C.**  
*Ad.*, 3441 N. Carlisle Street, Phila., Pa.
- Walter David Lewis, Ph.G.**  
*Ad.*, 10th and Girard Avenue, Phila., Pa.
- Walter L. Lindsay, Ph.C.**  
*Ad.*, Holmes, Delaware Co., Pa.
- Aaron Lipschutz, Ph.G.**  
Retail pharmacist.  
*Ad.*, 1215 S. 5th Street, Phila., Pa.
- John Jacob Misorech, Ph.G.**  
Retail pharmacist.  
*Ad.*, Amber and Dauphin Streets, Phila., Pa.
- Harrison R. Morgan, Ph.G.**  
*Ad.*, Belgrade and Clearfield Streets, Phila., Pa.
- Isaiah William Moras, Ph.G.**  
*Ad.*, 20th and Mountain Streets, Phila., Pa.
- John Andrew Neukirch, Ph.G.**  
*Ad.*, Mulhouse, France.
- \***Thomas Patrick G'Connor, Ph.G.**
- Abraham M. Grustein, Ph.G.**  
Physician. Graduated in medicine Univ. of Penna., 1917. Interne, Jewish Hosp. Res. Phys., N. Y. Neurological Inst. Asst. Instr. in Neurology, Univ. of Penna. Med. Sch. Served in U. S. A. as 1st Lieut.  
*Ad.*, 1312 S. 5th Street, Phila., Pa.
- Frank Paul Ostrow, Ph.G.**  
*Ad.*, 58th and Arch Streets, Phila., Pa.
- Herman W. Ostrum, Ph.G.**  
Physician. Graduated in medicine Univ. of Penna., 1917. Interne, Phila. Gen. Hosp. Served in U. S. A. Med. Dept. as 1st Lieut., Evac. Hosp. No. 26, England, France and Germany. Mem. Amer. Med. Assn.; County Med. Soc.; Amer. Legion.  
*Ad.*, 2407 N. 30th Street, Phila., Pa.
- Eugene B. Page, Ph.C.**
- Fred Jacob Peters, Ph.G.**  
*Ad.*, 1021 W. Airy Street, Norristown, Pa.
- Stuart Clarence Schaffer, Ph.G.**  
Pharmacist.  
*Ad.*, Quakertown, Pa.
- Philip Jacob Schlichtmann, Ph.G.**  
Pharmacist.  
*Ad.*, 62nd and Grays Avenue, Phila., Pa.
- Norman Alvin Shelley, Ph.G.**  
Pharmacist.  
*Ad.*, 5318 Hedge Street, Phila., Pa.
- Mortimer Mann Smith, Ph.G.**  
Retail pharmacist. Mem. Board Directors, Medico-Chi. Alumni Assn., 1914-15; Treas., 1915-17. Mem. Board Directors P. C. P. Alumni Assn., 1917-19; Corres. Secy. Alumni P. C. P. 1919-20; 2nd Vice-pres., 1920-21; 1st Vice-pres. 1921-22; Pres. 1922.  
*Ad.*, 15th and Montgomery Avenue, Phila., Pa.
- Henry Sonnan, Ph.G.**
- John Albert Stanavage, Ph.G.**  
*Ad.*, 3034 Arbor Street, Phila., Pa.
- Thomas Leo Stapleton, Ph.G.**  
Pharmacist. Served in U. S. A., Evac. Hosp. No. 8, with A. E. F. in France.  
*Ad.*, 2 Park Avenue, Wilkesbarre, Pa.
- Barrish Benjamin Subin, Ph.G.**  
*Ad.*, 1800 N. 7th Street, Phila., Pa.
- Arthur Jeremiah Swambach, Ph.G.**  
Pharmacist.  
*Ad.*, 2908 Oxford Street, Phila., Pa.
- Louis Nathaniel Taine, Ph.G.**  
*Ad.*, 731 Master Street, Phila., Pa.
- Israel Toplan, Ph.G.**  
*Ad.*, 1500 Ritner Street, Phila., Pa.
- Edward O. Turner, Ph.G.**  
Pharmacist. Served as Pharmacist in F. H. No. 366, 317th Sanitary Train, 92nd Div., with A. E. F. in France.  
*Ad.*, 1821 Lincoln Avenue, Atlantic City, N. J.
- Pascual Di-Bella Villamil, Ph.C.**  
Retail pharmacist. Formerly City Chemist and Mem. Board of Health. Received Phar.D. degree, 1914.  
*Ad.*, Apartado 96, Tampico, Mexico.
- Ernest C. Wagner, A.B., Ph.C.**  
Received Phar.D. degree, 1914.
- Ralph J. Watkins, Ph.G.**  
*Ad.*, 905 Dixon Street, Munhall, Pa.
- \***Felix DeZengotita, Ph.G.**

## 1914

Gilbert C. Bacon, Ph.C.

**William Neil Baker, Ph.G.**  
Pharmacist and chemist.  
*Ad.*, Lewisburg, Pa.

**Robert Lewis Bellenghi, Ph.G.**  
*Ad.*, 49th and Lancaster Avenue, Phila., Pa.

**Donald James Brown, Ph.G.**  
*Ad.*, 4 W. Broad Street, Hazleton, Pa.

**Robert Francis Carter, Ph.G.**  
Pharmacist. Received B.S. degree, Duquesne Univ. Served in U. S. A., 146th Inf., 37th Div.  
*Ad.*, 6630 Germantown Avenue, Phila., Pa.

**Francis Craig Cassimer, Ph.G.**  
Pharmacist. Served in U. S. A. Med Dept. as Sgt., 1st Class.  
*Ad.*, Shenandoah, Pa.

**Marcus Harrison Dotta, Ph.G., Ph.C.**  
*Ad.*, 2101 W. Somerset Street, Phila., Pa.

Melvin Carr Eaton, Ph.C.

William Eldelson, Ph.G.

\*Joseph Urciuoli Fabiani, Ph.C.

**Abraham Flinkman, Ph.G.**  
*Ad.*, 722 W. Erie Avenue, Phila., Pa.

**Abe Folstein, Ph.G.**  
Pharmacist.  
*Ad.*, 5800 Hazel Avenue, Phila., Pa.

**Samuel Louis Furman, Ph.G.**  
*Ad.*, 113 S. 10th Street, Phila., Pa.

- Isaac Samuel Gadol, Ph.G.**  
Retail pharmacist. Mem. Nat'l Assn. Retail Drug-  
gists; Phila. Assn. Retail Druggists.  
*Ad.*, Jasper and Huntingdon Streets, Phila., Pa.
- Benjamin Goodman, Ph.G.**  
Retail pharmacist.  
*Ad.*, 5th and Spruce Streets, Phila., Pa.
- Joseph Seligman Hagenbuch, Ph.G.**  
Served in U. S. A. Med. Dept., as Pvt., 1st.  
Lieut., and Capt., with Amer. Red Cross Supply  
Station in France.  
*Ad.*, Mahanoy City, Pa.
- William Daniel Hall, Ph.G.**  
*Ad.*, 35th and Queen Lane, Manayunk, Phila., Pa.
- John Daniel Keefe, Ph.G.**  
*Ad.*, Arnot, Pa.
- Leo Edward Kijanski, Ph.G.**  
*Ad.*, 114 N. Main Street, Wilkesbarre, Pa.
- William Groves Kocher, Ph.G.**  
Pharmacist. Mem. B. P. O. E.; Beta Phi Sigma  
Frat.  
*Ad.*, 701 Hepburn Street, Milton, Pa.
- Karl Nunge Krogh, Ph.G.**  
Retail pharmacist. Served in U. S. A. as Sgt.  
1st Class.  
*Ad.*, 5050 Baltimore Avenue, Phila., Pa.
- Louis Kron, Ph.G.**  
*Ad.*, 7th and Master Streets, Phila., Pa.
- Robert Ramsay Mebane, Ph.G.**  
Retail pharmacist.  
*Ad.*, 308 E. Northampton Street, Wilkesbarre, Pa.
- George Nathan Netsky, Ph.G.**  
*Ad.*, 10th and Oregon Avenue, Phila., Pa.
- Harold Leslie Parmalee, Ph.C.**  
Asst. in Botany and Pharmacognosy, P. C. P.,  
1921.  
*Ad.*, Maple Shade, N. J.
- George Lewis Reese, Ph.C.**  
Served in U. S. A., 2nd Div., with A. E. F.
- George Nelson Rice, Ph.G.**  
Retail pharmacist. Mem. Allentown Chamber of  
Commerce; Beta Phi Sigma Frat.  
*Ad.*, 1149 Hamilton Street, Allentown, Pa.
- Frederick Rosin, Ph.G.**  
*Ad.*, 3rd and Christian Streets, Phila., Pa.
- \*Harry Meyer Sagorsky, Ph.G.**  
Deceased, October, 1918, Camp Lee, Va.
- Edward Schafer, Ph.G.**  
*Ad.*, 1920 N. Croskey Street, Phila., Pa.
- Reginald Scheetz, Ph.G.**  
Pharmacist until 1917. Now in employ of U. S.  
Government.  
*Ad.*, 2732 S. 10th Street, Phila., Pa.
- Ross Franklin Shoemaker, Ph.G.**  
*Ad.*, Saxton, Pa.
- Nathsn Alexander Simpson, Ph.G.**  
Instr. in pharmacognosy, P. C. P. (See page 449.)  
*Ad.*, 5529 Poplar Street, Phila., Pa.
- Benjamin Smiler, Ph.G.**  
Retail pharmacist.  
*Ad.*, 40th and Parrish Streets, Phila., Pa.
- Morris Soffer, Ph.G.**
- Henry Luffberry Somers, Ph.G.**  
Received Ph.C. degree, 1915. Medical student.  
Formerly pharmacist and teacher of clinical chem-  
istry. Served in U. S. A. Med. Dept. Received  
Phar.D. degree, 1916.  
*Ad.*, 3123 Diamond Street, Phila., Pa.
- Christian Albert Stutzmsn, Ph.G.**  
*Ad.*, Tremont, Pa.
- William Udell, Ph.G.**  
Physician.  
*Ad.*, 1618 S. 9th Street, Phila., Pa.
- Harry Eberly Walker, Ph.G.**  
*Ad.*, Chambersburg, Pa.
- Truman J. Wall, Ph.C.**  
Supt. Electrolytic Chemical Plant, Miami Paper  
Co. Received Phar.D. degree, 1915.  
*Ad.*, 304 E. Main Street, West Carrollton, Ohio.
- \*Abraham Weiner, Ph.G.**  
Pharmacist. Served with U. S. A. in France.  
Wounded.
- Thomas Jefferson Wenner, Ph.C.**  
Physician and surgeon. Demonstrator in Chemistry,  
Medico-Chi. Coll. Graduated in medicine Univ.  
of Penna., 1918. Served in U. S. A. as 1st Lieut.,  
Med. Dept.  
*Ad.*, 150 S. Washington Street, Wilkesbarre, Pa.
- David Franklin Whetstone, Ph.G.**  
Retail pharmacist.  
*Ad.*, Everett, Pa.
- Charles Brandt Whitman, Ph.G.**  
Retail pharmacist. Served in U. S. A., Tank  
Corps.  
*Ad.*, 220 N. Union Street, Middletown, Pa.
- Robert Kerr Worrell, Ph.G.**  
*Ad.*, Blackwood, N. J.
- Dell Wallace Youngken, Ph.G.**  
Pharmacist. Assistant in Pharmacy Dept., Medico-  
Chi Coll. Served in U. S. A. as Sgt., Med. Dept.,  
56th Inf., 7th Div. In charge 7th Div. Sch. of  
Sanitation, A. E. F. in France. Mem. Amer.  
Legion; Beta Phi Sigma and Phi Zeta Delta Frats.  
*Ad.*, 140 Main Street, Coatesville, Pa.
- Vladislaus Xavier Zemaitis, Ph.G.**  
Retail pharmacist. Served in U. S. N. R. F. as  
Pharmacist's Mate.  
*Ad.*, 134 S. Main Street, Shenandoah, Pa.

1915

- Harry Franklin Angstadt, Ph.G.**  
*Ad.*, 200 S. 12th Street, Phila., Pa.
- Morris Lewis Augenblick, Ph.G.**  
Chemist, Eastern Mfg. Co.  
*Ad.*, 246 Front Street, Nanticoke, Pa.
- Jacob Elmer Baker, Ph.G.**  
Chemist, Security Cement and Lime Co.  
*Ad.*, 1162 Hamilton Blvd., Hagerstown, Md.
- Harrison George Ball, Ph.G.**  
*Ad.*, Mahanoy City, Pa.
- Isaac Benjmsln Bloomfield, Ph.G.**  
Retail pharmacist. Served in U. S. A., Med.  
Dept.  
*Ad.*, 326 W. Huntingdon Street, Phila., Pa.
- Harry Arthur Cohen, Ph.G.**  
Retail pharmacist. Served in U. S. A., Med. Sup-  
ply Depot, Camp Gordon, Ga.  
*Ad.*, 190 S. State Street, Wilkesbarre, Pa.
- Earl Montgomery Cole, Ph.G.**  
*Ad.*, E. Stroudsburg, Pa.
- Rudolph K. Dorfman, Ph.G.**  
Pharmacist.  
*Ad.*, 480 N. Orianna Street, Phila., Pa.
- Herman Maurice Feuerstein, Ph.G.**  
*Ad.*, 715 W. Wyoming Avenue, Phila., Pa.
- Jean Leon Germann, Ph.G.**
- Albert George Gibhony, Ph.G.**  
*Ad.*, Belleville, Pa.
- James Pureley Glover, Ph.G.**  
*Ad.*, 54th and City Line Avenue, Bala, Pa.



676 First Century of the Philadelphia College of Pharmacy

- Samuel Sidney Goodman, Ph.G.**  
*Ad.*, 221 Fitzwater Street, Phila., Pa.
- Lewis Sigmund Greenberg, Ph.G.**  
 Pharmacist. In charge of dispensary, Post Hosp., Fort Howard, Md.  
*Ad.*, 5741 Pine Street, Phila., Pa.
- Albert Greenlees, Ph.G.**
- John Milton Groff, Ph.G.**  
 Pharmacist.  
*Ad.*, Cynwyd, Pa.
- Herman Louis Grupe, Ph.G., Ph.C.**  
 Asst. foreman Rubber Dept., Wire and Cable Section, General Electric Co.  
*Ad.*, 290 McClellan Street, Schenectady, N. Y.
- Edward Israel Hallin, Ph.G.**  
 Graduated 1920, Univ. of Penna. Received B.S. degree in chemistry. Served in U. S. A., Engineers Reserve Corps. Mem. Amer. Chem. Soc.; Priestly Chem. Soc.  
*Ad.*, 1329 Parrish Street, Phila., Pa.
- Edward Joseph Heine, Ph.G.**  
*Ad.*, 134 Olney Avenue, Phila., Pa.
- Paul F. Houser, Ph.G.**  
 Received Ph.C. degree, 1916.
- Edward Huber, Ph.G.**  
 Pharmacist. Served in U. S. A., Med. Dept., Base Hosps. No. 64 and 90. With A. E. F. in France.  
*Ad.*, 405 Pittston Avenue, Scranton, Pa.
- Edmund Griffith Jackson, Ph.G.**  
 Retail pharmacist. Served in U. S. A. with 309th F. A., 78th Div. With A. E. F. in France.  
*Ad.*, 3401 Pacific Avenue, Wildwood, N. J.
- Benjamin Ivor Jones, Ph.G.**  
*Ad.*, Bangor, Pa.
- Morris Kabacoff, Ph.G.**  
*Ad.*, 220 Vine Street, Phila., Pa.
- \*Joseph Francis Kennelly, Ph.G.**  
 Deceased, December 25, 1917.
- Charles Jacob Koerber, Ph.G.**  
*Ad.*, 1724 Spring Garden Street, Phila., Pa.
- Herman Wischman Mathieu, B.S., Ph.C.**  
 Chemist, E. I. DuPont de Nemours and Co.  
*Ad.*, 105 W. 19th Street, Wilmington, Del.
- Levy Meshkov, Ph.G.**  
*Ad.*, 7th and Reed Streets, Phila., Pa.
- James E. Moss, Ph.G.**  
*Ad.*, 63rd and Elmwood Avenue, Phila., Pa.
- Basil Justin Fontenoy Mott, Ph.G.**  
 Pharmacist. Served in U. S. A. with A. E. F. in France.  
*Ad.*, Bellefonte, Pa.
- John Francis O'Brien, Ph.G., Ph.C.**
- Samuel B. Ostrum, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 2600 N. 31st Street, Phila., Pa.
- Bernard Overbeck, Ph.G.**  
*Ad.*, 1302 S. Lawrence Street, Phila., Pa.
- Asterios Pappadopoulos, Ph.G.**  
 Pharmacist.  
*Ad.*, South Bethlehem, Pa.
- \*Thomas Henry Peters, Ph.G.**  
 Deceased, October 27, 1918.
- Chester John Powell, Ph.G.**
- Morgan Charles Reed, Ph.G.**  
*Ad.*, Shamokin, Pa.
- Harry Russock, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 3rd and Green Streets, Phila., Pa.
- \*Howard Ely Seid, Ph.G.**  
 Deceased, May 29, 1919.
- Herbert Allaman Smith, Ph.G.**
- George Smithgall, Ph.G.**  
*Ad.*, 523 N. Pine Street, Lancaster, Pa.
- Martin Yalen Smulyan, Ph.G.**  
 Served in U. S. A., Gas Defense.
- Alfred B. Stellwagon, Ph.G.**  
 Chemist and Factory Control Mgr. A. Wilhelm Co., Division of the Glidden Co., Insecticides and Fungicides. Received Ph.C. degree, 1916. Formerly chemist for Reading Steel Casting Co., and H. J. Heinz Co.  
*Ad.*, 1222 Eckert Avenue, Reading, Pa.
- Michael Stoloff, Ph.G.**  
*Ad.*, 818 South Street, Phila., Pa.
- Lester Charles Thrash, Ph.G.**  
*Ad.*, Wayne and Logan Avenue, Phila., Pa.
- \*Aaron Vernick, Ph.G.**  
 Deceased, October, 1918.
- John Robert Williams, Ph.G.**

1916

- Horace R. Aarons, Ph.G.**  
*Ad.*, 1449 N. 13th Street, Phila., Pa.
- Aristides Alberti-M, Ph.G.**  
*Ad.*, 118 Wyoming Street, Hazleton, Pa.
- Harry J. Andes, Ph.C.**  
 Pres. and Gen. Mgr. Andes Drug Co., Inc., Wholesale Druggists.  
*Ad.*, Hazleton, Pa.
- A. H. Arbogast, Ph.G.**  
*Ad.*, Route 3, Easton, Pa.
- Abraham Arrow, Ph.G.**  
*Ad.*, 722 Erie Avenue, Phila., Pa.
- Harry Joseph Bailen, Ph.G.**  
 Retail pharmacist. Course in Gen. and Analyt. Chem. at Univ. of Penna.  
*Ad.*, 2169 N. 9th Street, Phila., Pa.
- Edwin M. Blitz, Ph.G.**  
 Retail pharmacist. Served in U. S. N. during World War.  
*Ad.*, 424 N. 2nd Street, Phila., Pa.
- Carl J. Gebhardtshauer (Now Charles J. Bower), Ph.C.**  
*Ad.*, 321 E. Dorset Street, Germantown, Phila., Pa.
- David B. B. Buchanan, Ph.G.**  
 Pharmacist. Served in U. S. A., 1st Div., with A. E. F. in France. Attended Pasteur Inst. and Ecole, Paris. Courses in bacteriology, pathology and chemistry. Wounded.  
*Ad.*, St. Clair, Schuylkill County, Pa.
- Albert Bunin, Ph.G.**  
 Retail pharmacist.  
*Ad.*, 2nd and West Streets, Wilmington, Del.
- Samuel A. Cohen, Ph.G.**  
*Ad.*, 2525 N. 32nd Street, Phila., Pa.
- William J. Conlen, Ph.G.**  
*Ad.*, 1709 S. Broad Street, Phila., Pa.
- Albert Dager Cooley, Ph.G.**  
 Chief Pharmacist's Mate, U. S. N. Served in U. S. N. as Instr. Hosp. Corps on transports, torpedo boats and destroyers.  
*Ad.*, Seaside Heights, N. J.
- Robert C. Dix, Ph.G.**  
*Ad.*, Nicholson, Pa.



- Saul Entine, Ph.G.**  
Ad., 3101 N. 24th Street, Phila., Pa.
- Jamea M. Evans, Ph.G.**  
Ad., 512 Broad Street, Pittston, Pa.
- Simon E. Finkelstein, Ph.G.**  
Pharmacist.  
Ad., S. W. Cor. 8th and McKean Streets, Phila., Pa.
- Nathan S. Gadol, Ph.G.**  
Ad., 603 Brown Street, Phila., Pa.
- Chester A. Gates, Ph.C.**  
Ad., VanCamp Packing Co., Indianapolis, Ind.
- Harry Gertz, Ph.G.**  
Ad., 1345 Germantown Avenue, Phila., Pa.
- A. G. Goodfriend, Ph.G.**  
Ad., 411 Lombard Street, Phila., Pa.
- Abraham N. Green, Ph.G.**  
Ad., 5th and Somerset Streets, Phila., Pa.
- Charles A. Greenstone, Ph.G.**  
Retail pharmacist. Mem. A. Ph. A.; Nat'l. Assn. Retail Druggists. Director Chamber of Commerce.  
Ad., 106 Idaho Street, Farrell, Pa.
- Robert W. Handforth, Ph.G.**  
Ad., 15th and Cumberland Streets, Phila., Pa.
- Ellery H. Harvey, Ph.C.**  
Chief chemist, Perkins Glue Co. Received Ph.M. degree P. C. P., 1921. Post grad. courses at Temple and Bucknell Univ. Author. Masonic affiliation.  
Ad., Lansdale, Pa.
- Leopold E. Helfand, Ph.G.**  
Retail pharmacist.  
Ad., 644 Snyder Avenue, Phila., Pa.
- Benjamin H. Horen, Ph.G.**  
Pharmacist. Pharmacist, Phila. Gen. Hosp., 1917-18. Served in U. S. A. as Sgt., Med. Dept.  
Ad., 1704 S. 7th Street, Phila., Pa.
- Charles William Hornby, Ph.G.**  
Pharmacist.  
Ad., 6134 Ridge Avenue, Roxborough, Phila., Pa.
- Albert L. Ikan (Now Aiken), Ph.G.**  
Retail pharmacist.  
Ad., 2621 Girard Avenue, Phila., Pa.
- Earl Keen, Ph.G.**  
Pharmacist.  
Ad., 221 W. Green Street, Reading, Pa.
- Caleb L. Killian, Ph.G.**  
Mgr. of retail drug store.  
Ad., 811 Church Street, Reading, Pa.
- Albert L. Kramer, Ph.G.**  
Ad., 516 E. Chestnut Street, Hazleton, Pa.
- Edward J. LeKarz, Ph.G.**  
Manager of Brown's Pharmacy.  
Ad., 430 3rd Avenue, Scranton, Pa.
- L. O. Littleton, Ph.C.**
- Walter R. McClarren, Ph.G.**  
Mgr. of retail drug store.  
Ad., 215 First Street, Conemaugh, Pa.
- William O. Meese, Ph.G.**  
Served in U. S. A., Med. Dept., with A. E. F.  
Ad., Nesquehoning, Pa.
- Daniel B. Nagle, Ph.G.**  
Retail pharmacist. Served in U. S. A., Med. Dept.  
Ad., 740 Weiser Street, Reading, Pa.
- Allen V. Nichols, Ph.G.**  
Ad., 240 Pine Street, Phila., Pa.
- \*Morris Ortzman, Ph.G.**  
Deceased, October 18, 1922.
- Angelo Perez, Ph.G.**  
Ad., Guantanamo, Cuba.
- Michael W. Pintzow, Ph.G.**  
Pharmacist.  
Ad., 2625 N. Napa Street, Phila., Pa.
- David L. Quickel, Ph.G.**  
Ad., 1308 N. George Street, York, Pa.
- Lester F. Raabe, Ph.G.**  
Manufacturing pharmacist. Masonic affiliation.  
Ad., 2223 Snyder Avenue, Phila., Pa.
- Alfred P. Redner, Ph.G.**  
Ad., S. E. Cor. 54th and Media Streets, Phila., Penna.
- G. A. Reitz, Ph.C.**  
Ad., Fishers Ferry, Pa.
- Richard H. Rogers, Ph.G.**  
Pharmacist.  
Ad., Apt. 8, Beverly Court, Atlantic City, N. J.
- D. Elvin Rosenberger, Ph.G.**  
Asst. Mgr. Liggett's Drug Store. Served in U. S. A. as Sgt., 1st Class, Med. Dept. With A. E. F. in France.  
Ad., Perkasio, Pa.
- Samuel Rotberg, Ph.G.**  
Pharmacist.  
Ad., 2352 Federal Street, Phila., Pa.
- Herman H. Schanbacher, Ph.G.**  
Pharmacist. Masonic affiliation. Served in U. S. A. as Sgt., Med. Dept.  
Ad., 1751 Orthodox Street, Phila., Pa.
- Aarou Simkin, Ph.G.**  
Ad., 1700 N. 42nd Street, Phila., Pa.
- Horace T. Sipler, Ph.C.**  
Chemist.  
Ad., 621 Darby Terrace, Darby, Del. Co., Pa.
- Jay A. Smith, Ph.G.**  
Treas. and Gen. Mgr., Media Drug Co., Retail and Wholesale Druggists. Served in U. S. A. as Sgt., Hosp. Corps, Camp Greene, N. C.  
Ad., 6417 Lebanon Avenue, Phila., Pa.
- \*William M. Smith, Ph.G.**  
Served in U. S. A., Med. Dept., Fort Oglethorpe, Georgia.
- Frank Steffin, Ph.G.**  
Pharmacist. Served in U. S. N. Hosp. Corps as Pharmacist's Mate on board U. S. S., So. Dakota.  
Ad., 617 S. 10th Street, Phila., Pa.
- Edward E. Stephenson, Ph.G.**  
Pharmacist. Served in U. S. N. as Pharmacist's Mate. Course in bacteriology Naval Med. Sch.  
Ad., 7955 Division Street, Wilksburg, Pa.
- Graff S. Stewart, Ph.G.**  
Pharmacist.  
Ad., Care of Hilton and Heffner, Lock Haven, Pa.
- Claude H. Umlauf, Ph.G.**  
Retail pharmacist.  
Ad., 5701 Kingsessing Avenue, Phila., Pa.
- J. A. Vincenty, Ph.C.**
- Charles Leroy Wall, Ph.G.**  
Retail pharmacist.  
Ad., Doylestown, Pa.
- Edwin Leslie Williams, Ph.G.**  
Retail pharmacist.  
Ad., 6700 Rising Sun Avenue, Phila., Pa.
- Fred J. Williams, Ph.G.**  
Retail pharmacist. Served in U. S. A. with 311th F. A. Masonic affiliation.  
Ad., 340 Wyoming Avenue, Wyoming, Pa.
- Raymond Williams, Ph.G.**
- Benjamin S. Zipin, Ph.G.**  
Pharmacist.  
Ad., 456 N. 2nd Street, Phila., Pa.

## CHAPTER XIII

## ALPHABETICAL LIST OF GRADUATES OF THE PHILADELPHIA COLLEGE OF PHARMACY, AND OF THE DEPARTMENT OF PHARMACY AND CHEMISTRY OF THE MEDICO-CHIRURGICAL COLLEGE

## GRADUATES OF THE PHILADELPHIA COLLEGE OF PHARMACY

- Aaron, James Polk, '79  
 Abalo, Aristides, '17  
 \*Abbott, J. Henry, '51  
 \*Abell, Wm. Warner, '86  
 \*Abernethy, James Maxwell, '61  
 Abrahams, Harold Justin, Sp. '21  
 Abrahams, Samuel, '19  
 \*Abrahamson, Aaron Moses, '15  
 Abrabamson, Oscar, '20  
 Abrams, Frederick Arthur, '98  
 Abrams, Henry Reuby, '98  
 \*Acker, Charles Niskey, '82  
 Acker, Louis Kossuth, '74  
 Ackerman, David, Jr., '74  
 Ackerman, William Brown, '02  
 Ackley, Kelso Carter, '08  
 Acuff, Raymond Albanus, '05  
 Adams, Bentley Bryan, '94  
 Adams, Charles Franklin, '81  
 \*Adams, Ellsworth Smith, '86  
 Adams, Elwood C., '17  
 Adams, Ernest Watts, '17  
 Adams, Franklin Irving, '90  
 Adams, Howard Ruby, '21  
 Adams, James Duffield, '93  
 Adams, Louis W., '70  
 Adams, Winfield Scott, '93  
 \*Addington, William B., '72  
 \*Addis, S. D., '73  
 Adler, Rudolph Wolf, '17  
 \*Agthe, John Frederick Oscar, '80  
 Aguiar, Carlos Maria, '15  
 Aguizy, Ahmed Mahmoud El, '15  
 Ahrendts, Conrad Henry, '17  
 Aidenbaum, Philip Lincoln, '20  
 Akers, Frank Leamer, '92  
 Alacan, Silvia Clotilde, '15  
 Albaugh, Herbert Spencer, '96  
 Albeck, Ray Augustus, '13  
 \*Albert, Harry Clay, '98  
 Albert, Howard, '03  
 Albright, Charles Wesley, '86  
 Albright, Franklin Pierce, '78  
 Alden, Harley Roscoe, '01  
 Alexander, Charles Ellis, '96  
 \*Alexander, Everett Vincent, '86  
 Alexander, Frederick William, '84  
 \*Alexander, Maurice W., '54  
 Aley, Hamilton, Jr., '95  
 Alf, Rudolph Eric, '16  
 Allaire, Charles B., '67  
 \*Allan, James Hugh, '09  
 Alleman, Emanuel Allison, '79  
 Alleman, Frank, '93  
 \*Allen, Alexander Bonnell, '79  
 \*Allen, Charles Spencer, '84  
 Allen, Charles Sumner, '72  
 Allen, Clyde M., '08  
 Allen, E. Floyd, '83  
 Allen, Harvey, '59  
 Allen, James Armstrong, '74  
 Allen, James Henry, '08  
 \*Allen, John C., '29  
 Allen, John Harvey, '06  
 \*Allen, John Hays, Jr., '78  
 \*Allen, John Maskell, '90  
 Allen, John Reese, '79  
 Allen, John Wesley, '21  
 Allen, Milton Deronda, '99  
 \*Allen, Robert Wallin, '03  
 \*Allen, William E., '66  
 \*Allen, William M., '62  
 Allison, James Harrison, '11  
 \*Alsentzer, Charles Frederick, '91  
 Alston, William Algernon, '02  
 Alter, George Merchant, '94  
 Althoff, Samuel Young, '04  
 Althouse, Frank John, '93  
 Althouse, Harry, '21  
 Althouse, Harry B., '97  
 Althouse, Joseph Landis, '05  
 Altshuler, Samuel Benson, '19  
 \*Alvarez, Miguel y Ortiz, '73  
 \*Amerman, Ella, '88  
 Ames, Arthur Garfield, '03  
 Ames, Charles Eugene, '94  
 \*Amsden, George Sidney, '85  
 \*Amsden, William C., '90  
 Amsterdam, Peter, '10  
 Anawalt, Robert Bunn, '06  
 Ancker, Louis, '79  
 Anderson, Clarence, '75  
 Anderson, Clarence George, '92  
 Anderson, Gustave G., '08  
 Anderson, Henry Warren, '84  
 Anderson, James Philip, '17  
 Anderson, Ralph Samuel Lloyd, '97  
 Anderson, Walter Marion, '12  
 Andrew, William Ernest, '09  
 Andrews, Charles Howard, '83  
 \*Andrews, John R., '48  
 Andrews, Joseph Colson, '06  
 Andrews, Willard Crandall, '99  
 Andrews, William Hall, '00  
 Anewalt, Ellsworth Quincy, '95  
 Angeny, Ferdinand Geisler, '90  
 Angeny, Granville Louis, '92  
 Angeny, Joseph Sleiifer, Jr., '88  
 Angle, Jay Warren, '92  
 Angstadt, Harry Franklin, '17  
 Ankrum, Samuel Martin, '14  
 Ankerbrand, Walter Franklin, '16  
 Anspach, Irvin Milton, '05  
 Anspach, Paul Bucher, '87  
 Anstett, Zachary Taylor, '76  
 Anstock, Arthur David, '01  
 Antes, Oliver Henry, '20  
 Anthes, Philip, '85  
 Anthony, Herbert Spencer, '03  
 \*Anthony, Joseph, '71  
 \*Antill, Joseph V., '73  
 \*Appenzeller, Gustav Adolph, '77  
 \*Apple, Ammon A., '73  
 \*Apple, Franklin Muhlenberg, '90  
 \*Apple, Milton Shimer, '83  
 \*Appman, William, '90  
 \*Archibald, Henry C., '67  
 Arcularius, Harry Edward, '96  
 Arkans, Morris, '21  
 Arledge, Isaac Curtis, '12  
 Armbrecht, William Charles, '83  
 \*Armstrong, James A., '55  
 \*Armstrong, John James, '12  
 \*Armstrong, Thomas Swain, '76  
 \*Armstrong, Walter, '96  
 \*Armstrong, William Moore, '07  
 Arndt, Harry, Jr., '96  
 Arnold, Alfred William, '21  
 \*Arnold, Charles Frederick, '83  
 Arnold, Claude Horace, '86  
 Arnold, Guy Raymond, '13  
 Arnold, Henry Peter, '93  
 Arnold, Mark Alphonsus, '12  
 Arnold, Mark Heikes, '07  
 Arnott, William, '99  
 Arny, Henry Vin, '89  
 Ash, J. Frank, '72  
 Ashcraft, Bernard Alfred, '17  
 \*Ashmead, Alfred Croskey, '79  
 Ashmead, Virden Peter, '03  
 Ashton, Charles Butterworth, '87  
 Askin, Martin I., '21  
 Aszmann, Louise Henrietta (Mrs. George H. Hance), '96  
 Atkins, Frank Hlean, '94  
 Atkins, George Hulings, '93  
 Atkins, John Walt, '11  
 Aubley, Samuel, '89  
 Aughinbaugh, John Keely, '99  
 Aughinbaugh, William Culbertson, '94  
 Aument, Harry Groff, '20  
 Austin, Charles Howard, '00  
 Austin, Jacob, '13  
 Avis, Clinton Fisk, '15  
 Axilbund, Samuel, '07  
 Ayres, John, '08  
 Ayres, William Bishop, '89  
 Ayres, Wilmot, '06  
 Baas, Charles Wesley, '03  
 Babb, E. Harlan, '73  
 Babb, Grace Lee (Mrs. Griffith Abbott), '84  
 \*Babb, Peter, '42  
 Bache, Benjamin Franklin, '78  
 \*Bache, Charles L., '49  
 \*Bachman, Alexander, '53  
 \*Bachman, G. Adolphus, '63  
 Bachman, Herbert Keck, '99  
 \*Backes, Thomas Joseph, '86  
 Baconstoe, Harvey Franklin, '88  
 Bacon, Edwin Gray, '95



- Bacon, Francis Llewellyn, '89  
 Bacon, Harry Augustus, '92  
 Baddour, Joseph Selim, '95  
 Baer, Clyde Kreider, '05  
 Baer, Hermanns Ludwig, '96  
 Baer, Herbert Oscar, '02  
 Baer, Howard Jacob, '08  
 Baer, Jacob Michael, '87  
 Baer, Lemuel Miles, '98  
 Bagge, Edward Everett, '83  
 Bailey, Albert Henry Anthony, '13  
 Bailey, Arthur Hamilton, '92  
 Bailey, John, '95  
 Bailey, John Henry, '94  
 Bailey, Ralph John, '07  
 Bair, Schafer Bowers, '07  
 Bair, Guy Frederick, '18  
 Baird, Robert, '88  
 Baker, Benjamin, '19  
 Baker, Charles Harry, '83  
 Baker, Daniel, '02  
 Baker, David Wiley, '86  
 Baker, Ernest Herbert, '81  
 Baker, George Fisher, '94  
 Baker, Howard Stanislaus, '04  
 \*Baker, Jacob L., '46  
 \*Baker, James R., '57  
 Baker, John Luther, '19  
 Baker, Newton Claire, '97  
 Baker, Thomas David, '84  
 Baker, Thomas Jennings, '91  
 \*Baker, T. Roberts, '52  
 \*Baker, Walter Theron, '76  
 \*Baker, William G., '42  
 \*Bakes, William Courtney, '55  
 Bakhaus, Edmund, '74  
 Baldauf, Julius Leopold, '89  
 Baldauf, Leon Kahn, '96  
 Baldwin, Charles Hampton, '08  
 Baldwin, Frank D., '12  
 \*Ball, Clifford Arthur, '99  
 Ball, William Amos, '77  
 \*Ball, William Ernest, '95  
 Balle, Bismarck Henry, '93  
 Ballentine, Allen DeBow, '83  
 \*Ballentine, Charles Hamilton, '80  
 \*Balliet, Howard Paul, '99  
 Balliet, Woods D., '14  
 Ballinger, Abraham Lincoln, '84  
 Ballinger, Reeve Leslie, '08  
 Balmer, John Henry, '83  
 Bambrick, Martin Joseph, '17  
 Bamford, Melvin William, '99  
 Bancroft, George Hickman, '79  
 \*Bancroft, Joseph W., '55  
 Banes, John M., '56  
 \*Banks, William Baker, '74  
 Bannan, Samuel Joseph, '08  
 Bannvart, Charles A., '55  
 Bantley, Bartholomew, '74  
 Banzhof, Harry George, '17  
 Barab, Harry, '17  
 Baradofsky, Samuel (now Bardy), '11  
 Barber, Harry Lee, '84  
 Barbieri, Francis Joseph, '96  
 Bardwell, Seth Arden, '05  
 Barker, James Henry, '85  
 \*Barker, Laura Alice, '00  
 Barkhuff, Hugh Augustus, '92  
 Barkhuff, James Addison, '82  
 Barlow, Louis Eugene, '86  
 Barlow, Walter Gilbert, '94  
 \*Barnard, William Dwight, '90  
 Barndollar, Harry, '74  
 Barnes, Thomas, Jr., '79  
 Barnett, Eldredge Ewing, '01  
 \*Barnitz, Frank M., '66  
 Barnitz, Harry L., '95  
 \*Barnitz, John Stevenson, '78  
 Barnitz, Lincoln Gray, '89  
 Baron, Samuel, '17  
 Barr, Elwyn Paul, '95  
 \*Barr, Robert Hamilton, '94  
 Barr, John Rufus, '76  
 Barr, Samuel Ernest, '77  
 \*Barr, Thomas H., '54  
 Barr, William Henry, Jr., '83  
 Barreras, Fernando, '18  
 Barrere, George Washington, '75  
 Barrett, Charles Llewellyn, '89  
 Barrett, Edson Jay, '08  
 Barrett, Wesley Johnson, '96  
 Barrington, Richard Calcott, '80  
 Barrowman, William G., '86  
 Bartel, Max, '85  
 Barth, Alfred, '74  
 Bartho, Fremont Kessler, '96  
 Bartholomew, Arthur, '00  
 Bartholomew, Arthur Demaire, '04  
 Bartholomew, Claude Lafayette, '97  
 Bartholomew, Samuel Howard, '10  
 Bartlett, Hannah Frances (Mrs. W. E. Tyson), '96  
 Barton, Charles Edwin, '78  
 \*Barton, George W., '70  
 \*Bartram, Ernest, '67  
 Barwig, Gustavus Adolphus, '90  
 Baskin, Anny Lonza, '06  
 Baskin, Mortimer H., '91  
 Bass, Albert Abe, '17  
 Bassett, Fenwick Hazleton, '80  
 Bassett, William H., '55  
 Batchelor, E. C., '73  
 \*Batdorf, Henry James, '89  
 Bateman, William Henry Stevens, '89  
 \*Bates, John Phillips, '97  
 \*Bates, Louis A., '69  
 \*Battye, Robert, '56  
 Bauch, George Franklin, '94  
 Bauder, Walter Westbrook, '05  
 Baum, William Louis, '87  
 Baumgardner, Charles Benjamin, '83  
 Baumgartner, Harry Francis, '13  
 Baumgartner, William Jacob, '92  
 Baun, William David, '10  
 Baur, Hugo Franklin, '76  
 \*Baur, Jacob, '81  
 \*Baur, William Christopher, Jr., '90  
 Bausner, George Joseph, '21  
 Bayles, John Wyckoff, '00  
 Beach, Malcolm, '13  
 \*Beakey, George Barnard, '94  
 \*Beale, Charles, '80  
 Beam, Eugene Cecil, '08  
 Beam, Isaac R., '56  
 Beam, William Thomas, '07  
 Beaman, Humphrey Mosher, '09  
 Beane, George Ridenour, '98  
 Beans, Edwin K., Jr., '84  
 \*Bear, Benjamin Samuel Janney, '99  
 \*Bear, John Decatur, '07  
 Bear, John H., '88  
 Beardsley, Robert Truman, Sp. '15  
 Beary, Eli S., '71  
 Beatty, Arthur William, '00  
 Beauchamps, Enrico R., '21  
 Beaver, Joseph Andrew, '13  
 Beaver, Ralph, '21  
 Beaver, Samuel, '92  
 Bechberger, Henry, '85  
 Beck, Addison Lloyd, '87  
 Beck, Frederick Cowden, '09  
 \*Beck, J. Howard, '73  
 Beck, Jay Dana, '10  
 \*Beck, John W., '68  
 Beck, Robert Wilbert, '91  
 Becker, Harry Vane, '86  
 Becker, Irwin Atwood, '96  
 Becker, Maxwell Montefiore, '07  
 Becker, Raymond Clyde, '05  
 Beckert, Theodore Frederick, '77  
 Beckett, Josiah Bee, '96  
 Beckett, Thomas Aloysius, '17  
 Beckler, Warren B., '87  
 Beckley, Norman Clyde, '11  
 Beckwith, James Webb, '88  
 Beddow, Llewellyn Jenkins, '99  
 Bee, William Frederick, '04  
 Beecham, Edgar Fortune Carroll, '08  
 Beecher, Lew Wallace, '16  
 Beechwood, May Elizabeth, (Mrs. F. L. Herron), '18  
 Beegle, David Elmer, '02  
 Beeler, Aaron Wilson, '96  
 Beeler, John L., '71  
 Beers, Benjamin Franklin, '92  
 Beers, James Norman, '17  
 Beetem, Jacob Samuel, '78  
 Behlar, John, '76  
 \*Behringer, Albert Christian, '82  
 Beidler, Samuel McGill, '75  
 Beidler, William, '92  
 Beitenman, W. Wallace, '79  
 Belaval, Vasco Sastrano, '07  
 Bell, Frances Rose (Mrs.), '06  
 Bell, Harry, '20  
 Bell, Howard Homer, '08  
 Bell, James Edgar Stevenson, '88  
 \*Bell, James S., '69  
 Bell, Robert Matthew, '86  
 Bell, Robert Nevens, '01  
 \*Bell, William D., '60  
 \*Belles, Arthur Hartman, '16  
 \*Belleville, Allen Leslie, '80  
 Bellis, William Henry, '83  
 Bellitz, Jennie (Mrs. Bector), '11  
 Bellows, Charles Edward, '81  
 Belov, Abraham, '21  
 Belt, James Ferris, '91  
 Bender, Arthur Clarence, '01  
 Bender, Edward Augustus, '91  
 Bender, John Jacob, '91  
 Bender, William Lawrence, '06  
 Benedetti, Carlos Manuel, '20  
 \*Benedict, William Paul, '94  
 Benjamin, Samuel Neuman, '83



- Benner, Frederick James, '01  
 \*Bennett, Alexander Elwell, '80  
 \*Bennett, John Knight, '78  
 Bennett, Samuel Dey, '93  
 Bennum, Charles Henry, '90  
 Bensinger, George Irvin, '96  
 Bentley, David Fuller, '89  
 Benton, Wilber Merritt, '81  
 Berberich, Herman, '98  
 \*Berberich, Joseph Herman, '02  
 Berg, Leroy, '92  
 Berger, Christian, '63  
 Berguido, Luis, '19  
 Beringer, George Mahlon, '80  
 Beringer, George Mahlon, Jr., '05  
 Berkenstock, Mark John, '18  
 \*Berkstresser, Watson, '93  
 Berman, Benjamin, '20  
 Bern, Morris, Sp. '21  
 \*Bernardy, Emile Seraphine, '87  
 \*Bernhard, Charles Henry, '81  
 Bernholz, Ida, '21  
 Bernstein, Abe Meyer, '21  
 Bernstein, Ada Malvina, '16  
 Bernstein, Mitchell, '09  
 Bernstein, Nita N., Sp. '20  
 \*Berret, Arthur, '86  
 Berry, De Wilton Snowden, '11  
 Berry, Robert Taylor, '98  
 Berryman, Clarence Haco, '14  
 Bertsch, George Philip, '90  
 Berube, Louis Napoleon, '81  
 Beshore, Ellsworth Smith, '87  
 Besore, Abraham Lincoln, '90  
 Besore, Alexander Stewart, '91  
 Best, Elton McCoy, '20  
 Bethel, Allen Paul, '08  
 Betts, John Alvin, '06  
 Betts, Samuel Everett, '81  
 \*Betts, William Hart, '84  
 Betz, Herman, '78  
 Betz, William Howard, '94  
 Beuter, John, '81  
 Beyer, Albert Franz, '04  
 \*Beyer, John Jacob, '79  
 Beyerle, Charles Wellington, '98  
 \*Bibby, Walter Eugene, '75  
 Bichy, William, '85  
 Bickel, Harry Lee, '90  
 Bicker, William Bernard, '75  
 Bickley, Milton Horace, '86  
 \*Bickley, Mortimer H., '54  
 Bicknell, Robert Cook, '86  
 Biddle, Charles Johnson, '74  
 \*Biddle, John W., '56  
 Biddleman, Harold Romayne, '15  
 Bidwell, Edwin Hugh, '80  
 Bienkowski, Peter Thomas, '06  
 Bienstock, Nathan Samuel, '17  
 Bietsch, George Edward, '92  
 Bigert, Anna Elizabeth (Mrs. W. S. Rice), '09  
 Bilderback, Joseph Brown, '91  
 \*Bilheimer, John Jessiah, '90  
 Bill, Howard Lukens, '21  
 Bille, George, '72  
 Billetdoux, Chester Augustus, '03  
 Billings, Oliver George, '07  
 Binder, Arthur Henry, '02  
 Binder, Furman Brooke, '04  
 \*Bines, Samuel M., '48  
 \*Binns, Harry R., '95  
 \*Binns, John Pemberton, '82  
 Bippus, Charles William, '88  
 Birch, Harry Rees, '89  
 Bird, Wellington Henry, '82  
 Biren, Samuel, '14  
 Birk, William Martin, '92  
 Birt, Frank John, '86  
 \*Bishop, Alanson B., '73  
 \*Bishop, W. H. Pancoast, '00  
 Bishop, David Kerlin, '98  
 \*Bishop, Samuel Walter, '87  
 \*Bispham, James L., '54  
 \*Bissell, Emery Gilbert, '77  
 \*Bissell, Wayne Barker, '85  
 Bitler, H. H., '72  
 Bitler, Harry, '91  
 Bitner, Richard Mathias, '21  
 Black, Charles Edgar, '88  
 Black, Charles Jeffries, '94  
 Black, Fred Lewis, '09  
 Black, Raymond D., Sp. '07  
 Black, Robert Morris, '98  
 Blackburn, Robert Perry, '89  
 \*Blackman, Augustus Smith, '92  
 Blackwood, Russell Thorn, '91  
 Blackwood, Russell Thorn, Jr., '19  
 \*Blair, Andrew, '65  
 \*Blair, Charles Lee, '95  
 \*Blair, Henry Cowan, '36  
 \*Blair, Henry Cowan, Jr., '66  
 Blair, Henry Cowan, 3rd, '92  
 \*Blair, Samuel Charles, '74  
 Elake, John Henry, '75  
 Blake, William Caleb, '13  
 Blalock, Jesse Nelson, '07  
 Blanco Mas, Ramon, '16  
 Blankenbush, Bernard E., '12  
 Blankenhorn, John, '79  
 \*Blankemeyer, Henry John, Jr., '99  
 Blasingame, Walter Alvan, '13  
 Blaustein, Louis Nathan, '16  
 Blauth, Adam John, '92  
 Bleeden, Rose, '20  
 Blew, Joseph Oscar, '00  
 Blew, Robert St. Clair, '02  
 Bley, Alphonso Albert Willits, '76  
 Blinkhorn, George, '57  
 Blinzig, Frederick John, '06  
 \*Blithe, Henry, '62  
 \*Blizzard, Joseph E., '67  
 Block, Jennie, '09  
 Bloes, Lee Otto, '11  
 Bloes, Walter Franklin, '19  
 \*Blomer, Augustus P., '65  
 \*Blomer, George Davis, '61  
 \*Blomer, George Davis, Jr., '87  
 Bloomfield, Morris, '20  
 Blouch, Charles Henry, '89  
 Blough, Elijah Robert, '02  
 \*Blow, Robert Gillingham, '93  
 Blum, Charles Julius, '16  
 Blumberg, Joseph, '10  
 Blumberg, Maurice, '17  
 Blumbard, Charles Albert, '94  
 Roadway, Jacob, '93  
 \*Bobb, Wallace Geary, '78  
 Bode, Theodore Christian, '96  
 \*Boecking, Guido Carl, '90  
 Boehme, Lawrence Carl, '17  
 Boerner, Emil Louis, '76  
 Boesch, Theodore Karl, '01  
 \*Boesser, Lewis Edmund, '05  
 Boger, Charles Everett, '89  
 Boger, Cyrus Maxwell, Jr., '82  
 \*Bogert, Charles Halsey, '04  
 Bogroff, Rebecca, '18  
 Boggs, Harry Leslie, '92  
 Bohn, Charles Henry, '82  
 Bohn, Frederick Henry, '17  
 \*Boileau, William Norwood Kelly, '76  
 \*Boisnot, Frederick Stryker, '76  
 Boisnot, Henry Stryker, '75  
 Bolich, Harry Clayton, '07  
 Bolin, Zera Exley, '09  
 Bollinger, Charles Wesley, '84  
 \*Bollinger, Chester Eugene, '11  
 \*Bollman, Curtis Jacob, '84  
 \*Bolton, Alfred H., '72  
 Bolton, Alfred Harrison, Jr., '96  
 \*Bolton, Charles F., '71  
 \*Bolton, Joseph P., '60  
 Bolton, Joseph Pecky, '92  
 \*Bolton, Stephen Conklin, '83  
 Bolton, Stephen Dwight, '10  
 Boltz, Albert Dillman, '18  
 Boltz, Elias Kline, '92  
 Boltz, Howard Hauer, '04  
 Boltz, Paul Kline, '01  
 Bomberger, Harry Jennings, '07  
 Bond, Curtis Humphrey, '18  
 \*Bond, Ira Linton, '88  
 \*Bond, Munroe, '73  
 Bondurant, Charles Scott, '87  
 Bongartz, Joseph Theodore, '12  
 Bongiovanni, Joseph Nathaniel, '16  
 \*Bonnell, Alexander Carhart, '90  
 Bonnell, Frank Sumner, '08  
 Bonner, John Edward, '05  
 Bonner, John Terry Wellington, '07  
 Bonnet, Charles Frederick, '86  
 \*Bonsall, Charles T., '53  
 Bonta, Clarence LaRue, '05  
 Boorse, Henry Augustus, '83  
 \*Boose, William Engelhart, '96  
 \*Booth, Frederick Smith, '83  
 Booth, James Lofton, '96  
 Booth, John Henry, '99  
 \*Booth, Thomas, '98  
 Booth, William Henry, '96  
 Booze, Edgar Ellsworth, '84  
 \*Borell, Henry A., '72  
 \*Borhek, James T., Jr., '67  
 \*Boring, Edwin McC., '67  
 Borneman, John Alexander, '02  
 Borneman, Warren Roland, '10  
 Bornstein, Rebecca, '20  
 Borrowes, George Henry, '01  
 Bosch, Karl Leander, '05  
 Bosch, Oscar Anthony, '07  
 Bose, Charles Henry, '10  
 Bosserman, Charles E., '16  
 Bossart, Ruth A., Sp. '20  
 Bossert, Myron Adam, '09  
 Bost, William Dale, '10  
 Botdorf, Joseph Franklin, '14  
 Botsford, Chipman, Sp. '76

- Bourke, Joseph M., '67  
 Bourne, James Frank, '08  
 Boush, Albert Lewis, '91  
 \*Bowen, Charles Alfred, '88  
 \*Bowen, Daniel Albert, '76  
 Bowen, Willis Elliott, '94  
 Bowens, Adrian, '74  
 Bower, Collier Levis, '82  
 \*Bower, Henry C., '54  
 Bower, Roy Carson, '08  
 Bower, William T., Sp. '83  
 Bowers, Charles Edward, '89  
 Bowers, Luther Pascal, '85  
 Bowersox, Benjamin Franklin, '05  
 \*Bowker, Frank, '89  
 Bowman, Charles Alexander, '77  
 Bowman, David Buchanan, '89  
 Bowman, George McLeod, '91  
 \*Bowman, Henry K., '69  
 Bowman, John M., Jr., '90  
 \*Bowman, Lin Light, '86  
 Bowman, Walter Jennings, '17  
 Bowman, William Frank, '93  
 Bowman, William Jasper, '81  
 Bowron, Dilley Arthur, '17  
 Boyd, Abraham, '68  
 Boyd, Charles Ducharme, '87  
 Boyd, Evan Garrett, '83  
 Boyd, Guy Stephen, '03  
 Boyd, John Charles, '86  
 \*Boyd, John Samuel, '93  
 Boyd, John W., '60  
 Boyd, Lardner Clark, '21  
 Boyd, Roger, '95  
 Boyd, William Merton, '14  
 Boyer, Allen Webster, '91  
 \*Boyer, Caverly, '43  
 Boyer, Edward Dayton, '77  
 \*Boyer, Edward L., '73  
 Boyer, Franklin Nagle, '91  
 Boyer, Howard Johns, '04  
 Boyer, John Clinton, '96  
 Boyer, Wallace B., '71  
 \*Boyer, Wesley Ray, '12  
 Boyle, Frank Meagher, '94  
 Boyles, Colonel James Clarkson, '91  
 \*Boynton, William Carlton, '84  
 Boysen, Edward George, '80  
 \*Boyson, Lewis Colloredo, '80  
 Boysen, Theophilus Henry, Jr., '01  
 Bozenhard, William Theodore, '85  
 Brach, Cornelius, '98  
 Bradburd, Harry Aaron, '17  
 \*Braddock, Charles S., '51  
 \*Braddock, Charles Shreve, Jr., '86  
 \*Braddock, Isaac A., '66  
 \*Braddock, William Henry, '75  
 Bradford, Edward Burton, '98  
 \*Bradford, John Marion, '82  
 Bradley, Augustus, '89  
 \*Bradley, James Andrew, '12  
 Bradley, Kersey Elmer, '11  
 Bradley, Oscar Samuel, '11  
 Bradley, Thomas F., '68  
 Bradley, William Nathaniel, '93  
 Brady, Roscoe Owen, '18  
 Bragdon, Clarence Eugene, '06  
 Brakeley, Joseph, '79  
 \*Brakeley, Philip F., '73  
 Brakeley, Philip Fine Howell, '81  
 Braker, Norman Clifton, '17  
 Brallier, Stanley A. E., '94  
 Bramer, Irving Daniel, '07  
 Brandner, Henry, Jr., '85  
 Brandt, Irvin Jacob, '87  
 Branin, Frederick Winston, '95  
 Branin, Manlif Lewis, '01  
 Braslavsky, Albert, '17  
 Bratton, Franklin Clair, '18  
 Bray, Walter S., '84  
 Bready, William Ramsey, Jr., '98  
 Brecht, Morris Winfield, '86  
 Breen, James Stanley, '10  
 Breidenbach, Charles Henry, '88  
 Breisch, William H., '91  
 \*Breitbaupt, Alphons Peter, '97  
 Brelocks, Frederick John, '94  
 Brendel, Frederick Charles, '95  
 Brendle, Lester Yoder, '16  
 \*Breneiser, Edgar, '87  
 \*Brennan, Francis Henry, '94  
 Brennan, Henry Morton, '75  
 \*Brennan, John M., '70  
 Brennan, John Thomas, '92  
 Brennecke, Robert, '77  
 Brenneman, Albert Sipe, '12  
 Brenner, Frederic Arthur, '01  
 Brenner, Harry Ellsworth, '17  
 Brenton, Willis, '76  
 Bresser, Otto Carl, '91  
 Brewer, William, '88  
 Brewster, Angus Eugene, '12  
 Brewton, Swain Hoffman, '98  
 Brice, William Oscar, '91  
 Brick, Harry Walter, '92  
 Bricker, Chester William, '20  
 Bricker, Robert Osborn, '11  
 Brickner, Herman Adam, '93  
 Bridgeman, Frank Frederick, '84  
 Bridgeman, John Joseph, '08  
 \*Bridger, Paul, '73  
 Bridgman, William George, '91  
 Brigadell, James Christopher, '08  
 Briggs, Matthew Ashley, '84  
 Briggs, Milton G., '70  
 Bright, Charles A., Sp. '21  
 \*Bright, Harry H., '91  
 \*Bright, J. William, '15  
 Bright, Milton Augustus, '90  
 Brightbill, Herbert Calvin, Sp. '16  
 Brill, Edward A., '21  
 Briner, Earl Raymond, '15  
 \*Bringhurst, Ferris, '57  
 \*Bringhurst, John, '32  
 Bringman, Merle Stoles, '10  
 Brinton, C. Hill, '71  
 Brisgol, Morris Stephen, '18  
 Brisgol, William Philip, '13  
 \*Britcher, Milton Weimer, '94  
 Broadbelt, George Harold, '06  
 Brockman, Frank William, '95  
 Brockman, Martin William, '04  
 \*Brodie, Robert C., '44  
 Brodman, Bessie Liss (Mrs.), '17  
 Brody, Reba, '18  
 \*Bronson, Eugene C., '68  
 Brookes, Lulu, '98  
 Brookes, Virginia Cade, '01  
 \*Brooks, Edward, '30  
 \*Brooks, Henry, '38  
 Brooks, Jay William, '10  
 \*Brooks, Joseph H., '29  
 Brooks, Joseph Warren, '95  
 Brooks, Mitchell Baxter, '80  
 Brooks, Walter, '00  
 Brosius, George N., '17  
 Brotherline, Charles Augustus, '76  
 \*Broughton, John, '54  
 \*Brower, Noah B., '57  
 \*Brown, Albert Edward, '85  
 \*Brown, Albert Edward, '86  
 \*Brown, Albert Potts, '62  
 Brown, Barton Gerald, '17  
 Brown, Bernice Berry, '15  
 Brown, Charles '92  
 Brown, Charles Henry, '13  
 Brown, Charles Scott, '73  
 Brown, Daniel Edward, '94  
 Brown, Edmund Lee, '93  
 Brown, Edwin Tyson, '20  
 Brown, Ernest G., '09  
 Brown, Frank L., '86  
 Brown, Frank Luther, '91  
 \*Brown, Frank Pierce, '75  
 Brown, Frank Wigton, '81  
 Brown, Frederick, Jr., '61  
 Brown, Frederick J., '58  
 \*Brown, Frederick Kendall, '87  
 Brown, George B. Walbridge, '78  
 Brown, Hampton Houseman, '99  
 Brown, Horsey Pierce, '02  
 Brown, Israel, '18  
 Brown, James Reed Logan, '94  
 Brown, Joseph Henry, '83  
 Brown, Joseph John, '76  
 Brown, Leland Nelson, '17  
 Brown, Leroy C. Parkman, '18  
 Brown, Paul Revere, '17  
 Brown, Peter Ray, '07  
 Brown, Russell Leo, '20  
 \*Brown, Samuel A., '67  
 \*Brown, Samuel W., '33  
 Brown, Sara, '21  
 Brown, Thomas D., '73  
 \*Brown, Thomas J., '67  
 \*Brown, Thomas Trew, '78  
 Brown, Walter Eugene, '04  
 Brown, Walter Lee, '89  
 Brown, West Smith, '13  
 Brown, Wilbur Reers, '94  
 Brown, William C., '73  
 Browne, Roy Hastings, '07  
 Browning, Robert Graighead, '83  
 Brozeitis, Estella Elizabeth (Mrs. Klimas), '15  
 Brubaker, Elam, '06  
 Bruce, Edward Douglas, '21  
 Brunchenheim, Byron Edwin, '83  
 Brugler, Elmer George, '96  
 Brumbaugh, Albert Sylvester, '97  
 Brunhouse, Frederick, Jr., '95  
 Brunier, George Franklin, '95  
 Brunner, Norman Isaac, '78  
 Brush, Franklin Cotton, '11  
 Brustin, Marie Florence, (Mrs. Bortnoff), '18  
 Bryan, Henry Northam, '74  
 Bryan, John E., '60  
 Bueh, Harry Harris, '20  
 Buchanan, Raymond Joseph, '19



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- \*Buchanan, William F., '59  
 \*Buchanan, William G., '62  
 Bucher, William Lewis, '95  
 \*Buechholz, William MacGilvray, '87  
 Buchman, Evan, '17  
 Buck, Charles Edward, '82  
 Buck, William Robert, '13  
 Buckalew, Raymond Gager, '13  
 Bucke, Samuel Lawrence, '17  
 Buckingham, Harry Sheldon, '99  
 \*Buckingham, James Harry, '74  
 Buckley, James Edward, '86  
 Buckman, James, '67  
 \*Buckman, Thomas Lownes, '74  
 Buckner, John Armstrong, '91  
 Buckwater, Clarence Clifton, '17  
 Budd, Frank Murrell, '74  
 Budin, Barnett, '20  
 Buehl, Edward Ierman, '90  
 Buehler, David Alexander, '96  
 \*Buehler, Edward H., '64  
 Buehler, Luther Alexander, '20  
 \*Bugg, Zack W., '90  
 \*Bullock, Charles, '47  
 Bullock, John Griscom, '79  
 \*Bullock, Lawrence Minor, '78  
 Bullock, William Anthouy, '86  
 Bundy, Clinton Thomas, '95  
 Bunker, William Beatty, '91  
 Bunn, Jonathan H., '57  
 Bunting, Frank Allison, '94  
 Bunting, James Hicks, '88  
 \*Bunting, Samuel S., '50  
 Buohl, Charles Augustus, '12  
 Buoymaster, Paul E., '16  
 Burbage, George Andrew, '17  
 Burchfield, William Clinton, '00  
 Burdick, Arch Webster, '91  
 \*Burdick, Edwin Raugbley, '80  
 Burg, John Dellinger, '86  
 \*Burge, James Oscar, '76  
 Burgess, Frank Eugene, '90  
 Burget, Harry Edward, '89  
 Burgoon, William David, '06  
 Burk, Alfred Gray, '87  
 Burke, John Joseph, '14  
 Burke, Walter Peter, '13  
 \*Burke, William Thompson, '86  
 Burkhart, Herman Adolphus, '86  
 Burkholder, Lloyd Amadore, '03  
 Burnett, James Howard, '92  
 Burns, Helen, '18  
 Burns, Helen Ritz, '06  
 Burns, Joseph Leo, '21  
 \*Burns, Seymour Snowden, '78  
 \*Burrroughs, Silas Mainevielle, '77  
 Burt, William Heury, '08  
 \*Burton, David F., '52  
 Burton, Edward Thomas, Jr., '15  
 Burton, Robert Jefferson, '20  
 Burton, Robert Jump, '87  
 Burtt, Lloyd, '11  
 Burwell, Alphonzo Colfax, '13  
 Busch, William Charles Asmus, '77  
 Bush, Harvey Benjamin, '94  
 Bush, J. Lyol, Sp. '14  
 Bush, John Albert, '82  
 Bush, Russell Luther, '09  
 \*Buss, Marcus, '96  
 Buss, Milton M., '72  
 \*Buss, Oliver, '64  
 Butcher, Charles Monroe, '93  
 Butler, Edward M., Sp. '83  
 Butler, George White, '83  
 \*Butler, John Albert, '11  
 Butler, Samuel Sumter, '06  
 Butler, Walter Taggart, '05  
 Butt, Luke Thomas, '10  
 Butt, Simon Mark, '89  
 Butts, Donald Charles A., Sp. '21  
 Butter, Franklin Alfred, '06  
 Butters, Charles Hayes, '90  
 Butterworth, Francis James, '91  
 Button, Charles Edwin, '78  
 Butz, Alfred Sylvester, '91  
 Buzby, Augustus Crane, '74  
 Buzby, William DuBois, '05  
 Buzzell, Edgar Robert, '08  
 Bye, Charles Alfred, '81  
 Byerly, Charles Henry, '77  
 \*Byers, Huizinga Clarence, '82  
 Byers, Wayne Emmanuel, '20  
 Cabe, Raphael, '58  
 Cable, Jesse George, '07  
 Cadbury, John W., '58  
 Caden, Alice Beatrice, '02  
 Cadmus, Alfred Brooks, '92  
 Cadmus, Robert Clark, '85  
 Cadwallader, Wayne, '10  
 Cady, Murch Robinson, '09  
 Cafky, William Walter, '86  
 Cahan, Samuel, '14  
 Cahill, Daniel William, '86  
 Cahill, James Edward, '81  
 Caboon, Charles Thomas, '68  
 \*Cahoon, Edward Daily, '85  
 Cain, Maude Florence, '95  
 Caldwell, Archie Lee, '21  
 Caldwell, Florence Moore, '90  
 \*Caldwell, James Marshall, '57  
 Calhoun, Albert Reid, '93  
 \*Calkins, Arthur Robert, '17  
 Calvert, Ralph Leonard, '21  
 Calvin, William Ray, '10  
 Cameron, Charles Sherwood, '96  
 \*Cameron, Elmer Lindsay, '92  
 Cameron, Ernest Clifford, '14  
 Cameron, Frank Butler, '94  
 Cameron, John Henry, '04  
 \*Camm, Harry V., '71  
 Camp, Walter Samuel, '06  
 Campbell, Andrew, '95  
 Campbell, Clarence Henry, '90  
 Campbell, Frank Book, '96  
 Campbell, Frank Williams, '13  
 \*Campbell, Henry Belting, '86  
 Campbell, Hugh, '66  
 \*Campbell, James B., '51  
 Campbell, Milton, '83  
 \*Campbell, Samuel, '57  
 Campbell, Samuel, Jr., '81  
 Campbell, Theodore, '93  
 Campbell, Thomas P. V., '95  
 Campbell, William Henry, '88  
 \*Canby, George, '51  
 Canedo, Cipriano, '52  
 Cannon, Charles Walton, '88  
 Cantarow, Rose, '20  
 Cantner, Paul Clifford, '14  
 Cantor, Benjamin H., '18  
 Cantor, Philip, '09  
 \*Capp, Henry M., '73  
 Cappeau, Thomas Harrison, '94  
 \*Capwell, Harry Morris, Sp. '03  
 \*Carberry, Peter J. L., '67  
 Carbo, Pedro, Sp. '17  
 \*Carbonell, F. Benjamin, '61  
 Carbonell, Louis Philip, '76  
 Cardamone, Michael John, '21  
 \*Carey, George Warner, '11  
 Carey, Harris May, '00  
 Carey, Harry Caspar, '92  
 \*Carey, William James, '91  
 Carhart, Clarence Cathers, '05  
 Carl, Charles Blair, '80  
 Carl, Frank William, '06  
 Carlin, Joseph C., Sp. '06  
 Carlisle, Mildred Frances, '21  
 \*Carman, Frank Hamilton, '89  
 Carman, Harry Alfred, '96  
 Carmody, Martin Francis, '15  
 Carn, Fred Leroy, '16  
 Carnan, George Lewis, '85  
 Carpenter, Edward Albert, '95  
 Carpenter, Frederick White, '79  
 \*Carpenter, Howard Preston, '93  
 Carpenter, Pierce Raymond, '11  
 \*Carpenter, William Asbury, '91  
 Carr, Edmund Eugene, '14  
 Carriat, Louis Michael, Sp. '91  
 Carrington, Arthur Hudson, '11  
 Carrington, Charles Robert, '07  
 Carritte, Clarence Edgar, '90  
 \*Carroll, Augustus D., '55  
 Carroll, John Francis, '17  
 Carroll, Paul Raymond, '17  
 Carroll, Sherman Lincoln, '88  
 \*Carslake, William Henry, '80  
 Carson, Charles Robert, '93  
 Carstater, James Cowling, '20  
 Carstens, Lewis Peter, '96  
 Carter, Buchanan, '84  
 Carter, Charles Franklin, '95  
 Carter, Herbert Gent, '93  
 Carter, John E., '58  
 Carter, William Baker, '17  
 \*Carter, William J., '42  
 Carter, William James, '17  
 Cartwright, Benjamin Franklin, '90  
 Cartwright, Joseph David, '18  
 Carwithen, Albert States, Sp. '04  
 Case, Flavius Sanders, '76  
 Case, Joe Stinchfield, '13  
 Case, Luella, '96  
 Casey, Harry English, '92  
 Cash, Artimus Bogan, '16  
 \*Cashman, Nathan Alexander, '81  
 \*Casperson, Henry Lyle, '00  
 Cassaday, Frank Valorus, '89  
 Cassaday, Orlin Ulysses, '87  
 Cassel, James Wilson, '96  
 Cassell, William E., '84  
 Cassidy, John Francis, '90  
 \*Castleton, Edward Ligon Enders, '79  
 \*Cast, Frank William, '05  
 Cather, Frank Leslie, '01  
 Catherman, Isaac Newton, '96  
 \*Catlin, Joseph Albert, '02



- Caton, Joseph Vester, '12  
 Causse, Emiliano, '71  
 Cavanagh, Frank Arthur, Sp. '01  
 Cavanaugh, Charles Joseph, '95  
 Cave, Joseph, '72  
 Cawley, Charles E., '89  
 Cawley, Ellen, '21  
 \*Chalfant, William Windle, '94  
 Challenger, James Truss, '90  
 \*Chalquest, Gustave Emil, '99  
 Chamberlain, Lowell Holbrook, '99  
 Chamberlin, William Allen, '99  
 Chambers, Frank Joseph, '03  
 Chambliss, George Edward, '21  
 Champaine, David, '21  
 Champion, Carleton Cole, '85  
 Chance, Albert Arthur, '93  
 Chandler, Isaac Eugene, '84  
 Chapman, Charles Frederick, '81  
 Chapman, George Fulmer, '10  
 \*Chapman, William B., '34  
 Charleston, Julius Lewis, '11  
 \*Chatham, John Eliason, '95  
 \*Cheatham, Matthew Venable, '83  
 Cheatham, Thomas Alexander, '75  
 \*Cheek, Simmons Lee, '93  
 Cheney, Frank Lester, '06  
 Cheney, Millwood C., Sp. '98  
 \*Cheney, Walter Bowden, '86  
 \*Chenoweth, J. T., '56  
 Cherdron, Charles, '94  
 Cherry, Frances S. (Mrs. Rabinovitch), '04  
 \*Cherry, James B., '72  
 \*Cheston, Elijah, Jr., '53  
 \*Childs, Walter Foss, '77  
 Chiles, Edward, '70  
 \*Chiles, Richard T., '73  
 Chipman, Edward D., '62  
 \*Chisholm, Jesse Connor, '04  
 Christ Charles Wesley, '87  
 Christ, George Raymond, '94  
 \*Christman, Albert Samuel, '92  
 Christopher, Harry Warren, '77  
 Christopher, Louis Edward, '11  
 Church, Charles Corss, '08  
 Churchill, Jerome Perry, '90  
 Ciancarelli, Silvio, '08  
 Clabaugh, Alton, '81  
 Clair, Joseph Sylvester, '96  
 Clapham, Amanda Elizabeth, '17  
 Clapham, Benson Grant, '91  
 Clapham, Messer Charles, '79  
 Clapp, Chambers Brown, '82  
 Clark, A. B., Jr., '68  
 Clark, Charles H., '72  
 Clark, Earl Daniel, '15  
 Clark, Edgar George, '13  
 Clark, Edward B., '97  
 Clark, John Edward, '99  
 Clark, Harry Scott, '80  
 \*Clark, Jacob Miller, '82  
 Clark, Milton Renn, '08  
 \*Clark, Roy Lavender, '13  
 \*Clark, Thomas C., Jr., '65  
 Clark, Thomas M., '54  
 Clark, William Gorgas, '93  
 Clark, William Henry, '88  
 Clarke, Louis Gaylord, '75  
 Clarke, Ray Shearer, '17  
 Clarke, Silas B., '70  
 Clarkson, F. Steiner, Sp. '87  
 Claudy, Robert Blean, '94  
 \*Clavin, James, '89  
 Claypoole, John, '60  
 \*Clayton, Abraham Theophilus, '84  
 Clemmer, John Krupp, '02  
 Clemmer, Jonas Gerhard, '82  
 Clowell, Rollin Earl, '21  
 Cliffe, Albert, '88  
 \*Cliffe, Katharine Ella, '07  
 Cliffe, William Lincoln, '84  
 Clinch, John Houston McIntosh, '83  
 Cline, Hubert Lee, '20  
 Cline, John Halliday, '91  
 Cline, Samuel Pierce, '75  
 \*Cline, Walter Howard, '83  
 Cline, William Edward, '93  
 \*Clingan, William Arthur, '91  
 \*Close, Paul, '15  
 Closson, Charles Steinmetz, '04  
 \*Clothier, William P., '61  
 Cloud, Harlan, '77  
 \*Cloud, Norman H., '97  
 \*Clymer, Charles Wesley, '81  
 Coble, Charles L., Sp. '17  
 Coble, Paul Daniel, '14  
 Coblentz, Virgil, '82  
 \*Cochran, Alfred W., '79  
 Cochran, Levi Bennett, '91  
 \*Cockburn, James, Jr., '35  
 Cockroft, David Holiday, '99  
 Codori, Simon Jacob, Jr., '97  
 Codville, William Lowther, '89  
 \*Coffee, Isaac Newton, '74  
 Coffey, Hiram Myers, '18  
 Coffey, Maurice Grant, '95  
 Coffman, Charles Wayne, '20  
 \*Coggshall, George D., '28  
 Coggins, Franklin, '63  
 Cohen, Arthur, '05  
 Cohen, Hassie D. G. (Mrs.), '20  
 Cohen, Isaac, '82  
 Cohen, John Thomas, '99  
 Cohen, Louis, '14  
 \*Cohen, Nathan Alexander, '86  
 Cohen, Philip, '11  
 Cohn, Arthur H., '86  
 Colahan, Frank Patrick, '21  
 Colborn, Earl Wesley, '12  
 Colborn, Isaiah Grant, '86  
 Coldren, Arthur Bard, '08  
 Cole, Charles Woodson, '17  
 Cole, Edward Nelson, '83  
 Colegrove, LaRue Robert, '84  
 Coleman, David, '20  
 Coleman, Frank Arthur, '07  
 \*Coleman, Frederick Frelinghuysen, '88  
 Coleman, George Joseph, '09  
 Coleman, John Edward, '98  
 Coleman, John Joseph, '84  
 Coleman, Mimms William, '83  
 Coleman, Samuel, '90  
 Coleman, William Fogg, '03  
 Coles, Clawson Samuel, '06  
 Coles, Percy Arthur, '07  
 Colestock, Chauncey Parven, '17  
 Coley, Lemuel Belah, '90  
 Collier, William Warner, '96  
 \*Collier, Louis Clay, '80  
 Collins, Amos Reeves, '19  
 Collins, Edward Smith, '93  
 Collins, John Edmund, '14  
 Collins, John Edward, '16  
 Collins, John Hall, '96  
 Collins, L. D. Paul, '84  
 Collins, Lane Verlenden, '01  
 Collins, Richard Frazier, '82  
 Collins, Thomas Philip, '92  
 \*Collins, Thomas S., '80  
 Collom, Charles D., '62  
 Colman, Francis A., '60  
 Colsten, George Henry, '95  
 Coltman, Thomas Clements, '85  
 Colton, George Havens, '80  
 Comas, Mercedes Elvira, Sp. '18  
 Comber, Gertrude Agnes, '13  
 Comber, M. Beatrice, '13  
 Comfort, Newton C., '92  
 Comings, Charles Samuel, '86  
 Comp, Harry Gearhart, '87  
 Compton, Richard Hal, '97  
 \*Conard, George McClellan, '92  
 Conard, Norman Shoemaker, '95  
 Conard, T. Ellwood, '71  
 Condra, James O'Brien, '07  
 Cone, Charles Gray, '12  
 Cone, Earl Hobart, '01  
 \*Conlyn, Thomas A., '73  
 Connally, William C., '70  
 Connell, Francis Joseph, '00  
 Connelly, Lester Cleveland, '10  
 Conner, Jefferson Somerville, '74  
 \*Conner, William, '75  
 Connor, Edwin John, '21  
 Conold, Clarence Carl, Sp. '21  
 Conover, Samuel Harry, '93  
 \*Conrath, Adam, '73  
 \*Conrath, Frank, '75  
 Conroy, Henry Slicer, '95  
 Conrow, Charles Mervin, '15  
 \*Conté, Horace, '50  
 Converse, Howard Romaino, '01  
 Conyers, Zeb. Vance, '92  
 Cook, Elliott Daniel, '06  
 Cook, Ernest Fullerton, '00  
 Cook, Francis Wade, '90  
 \*Cook, Harry C., '84  
 \*Cook, John E., '73  
 Cook, John William, '83  
 \*Cook, William Alexander, '84  
 Cook, William Donald, '18  
 Cook, William Edmund, '81  
 Cook, William Stephen Gray, '96  
 Coolbaugh, Leonard Ellsworth, '14  
 Cooley, James Sherman, '85  
 \*Coombe, Thomas R., '59  
 Coombs, Harry, '04  
 Cooper, Clyde Heaton, '03  
 Cooper, Herbert, '91  
 Cooper, Joseph Benton, '12  
 Cooper, Morris, '97  
 Cooper, Percival Valentine, '89  
 Cooper, Walter Greenlee, '98  
 Cooper, William Benjamin Dangerfield, '10  
 Cooper, William H., '62  
 Cooperman, Daniel, '17

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- Cope, Edward Kreidler, '97  
 Cope, Frank Henry, '91  
 \*Cope, Roy Thomas, '08  
 Copeland, George Hogan, '90  
 Copeland, Harry Thompson, '93  
 Copella, George William, '08  
 Coppenhaver, Charles Brewster, '95  
 \*Corbridge, John E., '68  
 Corbyn, Theophilus Nihlow, '76  
 Cordier, Lee Garfield, '21  
 \*Cornell, Charles M., '48  
 \*Cornell, Edward A., '65  
 \*Cornell, Wharton Landis, '92  
 Corp, Clarence Henry, '08  
 \*Corrie, William Moore Guilford, '82  
 \*Corse, William H., '40  
 \*Corson, Joseph K., '58  
 \*Corson, Linwood Shamgar, '93  
 Corson, Thomas Clark, '00  
 Cossaboom, Herbert Solomon, '03  
 Cossoy, Herman Lincoln, '17  
 Costello, Catherine Elizabeth, '15  
 Costello, Genevieve Marie, '17  
 Costello, Mary O'Dea (Mrs. Charles Ostrum), '10  
 Costelo, David, '79  
 Costenbader, Clayton Elmer, '11  
 \*Costill, Samuel L. '49  
 \*COSTIN, John Richard, '91  
 Cotanche, James Gilbert, '17  
 Cott, William Jasper, '05  
 Cottam, Charles Marquis, '89  
 Cotterel, John Wesley, '87  
 \*Cotton, Frank Wilbert, '90  
 Coulbourn, Frederic Bennum, '12  
 Coult, Samuel, '21  
 Courson, Harry Stockton, '89  
 \*Courtney, Samuel Walter, '81  
 Cowell, Cincinattus M., '60  
 Cowles, Henry Carleton, Jr., Sp. '14  
 Cox, Carl Reed, '12  
 \*Cox, Harry, '78  
 Cox, Harry Lehman, '93  
 \*Cox, Harry Oscar, '79  
 Cox, Linwood, '98  
 Cox, Richard S., '54  
 Coxe, Russell LeVan, '93  
 Coxy, Joseph Clarence, '77  
 Cozens, Nathan Alexis, '83  
 Craft, Charles Clagett, '17  
 Craft, William Wheeler, '14  
 Crafts, Frederick J., '04  
 \*Craig, Charles Franklin, '92  
 Craig, Clark Rankin, '83  
 Craig, Edwin Sherman, '86  
 Craig, George Tindall, '89  
 Craig, Harvey Alfred, '94  
 \*Craig, James, '96  
 Craig, Thomas Canby, '78  
 \*Craighhead, Thomas, '78  
 Craine, William Monroe Clarkson, '87  
 Cramer, Richard Edward, '20  
 Cramer, Walter, '81  
 Cramer, William Franklin, Jr., '09  
 Crane, Claude Harold, '18  
 \*Crane, Henry Bedell, '78  
 Crane, William Howard, '90  
 Cranston, James Bearl, '07  
 Crass, John Henry, '89  
 Craven, Alfred Young, '02  
 \*Craven, James C., '69  
 \*Cravens, Harry Otis, '79  
 Cravens, John Coldsmith, Jr., '16  
 \*Crawford, Archie Darrah, '89  
 Crawford, Dean Burton, '05  
 \*Crawford, Horace Victor, '99  
 \*Crawford, James Adam, '94  
 Crawford, Joseph, '84  
 \*Crawford, Joseph H., '72  
 Crawford, Martyn Paine, '88  
 \*Crawford, Samuel Douglass, '84  
 Crawford, Thomas Foster, '02  
 Crawford, Walter, '79  
 \*Crawford, Walter Beatty, Jr., '89  
 \*Crawford, Wilbur Fisk, '75  
 Crawford, William Burton, '11  
 Craythorn, Charles John, '85  
 Crayton, Frank Blair, '96  
 Creecy, William Pryor, '60  
 Creen, Judge Judson, '75  
 Creep, Parker Bare, '15  
 Creighton, Benjamin Thomas, '76  
 Creighton, Orville Sharp, '87  
 \*Crenshaw, Edmund Austin, '49  
 Crenshaw, Edmund Austin, Jr., '82  
 Crenshaw, Katharine H., Sp. '21  
 \*Cress, Charles Thomas William, '84  
 \*Cressler, Charles H., '61  
 Cressler, David Winfield, '81  
 \*Crew, James H., '47  
 Cribbs, Frank Albert, '17  
 Criswell, Edward Ott, '97  
 Croff, Adam Cleveland, '17  
 Croft, Clarence, '02  
 \*Croft, Henry C., '64  
 \*Croft, Samuel F., '67  
 \*Croft, William Kinnard, '92  
 Crossley, Samuel Wallace, '03  
 Crothers, Anthony Brooks, '02  
 Crothers, Howell Guy, '05  
 Crothers, James Lawson, '90  
 Crothers, Samuel Ross, '85  
 Crouse, Albert Roy, '13  
 Crouse, Eugene Drake, '04  
 Crouse, George Francis, '06  
 Crowl, Frank Mercer, '77  
 Crull, Lewis Aylesworth, '87  
 \*Crumbie, George Joseph, '89  
 Crumbie, James Henry, '96  
 \*Crutcher, William, '88  
 \*Culby, Walter Gibson, '99  
 \*Culin, Walter, '88  
 Cullen, James Kimmey, '90  
 Culler, Frederick Wallace, '81  
 Culley, John, '94  
 \*Cummings, Joseph J., '69  
 \*Cummings, Michael J., '71  
 \*Cummings, William T., '56  
 \*Cunningham, Benjamin Amos, '82  
 Cunningham, Henry M., Sp. '19  
 \*Cunningham, John M., '64  
 Cunningham, Milton Hart, '06  
 \*Cunningham, Thomas Starks Mc-Neilly, '91  
 Curran, Albert Alphonsus, '18  
 \*Curran, John P., Jr., '79  
 \*Curriden, George Altick, '88  
 Currinder, Alva Batten, '03  
 \*Curtis, Albert C., '72  
 \*Curtis, Henry, '99  
 Curtis, Luther Barker, '04  
 Curtis Thomas F., Sp. '20  
 \*Cusben, Harry Roscoe, '93  
 Cuskaden, Albert Douglass, '83  
 Custer, John Whiteside, '84  
 \*Custis, Daniel Parke, '78  
 \*Cuthbert, Richard W., '67  
 Cuthbert, Richard Williams, Jr., '09  
 Cutler, Ralph, '08  
 Cutter, Paul Styer, '13  
 Dabney, Maurice Benjamin, '17  
 Dahis, George Emil, '80  
 Dale, David, '98  
 Dale, Frank C., '73  
 D'Alemberte, Herbert Harry, '03  
 \*Dallett, Prosper Martin, '86  
 \*Dalpe, Frederick Augustus, '84  
 Dalton, David, '91  
 \*Daly, John, '83  
 Daly, Thomas Joseph, '20  
 Dana, Oscar Fingal, Jr., '87  
 Dancy, Frank B., '57  
 Dancy, Henry Hyman, '93  
 Danforth, Nathan B., '73  
 Daniel, Charles Albert, '76  
 \*Daniels, Adam Clarion, '80  
 Daniels, Charles Rockford, '96  
 Daniels, George Edmund, '92  
 Daniels, William Joseph, '89  
 Dannenhauer, Frederick, '93  
 Danner, William Edward, '81  
 Danzberger, George William, '86  
 Dapp, Gustave Adolph, '09  
 \*Dare, Charles F., '61  
 Dare, Charles Wilfred, '94  
 Dare, Charles William, '82  
 Dare, John Henry, '83  
 Darling, Dwight Kellum, '90  
 Darr, Harry Ivan, '09  
 Darrach, Francis Leaming, '84  
 Daub, Charles Melvin, '03  
 Dauphinee, Forrest Whitney, '08  
 Davendish, Sanford Joseph, '21  
 Davidowitch, Katie Minerva (Mrs. Samuel Juresco), '05  
 Davidowitch, Jacob, '09  
 Davidson, Abraham, '77  
 Davidson, Abraham, '17  
 \*Davidson, Edward Joseph, '75  
 Davidson, Wilmer Paul, '14  
 Davies, Chester Stanley, '08  
 Davies, Emlyn, '12  
 Davies, George Bertram, '05  
 Davies, John Jenkins, '84  
 \*Davies, William Owen, '89  
 Davies, William Richard, '95  
 \*Davis, Aaron R., '69  
 Davis, Alfred Ivins, '86  
 \*Davis, Alvah Molony, '92  
 \*Davis, Benjamin B., '50  
 Davis, Benjamin Franklin, '93  
 Davis, Berryman K., '99  
 Davis, Benjamin Winter, '99  
 Davis, Clayton Erwin, '88  
 Davis, Edward, '91



- Davis, Elizabeth (Mrs. Harth), '04  
 Davis, Ellerslie Wallace, '16  
 Davis, Elliott Veil, '11  
 \*Davis, Frank Clifford, '81  
 \*Davis, Frederick Horace, '85  
 \*Davis, George H., '61  
 Davis, George Warren, '93  
 \*Davis, Harry Cardeza, '09  
 Davis, Harry Irvin, '83  
 Davis, Harry Morgan, '92  
 Davis, Henry II., '69  
 Davis, Horace Tracy, '04  
 Davis, Howard Sherman, '03  
 \*Davis, Isaac, '78  
 Davis, John Ellsworth, '96  
 \*Davis, John L., '52  
 Davis, John Simmonds, '04  
 Davis, John Stephen Voorhees, '88  
 \*Davis, John W., '53  
 Davis, John Walheater, '81  
 Davis, Mae Rose (Mrs. Summers), '18  
 Davis, Marshall Moses Andre, '78  
 \*Davis, Nehemiah, '78  
 Davis, Percy Mason, '09  
 Davis, Pierre Beaumont, '89  
 \*Davis, Robert Coulton, '44  
 Davis, Robert Goode, '95  
 Davis, Robert V. S., '21  
 \*Davis, Samuel Baker, '75  
 Davis, Samuel Bond, '99  
 \*Davis, Theodore Garrison, '77  
 Davis, Thomas Carroll, '04  
 Davis, William, '94  
 Davis, William Brown, '01  
 Davis, William Harry, '86  
 Davis, William Henson, '83  
 Davison, Blythe James, '85  
 Davison, George S. '72  
 Davison, James, '75  
 Davy, George Covell, '06  
 Davy, George William, '78  
 Dawe, William John, '16  
 \*Dawes, J. Crawford, '41  
 Dawes, William Ruth, '94  
 Dawson, Alexander, '27  
 Dawson, Edward Seymour, Jr., '74  
 Dawson, John Douglas, '06  
 \*Dawson, John H. '72  
 Day, Frederick Samuel, '90  
 Day, John Frederick, Sp. '17  
 \*Day, Robert L., '68  
 \*Day, William George, '79  
 Deacon, George Frank, '79  
 Deaknye, Harry H., '83  
 Deaknye, Oscar Boone, '85  
 \*Dean, Guy Stewart, '95  
 Dean, J. Atlee, '08  
 Dean, Norman R., '78  
 Deans, John, '21  
 Deaver, Ralph Bernard, '15  
 DeBlasio, James John, '17  
 DeBuest, William Hare, '99  
 DeChoudens, Joseph F., '57  
 Deck, Roy, '10  
 Decker, Henry Bristol, '15  
 Decker, William Robert, '98  
 Deem, David Ferguson, '85  
 \*Deemer, George Morton Hays, '96  
 Deen, Frank Snyder, '94  
 Deen, William Lewis, '93  
 DeFrehn, Charles William, '82  
 DeFord, Charles Henry, '94  
 DeGraffe, Bertha Leon (Mrs. J. C. Peacock), '96  
 DeHaven, Henry Vernon, '10  
 DeHaven, Ida Valeria, '98  
 Dehler, Henry Elias, '88  
 DeHuy, Bernard H., '84  
 \*DeHuff, John G., '69  
 Deibert, Thomas Irvin, '86  
 Deibert, William Henry, '97  
 \*Deininger, John Wolfersberger, '93  
 Deitz, Charles James, '90  
 Deitz, George Arthur, Jr., '89  
 DeKalh, Hugh Leonard, '86  
 DeKeiffer, Otto M., '86  
 De LaCour, Joseph Carl, '92  
 \*Delaney, Harry Lee, '08  
 \*Delker, William, '73  
 Delle, Oscar Artus, '08  
 Delle, Walter Hughlee, '20  
 \*DeLong, William Edward, '85  
 DeLorme, John Grenville, '96  
 Demaree, William Lowther, '81  
 \*Dembinski, Louis, '77  
 Demoville, James Louis, '89  
 Dengler, George Ludwig, '93  
 Dennison, George Eicholtz, '85  
 \*Dennison, Ulysses Grant, '85  
 \*Denniston, William Milliken, '85  
 Dentler, Roy W., '00  
 Denzler, Edward O., Sp. '11  
 Depew, Samuel Harry, Jr., '16  
 Deprez, William Henry, '78  
 DePuy, Caspar Edward, '77  
 DeReeves, Eugene, '87  
 Derick, George Coyle, '20  
 Desch, Edward Allen, '00  
 Desh, Edward E., '72  
 Desmond, Edward, '94  
 Dettrey, John Franklin, '09  
 Detweiler, Howard Werstler, '21  
 Detwiler, David R., '21  
 Detwiler, William Penn, '93  
 Detzer, August Jacob, '80  
 Deuschle, William D., '85  
 Devers, Margaret A., '17  
 Devine, Joseph Matthew, '07  
 Devine, Thomas Joseph, '21  
 Devitt, John, '17  
 DeVittorio, Carl Donald, '21  
 Dewees, Jacob Highley, '91  
 Dewees, William Holstein, '96  
 Diaz, Marquez Julio, '18  
 Dick, George II., '58  
 Dickel, William John, '92  
 Dickeson, Morton Phelps, '85  
 Dickeson, William Eunice, '77  
 Dickhart, Wallace R., Sp. '19  
 Dickinson, Charles Seymour, '96  
 Dickinson, Ralph Brinton, '02  
 \*Dickson, John, '46  
 Dickson, John M., '56  
 \*Dickson, Robert W., '62  
 Dickson, Thomas Young, '14  
 Diefenbeck, Henry, '85  
 \*Diehl, Benjamin Harper, '81  
 \*Diehl, C. Lewis, '62  
 Diehl, George Edward, '99  
 Dielman, Louis Henry, '85  
 Dierolf, Charles B., '91  
 Dietrich, Harry Daniel, '93  
 Dietrich, Howard Dickson, '83  
 Dietrich, Pierce Abbott, '96  
 Dietz, Harry Edgar, '00  
 Dilatush, Howard Burtis, '10  
 Dilatush, Owen Philip Eaches, '16  
 Dilg, Philip Henry, '76  
 Dilks, Harmon, Jr., '94  
 Dilks, John, '03  
 \*Dilks, S. Levin, '68  
 \*Dilks, Theodore, '56  
 Dill, Benjamin, '96  
 \*Dillard, Robert K., '54  
 Diller, Charles Macley, '05  
 Diller, Isaac Roland, '76  
 Dillon, Leroy Victor, '08  
 Dillon, Thomas Henry, Jr., '91  
 Dilmore, William, '74  
 Dils, Cbauncey Lloyd, '14  
 \*Dingee, Charles H., '26  
 \*Dingee, John H., '28  
 Dinger, Allen Leroy, Sp. '21  
 Dinges, Robert P., '79  
 Dinklocker, Robert George, '17  
 Dinning, Henry H., '70  
 D'Inwillers, Charles, '71  
 Dirmitt, Charles Walter, '98  
 DiSilvestro, Elisa (Mrs. Joseph N. Bongiovanni), '17  
 Ditman, Andrew J., '65  
 Dittmeyer, Walter Eugene, '04  
 Dixon, David Bainbridge, '21  
 Dixon, Hayes Merrill, '19  
 Dixon, Herbert Carlyle, Sp. '19  
 Dixon, John Glaspey, '99  
 Doan, Chester Clayton, '01  
 Dobbins, Albert N., '66  
 \*Dobbins, Edward T., '62  
 \*Dockstader, William Crossett, '80  
 Dodds, William Howard, '05  
 \*Dodson, Charles G., '59  
 Doench, Charles August-Theodore, '82  
 Doherty, Harry Aloysius, '99  
 Doherty, William John, '04  
 Dohner, Harold Bertram, '17  
 \*Dolbey, J. Warren, '12  
 Dombrowski, Henry Joseph, '21  
 Dompf, Solomon Harry, '17  
 Donaldson, Thomas, '89  
 Donecker, Edwin Alfred, '92  
 \*Donmoyer, Paul Revere, '08  
 Donnelly, Clarence Eugene, '99  
 \*Donnelly, Edward, '43  
 Donnelly, John Henry, '11  
 Donoghue, Robert Ligorius, '92  
 Donough, Charles Schaeffer, '93  
 \*Donough, William Edgar, '86  
 Donovan, Walter Ephrem, '21  
 Dooley, John Joseph, '00  
 Doolin, David, '19  
 \*Dorman, Harry Milton, '00  
 Dorman, William Albert, '89  
 Dorner, Emil August, '81  
 \*Dosch, Benton G., '70



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- Dosch, Philip Christ, '09  
 \*Doubler, George Hougen, '99  
 Dougherty, Albert, '96  
 Dougherty, Christopher Patrick, '14  
 Dougherty, Joseph Thomas, '07  
 \*Douglass, John Wyeth, '40  
 Douglass, John Xavier, '02  
 Douglass, Serrill, '81  
 Douglass, William Tyler, '94  
 Doughty, John Thompson, '00  
 Dowd, Andrew William, '92  
 Downes, Clarence Eugene, '86  
 Downes, Randolph Hinson, '86  
 Downs, William Joseph, '02  
 Doyle, William Joseph, Sp. '96  
 Drake, Theodore, '79  
 Drancourt, Samuel, '77  
 Draper, Oscar Carman, '96  
 \*Dreisbach, Luther Albert, '93  
 Dreiss, Herman Edward Frederick, '85  
 Drescher, Augusto F., '78  
 Drew, A. Damer, '86  
 Drever, George Francis, '93  
 Driver, Joseph B., '79  
 Driver, Walter, '10  
 Droelle, Frank William, '87  
 Drorbaugh, James Edgar, '82  
 Drueding, Charles Caspar, '77  
 Drueding, Frank Frederick, '80  
 Drueding, Henry Gerhard, '77  
 Dry, Robert Levi, '20  
 Dry, William Reddig, '08  
 Dubbs, Robert Lovine, '91  
 Dubell, Alexander, '98  
 DuBois, George Stanley, '06  
 DuBois, L. Stanley, '73  
 \*DuBois, Samuel Conier, Jr., '89  
 Dudley, Leonard Freeman, '17  
 Duff, Peter Nicholas, '90  
 Duffey, Roger William, '83  
 Duffie, Silas Johnstone, '86  
 \*Duffield, Harrison, '71  
 \*Dugan, Walter Crull, '82  
 Dugan, William Francis, '74  
 \*Duhamel, Augustine J. L., '34  
 Dulaney, Joseph Field, '02  
 Dulin, William, '04  
 Dunbar, Guy Sinclair, '09  
 \*Dunbar, Thomas, Jr., '85  
 Duncan, Chester Arthur, '04  
 Dundor, Milton Jacob, '83  
 Dundore, Harry Wilson, '05  
 Dunkle, Robert Pattison, '13  
 Dunkleberger, Eugene Blair, '13  
 Dunmire, Wilbert Jacob, '17  
 Dunn, Clifford G., '89  
 Dunn, Edward Walker, '94  
 Dunn, Edwin Alfred, '01  
 Dunn, Frederick V., '86  
 Dunn, Walter, '86  
 \*Dunning, Frederick, '90  
 Dunston, William Harold, '17  
 \*Dunton, Jacob, '55  
 Duntze, Francis Charles, Jr., '08  
 Dunwoody, Richard Gaillard, '90  
 \*Dupuy, Powhatan E., '59  
 \*Durand, Alfred A. B., '51  
 Durand, Arthur John, '95  
 Durand, Chalmer John, '16  
 Durbin, Edward John, '12  
 Durbin, John George, '95  
 Durbin, William Stacey, '10  
 Durborow, Charles Massey Cresson, '76  
 \*Durham, John McCurdy, '94  
 Durkin, William Joseph, '12  
 Duron, Guillermo Enrique, '17  
 Duster, Elmer Joseph, '17  
 \*Dutt, William, '96  
 \*Dutton, William, '84  
 Duvoisin, Agnes, '12  
 Duvoisin, Charles, Sp. '11  
 Duvoisin, Frank, '11  
 Duvoisin, Lily (Mrs. W. T. Peck), '18  
 Dyen, David Leonard, '21  
 Dyer, Charles Ellsworth, '88  
 Eadie, Erma Delia, '06  
 Eads, Robert Isam, '88  
 Eakin, Henry Gray, '94  
 Eakle, Homer Willis, '09  
 Eakle, Roy Sperow, '13  
 Earl, Franklin Wallace, '06  
 Eaton, Lewis Hayden, '15  
 \*Eayre, Mortimer H., '68  
 \*Ebeling, George Henry, '85  
 \*Eberhard, John Oliver, '71  
 Eberhardt, Ernest Godlove, '90  
 Eberhardt, William Fred, '90  
 Eberhart, Henry Winfield, '07  
 \*Eberle, Charles L., '59  
 Eberle, Eugene Gustavus, '84  
 Eberle, Herman T., '73  
 Eberly, David Alexander, '95  
 Eberly, Earle Kendig, '18  
 Eberly, Frank Hertzler, '81  
 Eberly, Jacob Addison, '85  
 Eberly, John Shelly, '04  
 Eberly, Norman Elias, '10  
 Eberly, Russell Neely, '13  
 \*Ebert, Albert Ethelbert, '64  
 Ebert, James Monroe, '03  
 Ebischbach, Arthur, '12  
 Ebner, Frank Gannon, '09  
 Eby, Edwin Stanton, '91  
 Eby, Maurice Herr, '10  
 Eby, Wilmer Morrison, '21  
 Eckels, Charles Alfred, '91  
 \*Eckels, George Morris, '79  
 Eckels, Howard Samuel, '87  
 Eckels, Nathaniel Ort, '02  
 Eckels, Paul, '01  
 Eckenroth, Charles William, '06  
 \*Eckhard, Schnyler Colfax, '92  
 Eckhardt, Harry Frederick, '05  
 Eckman, Joshua Evans, Sp. '05  
 Eddy, Eugene Henry, '00  
 Eddy, Roswell Martin, '01  
 Eddy, Thomas L., '21  
 \*Edenborn, Charles Wesley Simons, '89  
 Edgar, Roy Alfred, '17  
 Edge, Nicholas Joseph, '20  
 Edmonds, George Washington, '85  
 \*Edwards, Charles Matthew, '84  
 Edwards, David Everett, '11  
 Edwards, Harold Powell, '14  
 Edwards, Howard Mell, '82  
 Edwards, Lawrence, '03  
 Edwards, Manly Bruce, '00  
 Edwards, William Mason, '18  
 Eft, Frederick, '89  
 Egan, Vincent Aloysius, '18  
 Egel, Frederick William, '99  
 Eggert, Charles H., '54  
 Ehler, Will Rush, '70  
 Ebman, Joseph William, '96  
 Ehmann, Karl Francis, '16  
 Ehrenfeld, William King, '05  
 Eichold, Bernard Herbert, '03  
 Eidam, Frank, '07  
 Eilinger, Frederick Rudolph, '83  
 Eisenhardt, Harry, '05  
 Eisenhart, Edwin Kemmerer, '90  
 Eisenhart, Foster Benjamin, '86  
 \*Eisenhart, Harry Pickering, '93  
 Eisenhower, James S. D., '07  
 Eisman, Charles Kohlman, '16  
 Eisman, David William, '11  
 \*Elden, William McKee, '87  
 \*Eldon, Clarence Howard, '08  
 Eldredge, Clarence Selby, '89  
 \*Eldredge, Joseph Johnson, '85  
 Eldredge, William Payson, '14  
 \*Eldridge, George W., '63  
 Eldridge, Jerome A., '71  
 Eldridge, William Arthur, '00  
 \*Elfreth, Jacob R., '77  
 Elkins, Charles W., '80  
 Elliott, Arthur Hugh, '92  
 \*Elliott, Boyce, '96  
 Elliott, Francis Theodore, '05  
 \*Elliott, Fred G., '68  
 \*Elliott, James Lewis, '37  
 Elliott, Walter Roland, '91  
 \*Elliott, William D., '51  
 Ellis, Chester Alexander, '17  
 Ellis, David, '95  
 \*Ellis, Evan T., '47  
 Ellis, R. Leslie, '18  
 \*Ellis, Wardle, '70  
 Ellis, Wilbur James, '17  
 \*Ellis, William, '34  
 Elm, Paris Foster, '93  
 Elmer, Walter, '15  
 Elston, Clarence William, '92  
 Elward, Joseph Francis, '13  
 Ely, Frank William, '94  
 \*Ely, Samuel S., '85  
 Emanuel, Louis, '76  
 \*Emanuel, Louis M., '54  
 Emerson, Henry Everett, '87  
 Emerson, John Carl, '07  
 \*Emerson, Worthington, '73  
 Emig, Charles Maurice, '12  
 Emig, Herbert Martin, '19  
 Emllet, John Matthias, '10  
 Enberg, Charles Elmer, '12  
 Enders, William James, '89  
 Engelman, Henry Shaffer, '90  
 England, Howard, '68  
 England, Joseph Winters, '83  
 England, Paul Roberts, '08  
 \*England, Robert, '46  
 England, William Taws, '92

- Engle, Stratton Roger, '94  
 \*Engler, John George, '85  
 \*English, Addison Henry, '87  
 \*English, George Hilliard, '81  
 English, LaVerne, '09  
 Engstrom, Myrle Emmette, '13  
 Ennis, George A., '87  
 Ennis, James Henry, Jr., '11  
 \*Ensminger, Samuel Charles Deeg, '89  
 Episcopo, Harry N., '21  
 Eppler, Erwin Henry, '12  
 Eppler, George Theodore, '01  
 Eppley, John Aloysius, '19  
 Eppley, John Iake, '92  
 Eppstein, Jacob, '92  
 Epstein, Meyer Charles, '14  
 Epstein, William, '12  
 \*Epting, Charles W., '55  
 Ernest, Harold Langsdorf, '17  
 Erwin, Bertine L., '67  
 Escanaverino Pineiro, Luisa Lutgarda, '16  
 Escanaverino Pineiro, Maria Dolores, '16  
 \*Eschbach, Clarence Derby, '97  
 Escott, Charles Edward, '86  
 \*Esenwein, John Riley, '83  
 Eshbach, William Wallace, '93  
 Esbenbaugh, Roscoe Russell, '13  
 \*Eshleman, Ellis Good, '00  
 Eskin, Sara, '18  
 Estep, Fred Howard, '12  
 \*Estlack, Horace W., '68  
 \*Estlack, Thomas, Jr., '44  
 Estlack, Walter Forrest, '98  
 Etoch, Michael Antoine, '08  
 Ettelman, Abraham Guedalyah, '17  
 Evans, Abner Thomas, '98  
 \*Evans, Charles B., '72  
 Evans, Charles Born, '88  
 Evans, Charles Wilson, '06  
 Evans, Chester, '09  
 \*Evans, Edmund Hann, '84  
 Evans George Brinton, '86  
 Evans, George Bryan, '80  
 Evans, Hunter Leon, '17  
 \*Evans, J. Estell, '77  
 Evans, John Brady, Sp. '15  
 \*Evans, John Henry, '76  
 \*Evans, Jonathan, Jr., '35  
 Evans, Joseph Cook, '75  
 Evans, Samuel, Jr., '98  
 Evans, Thomas John, '02  
 Evans, William, '89  
 Evans, William, Jr., '66  
 \*Evans, William H., '61  
 Evanson, Axel Alfred, '17  
 Everhart, Thaddeus, '75  
 Everlockner, Charles Brewin, '15  
 Eves, Charles Palm, '05  
 Eves, Charles Scott, '02  
 Evrard, John Joseph, '02  
 Ewing, Charles Henry, '21  
 Ewing, George Washington, '77  
 Ewing, William G., '71  
 Eyer, Edward Augustus, '94  
 Eyer, Harvey Bowman, '90  
 Eyler, Maurice Edgar, '79  
 Eyre, Clarence Preston, '79  
 Eyre, William, '59  
 \*Eyster, Christopher E., '69  
 Fabian, Asa, '00  
 Fackenthall, John Michael, '94  
 Fackenthall, Philip Frederic, '13  
 \*Fahey, Edward H., '86  
 \*Fabey, John C., '81  
 \*Fabnestock, Levi, '79  
 Fabr, Harry Miller, '06  
 Failing, John Peter, '92  
 \*Fair, Walter Terpe, '12  
 Fairchild, Benjamin T., '72  
 Fairchild, Samuel W., '73  
 Fairlamb, William Hamer, '13  
 \*Fairthorne, Robert F., '55  
 \*Falck, John Aiken, '78  
 Falck, Milton Smoker, '84  
 Falk, John Charles, '84  
 Falkenbainer, Charles, Jr., '99  
 Falloure, Edwin Reed, '87  
 \*Famous, Parker Hoover, '80  
 \*Faries, Joseph Benjamin, '90  
 Farley, Levi James, '97  
 Farnsworth, Anthony, '95  
 Farr, William L., '68  
 Farrell, Martin Edward, '96  
 Farrell, Robert Joseph, '17  
 Farrell, Walter John, '11  
 Farrow, Charles Taylor, '96  
 Farrow, Fred. Reeves, '98  
 Farwell, Charles Darius, '78  
 Fasig, Harry Buckley, '83  
 Fasnacht, Allen Hornberger, '19  
 Faulhaber, Gustave Adolph, '99  
 Faunce, Benjamin Rice, '95  
 Faunce, George Castor, '00  
 \*Faunce, John H., '53  
 \*Faunce, William Henry, '81  
 Faust, Jacob Mauger, '91  
 Faust, John Kirk, '87  
 Fawkes, David Wilmot, '78  
 Fayko, Andrew C., Sp. '16  
 \*Feairheller, Theodore, '85  
 Federer, Ernest Charles, '78  
 Feeny, Leonard A., Sp. '18  
 Fegley, Florence Augusta, '01  
 \*Fegley, John Stauffer, '01  
 Fegley, Oscar George, '88  
 Fehr, George W., '89  
 Feidt, George David, '90  
 Feigley, Harvey Peter, '06  
 Feinstein, Anna (Mrs. Levitsky), '09  
 Fekula, Joseph Harry, '05  
 Feldkamp, Charles Henry, '84  
 Feldman, Samuel Haimon, '07  
 Felker, Harry, '96  
 Fell, Edgar Burnside, '83  
 \*Fell, Edward Reese, '58  
 Fenstermacher, Clarence Hoover, '17  
 Fenton, Percival Norman, '20  
 \*Ferdinand, George Adam, '80  
 Ferguson, Enoch Pennock, '92  
 Ferguson, James Adams, '87  
 Ferguson, Susan Eleanor (Mrs. Rowand), '07  
 Ferko, Joseph Aloysius, '16  
 Fernandez, Juan Diego, '05  
 Fernandez, Manuel, '06  
 Fernsler, Edward Shoener, '91  
 Ferron, William Euart, '09  
 Ferry, Fanny, '10  
 Fessler, Thomas Addison, '93  
 Fetter, Henry Herman, '86  
 \*Fetter, Marcus C., '62  
 Fetterolf, Clarence Frederick Garfield, '02  
 Fetterolf, Daniel Webster, '87  
 \*Fetters, Frank Penicks, '84  
 Fetters, Leonora Gibb (Mrs. Gordon Leech), '12  
 \*Fetters, William Anderson, '84  
 Feuerstein, Rose (Mrs. Finkel), '08  
 Few, Colin Spangler, '97  
 \*Field, Claud, '89  
 Fielder, Albert Robert Hugo, '75  
 \*Fienhold, Edward Henry, '85  
 \*Fies, John Henry, '91  
 Fiet, Harvey James, '89  
 Figueroa, Francis A., '58  
 Filippone, Gaetano, '18  
 \*Fillman, Eugene Anderson, '84  
 Filman, Walter Theodore, '02  
 Finch, Charles L., '70  
 \*Finck, Robert Fechtig, '84  
 Finegan, Edward Thomas, '21  
 Finegan, William Francis, '18  
 Finrock, Ira Elmer, '87  
 Finkbiner, Martin Luther, '92  
 Finkelstein, Herman, '18  
 Finkelstein, Nathan, '12  
 Finkeni, Paul William, '19  
 \*Finley, John D., '51  
 Finney, John Joseph, '92  
 \*Finney, William Edgar, '82  
 Fiscoel, John Arthur, '14  
 Fischer, Adolph Gustave, '01  
 Fischer, Albert Martin, '86  
 Fischer, Frederick Franklin, '96  
 \*Fischer, Theophilus, '62  
 Fishburne, Pliny, '94  
 \*Fishburne, Richard Levis, '99  
 Fisher, Edmund Keim, '95  
 Fisher, George Calvin, '01  
 Fisher, George Washington, '80  
 Fisher, Henry, '77  
 Fisher, Jacob Livingood, '86  
 Fisher, John Anthony, '00  
 Fisher, Robert Welles, '87  
 Fisher, Samuel Keim, '98  
 Fisher, Thomas Leroy, '92  
 \*Fisher, William R., '29  
 Fitch, James Clarence, '02  
 Fitzgeorge, George Thomas, '84  
 Fitzgerald, Charles Edward, '13  
 Fitzgerald, Samuel Walter, '96  
 Fitzkee, Adam Hastings, '16  
 Fitzpatrick, Philip Thomas, '84  
 Fitzpatrick, Richard P., '08  
 \*Fitzsimmons, William Henry, '14  
 Flack, George Thomas, '14  
 Flack, Herbert Louis, '06  
 Flaherty, Richard Cyril, '20  
 Flanagan, Clark Harrison, '14



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- Flanagan, Thomas Francis, '94  
 Fleischer, William Paul, '02  
 Fleisher, Joseph Charles, '20  
 Fleisher, Lewis, '10  
 Fleming, Arthur Bowles, '99  
 Fleming, Frank Byerly, '83  
 Fleming, John Halbert, '98  
 \*Fleming, John Merle, '08  
 Fleming, Samuel Clarkson, '01  
 Fleming, William Fullerton, '76  
 Fleming, William S., '57  
 Fleming, William Scott, '78  
 \*Flemming, Daniel W., '83  
 \*Flenniken, John Byron, '96  
 Fletcher, Benjamin Kennard, '90  
 Fletcher, Oscar Conrad, '86  
 Fletcher, Thomas Milton, '91  
 Flickinger, William Gordon, '11  
 Flint, John Henry, '73  
 Flitcraft, Warren Whitney, '95  
 Flood, James John, '18  
 Flores, David, Sp. '17  
 Flottman, Charles August, '14  
 \*Flowers, Hiland, '79  
 Fluck, Charles Lewis, '94  
 Fluck, Franklin Wilson, '96  
 \*Flynn, John Joseph, '86  
 Fogg, Frank Carroll, '06  
 Fogg, Frank Garfield, '06  
 Folk, Howard George, '17  
 Folkrod, Cyril C., Sp. '18  
 \*Follmer, Daniel, '84  
 Foltz, Alvin Elmer, '13  
 \*Foltz, Edgar David Grant, '99  
 Fong, Job, '13  
 Foran, Ralph Richard, '17  
 Forbes, John Davies, '82  
 Forbes, William Clifford, '17  
 Force, Norman L., Sp. '15  
 Ford, Harry Billings, '13  
 Ford, Samuel Stewart, '72  
 Foresman, Harry Bastian, '95  
 Forman, Joseph Maurice, '20  
 Forman, LeRoy, Sp. '13  
 Forney, Charles McClellan, '82  
 Forrest, Ralph Anderson, '06  
 Foss, George Rodney, Sp. '13  
 \*Fosselman, Charles, '78  
 Foster, Sylvan Lorraine, '13  
 Foster, William Wetherill, Jr., '06  
 Foulk, James Floyd, '18  
 Foulke, James, '68  
 Foulkes, Stephen Harvey, '89  
 Foust, Clarence Herr, '17  
 Foust, John Clark, '12  
 Foust, Samuel Byers, '12  
 Fowler, Hudson DeMott, '94  
 Fowler, Jesse A., '08  
 Fox, Bessie Carrie Belle, '17  
 Fox, Clarence R., '12  
 Fox, Clarence Roy, '08  
 \*Fox, Daniel S., '63  
 Fox, Elmer Delmire, '15  
 \*Fox, Francis X., '70  
 Fox, Frederick Henry, '84  
 Fox, Harry Terry, '00  
 Fox, Irvin Berry, '02  
 \*Fox, Jamella, '04  
 Fox, James Andrew, '14  
 Fox, James Floyd, '92  
 Fox, Joseph, '15  
 Fox, Joseph Patrick, '13  
 Fox, Joseph Peter, '02  
 Fox, Louis, '21  
 Fox, Morris Wayne, '03  
 Fox, Ray Linaham, '21  
 Fox, Sereck Hall, '21  
 Frailey, William Otterbein, '82  
 Frailey, William Otterbein, Jr., '08  
 Fralinger, John Joseph, '03  
 Franciscus, William Charles, '83  
 Frangkiser, John Frederick, '83  
 Frank, Harvey, '13  
 Frank, William Reuben, '14  
 Franke, Louis, '00  
 Frankeberger, Allen J., '92  
 \*Franklin, Thomas H., '60  
 Franz, Frederick William, '88  
 Fraser, Horatio N., '72  
 \*Fraser, John Stewart, '72  
 Fraunfelder, Jacob Adam, '94  
 \*Fraunfelder, Richard Deily, '91  
 Frazer, Donald Morrow, '17  
 Freas, William Kerr, '79  
 Frederick, Charles R., '17  
 Frederick, John Henry, '79  
 Fredericks, Lewis Armstrong, '15  
 Free, William Henderson, Jr., '04  
 Freedman, Jacob, '21  
 \*Freeman, Josiah Kisterbock, '96  
 Freeman, Leslie Steckel, '05  
 Freeman, Lewis Good, '20  
 Freeman, Oliver John, '80  
 Freeman, Walter Seip, '82  
 Freethy, Charles Henry, '95  
 \*French, Adelbert Porter, '91  
 French, Arthur S., '73  
 French, Charles Dunning, Sp. '05  
 French, Francis Freas, '91  
 French, Howard B., '70  
 French, Robert Samuel, '08  
 French, Roland Hall, '01  
 \*French, Samuel Harrison, '82  
 Frey, Andrew G., '79  
 Frey, John Peter, '83  
 \*Frey, John William, '83  
 Frick, Charles Keyser, '17  
 Fricke, Charles B., '04  
 Friebely, Harry Eugene, '98  
 Fried, Percy, '02  
 Friedman, Charles Jonas, '17  
 Friedman, Nathan Meyer, '11  
 Friedman, William Leonard, '19  
 \*Fries, Charles Joseph Valentine, '83  
 \*Frisby, Frank, '80  
 \*Fritchey, James C., '69  
 Fritsch, Harry, '86  
 Fritsch, Herman, '60  
 Frock, Charles Thomas, '21  
 Froelich, Walter Scott, '89  
 \*Fronefield, Charles, Jr., '60  
 Fronefield, Joseph Millan, Jr., '82  
 \*Fronheiser, James J., '68  
 Frontz, Edward Elmer, '90  
 \*Früh, Carl D. S., '69  
 \*Früh, Ernest, '79  
 Früh, Gustav Adolph, '80  
 Fry, Daniel Joshua, '80  
 Fry, Daniel Joshua, Jr., '14  
 Fry, Elmer Jay, Sp. '08  
 Fry, Eugene Arthur, Sp. '12  
 Fry, Harry Edmund, '91  
 Fry, Nelson Becker, '92  
 Fry, Wilbur Winthrop, '76  
 \*Fuchs, Peter P. (Fox), '58  
 Fuhr, Harry Godshall, '17  
 \*Fuller, Royston Tupper, '04  
 Fulton, J. Robert, '09  
 Fulton, Joseph Miller, '77  
 Funcheon, Margaret Gertrude, '21  
 Fundora, Florentino Lopez, '17  
 Funk, Lawson C., '77  
 Fnnk, Robert Rowland, '98  
 Furman, Frank Hagenbuch, '20  
 \*Furman, Josiah Hodgkinson, '93  
 Furnell, Carl Bennett, '94  
 Fuser, Benjamin Louis, '07  
 Fuss, Ivan Ralph, '15  
 Gabell, Cromwell Pearce, '89  
 Gable, Ralph Benton, '85  
 Gable, Walter Emanuel, '15  
 Gabler, Theodore, '94  
 Gabriel, Robert Rudolph, '96  
 Gabriel, Rose I., '08  
 Gabrio, Frank Peter, '94  
 Gadd, Samuel Wesley, '80  
 \*Gaillard, Edward, '54  
 \*Galbreath, Thomas Mullin, '80  
 Galbraith, William Henry, Jr., '03  
 Gallagher, Malcolm Wight, '12  
 Gallaher, Charles Sumner, '88  
 Gallant, Clifton Brown, '09  
 Gallaschick, Paul Hermann, '88  
 Gallinger, George Roy, '09  
 Galloway, Clarence Moore, '20  
 Gamble, Theodore Littlefield, Sp. '95  
 Gamer, Albert Charles C., '02  
 Gano, William Hubbell, Jr., '84  
 Ganter, Charles Louis, '14  
 Ganster, William Foster, '89  
 Garber, Elmer Franklin Weaver, '01  
 Garber, Iiallie Jackson, '21  
 Garcia Birba, Ricardo, '18  
 Gardier, Louis Anthony, '18  
 Gardner, Charles, '84  
 \*Gardner, Charles Herman, '78  
 Gardner, Frank Edwin, '86  
 Gardner, Stanley Preston, '17  
 Garges, Alfred Ball, '91  
 Garland, John Kistler, '91  
 Garman, Jonas Hezekiah, '87  
 \*Garman, Samuel Franklin, '80  
 Garr, Hyman David, '17  
 Garrell, Frank Emanuel, '17  
 Garrett, Joseph Jeffreys, Sp. '14  
 \*Garrigues, Samuel S., '51  
 Garrison, Joseph Miller, Jr., '97  
 Garritt, Henry James, '00  
 Garton, Frank Morton, '05  
 Garver, Walter Joseph, '94  
 Garvey, James Aloysius, '04  
 Garvey, Joseph Peter, '03  
 Garvin, Luther Burket, '18  
 \*Garwood, William T., '59



- Gaskell, Walter James, '11  
 Gasser, Ira George, '07  
 Gasslein, Richard Joseph, '99  
 Gatchell, Edmund Randolph, '76  
 Gates, Burt Pike, '77  
 Gates, Lynn Hubbell, '12  
 Gault, Claude Ellsworth, '11  
 Gearhart, Harry Jacob, '90  
 \*Gebhard, Adolf Emil, '85  
 Gebhardt, Ehr Gott William, '94  
 \*Geddes, Frank, '82  
 Geetey, Wallace Gillespie, '94  
 Geety, William Wallace, '08  
 Gegan, James J., '60  
 \*Gehman, Matthew Stanley, '17  
 \*Gehman, Walter Warren, '17  
 Gehringer, Edwin Franklin, '02  
 Gehris, Peter Spang, '85  
 Gehrung, John Clucas, '14  
 \*Geiger, Jacob Franklin D., '82  
 Geiger, Joseph Hess, '12  
 Geiger, Max, '72  
 Geiger, Walter Samuel, '96  
 \*Geist, Richard Clement, '89  
 Gemmill, Clarence Franklin, '04  
 \*Genois, Louis, '81  
 Gensler, Howard Elias, '12  
 Gentry, Orton Harris, Jr., '82  
 \*Gensch, Daniel Conrad, '76  
 Genz, George Leonard, '96  
 Georges, Amandus George, '87  
 \*Gerhard, Augustus F., '70  
 Gerhard, Samuel, '54  
 Gerhard, William Henry, '79  
 Gerhardt, John Isaac, (now Ger-  
 hard), '05  
 \*Gerhart, Herman, '56  
 Gerlach, Frank Christian, '91  
 Gerlach, Herman, '94  
 Gerling, John Miller, '77  
 \*Geron, Yeatman, '02  
 Gershenfeld, Herman, '21  
 Gershenfeld, Joseph Charles, '17  
 Gershenfeld, Louis, '15  
 Gerson, Dora Goldie (Mrs. Laskin),  
 '03  
 Gerstacher, Michael, '81  
 Gervais, William Joseph Napoleon,  
 '90  
 Gessford, Otice Eugene, '97  
 Gettel, John Ralph Elsrude, '02  
 Geuther, Frederick Edwin, '95  
 Geyer, Henry F., '59  
 \*Gibble, Elmer Ellsworth, '90  
 \*Gibbony, David Clarence, '91  
 Gibney, Edward Paul, '10  
 Gibney, Raymond George, '15  
 \*Gibson, Hiester Franklin, '94  
 \*Gibson, Robert, '61  
 \*Gibson, Robert, Jr., '80  
 Giffard, William H., '61  
 Giffin, Henry R., '86  
 Gilbert, Benjamin S., '72  
 Gilbert, Cyrus Thurston, '13  
 Gilfillan, James Walls, Jr., '16  
 Gill, Charles Alfred, '90  
 \*Gill, William C., '73  
 Gillan, James Dunlap, '04  
 Gilliland, Ray Dill, '05  
 \*Gillispie, Henry Robert, '89  
 Gingrich, Edward Harry, '88  
 Gingrich, Ezra Henry, '76  
 \*Gingrich, John Adams, '77  
 Githens, Frank Smith, '92  
 Githens, William H. H., '61  
 Given, Horace Ware, '05  
 Gladhill, James White, '98  
 Glantz, Morris, '18  
 Glass, Raphael, '18  
 Glauser, Jacob, '18  
 Gleim, Francis Henry Ebur, '74  
 Gleim, Harry Charles, '02  
 Gleim, Perry Martin, '75  
 Gleim, William B., '83  
 Glenk, Robert, '91  
 Glenn, Joseph Anthony, '05  
 Glenn, William Andrew, '05  
 Glise, Amos Chester, '08  
 Glover, Wallace Thompson, '12  
 Godfrey, Swain Townsend, '97  
 Godlewski, Charles Francis, '18  
 Godshall, Henry Stites, '09  
 \*Godshall, Samuel R., '97  
 Goebel, George, Jr., '81  
 \*Goess, George Conrad, Jr., '77  
 Goico, Ernest, '94  
 Goicouria, Pedro Prudencio, '08  
 Goinez, Leroy H., Sp. '19  
 Gold, Adolph E., '21  
 \*Gold, Hiram, '64  
 Gold, Martin Hollenbach, '17  
 Gold, Maurice George, '20  
 Goldberg, John C., '84  
 Goldberg, Anne, '21  
 Goldblum, Adolph Addie, '16  
 Goldblum, Theodore Isadore, '12  
 Goldin, Joseph Bernard, '19  
 Goldsmith, George Washington, '82  
 Goldsmith, Lee, '96  
 Goldstein, Benjamin M., '21  
 Goll, Philip, '90  
 Golland, Jack Kendall, '21  
 Gonya, Harry Jerome, '14  
 Good, Benjamin Miffin, '91  
 Good, Harry Jonas Tilghman, '83  
 Good, Jacob Edison, '16  
 Good, Robert Franklin, '96  
 Goodfellow, Charles R., '97  
 Goodfriend, Harry Politzer, '13  
 Goodhart, Floyd R., '18  
 \*Goodman, Edith Morton, '02  
 Goodman, Jacob, '21  
 Goodman, James, '92  
 \*Goodno, Charles Franklin, '74  
 Goodwin, James Jeffries, '10  
 \*Goodyear, David F., '51  
 Goodyear, Harry Jacob, '01  
 \*Goodyear, John Y., '37  
 Goodyear, Wilbur Bair, '06  
 Gordon, David Harris, '11  
 Gordon, Jean, '91  
 Gorgas, George Albert, '81  
 Gorgas, Thomas, A., Jr., '21  
 Goring, Myatt Edward, '02  
 \*Gormley, George M., '52  
 Gorrell, Benjamin Harvey, Jr., '91  
 Gorry, John Ambrose, '09  
 Gosh, William Edgar, '91  
 Goss, Charles, '93  
 Goss, Lloyd Earl, '06  
 Gossling, Thomas Richard, '81  
 Gottshall, Earl Stouffer, '16  
 Gotwalt, Samuel Horace, '90  
 Gould, Josiah Cole, '94  
 Goulden, Frank Ellwood, '05  
 Gowen, Clarence Blaine, Sp. '96  
 Graber, Leon Joseph K., '76  
 Gracey, Archibald Alexander, '90  
 \*Gradwohl, John Frederick, '92  
 Grady, William Patrick, '99  
 Graef, Paul, Jr., '74  
 Graeff, Claude Conner, '08  
 Graeff, William Lewis, '11  
 Graeff, Raymond Newhard, '07  
 Graf, Albert Frederick, '87  
 Graff, Emil George Herman, '81  
 \*Graham, Harry Edgar, '96  
 Graham, James Lord, '79  
 Graham, John Russell, '16  
 Graham, Willard Rice, '01  
 Grahame, George Harris, '77  
 \*Gramm, Edgar S., '71  
 Grammer, Charles Roy, '06  
 Grandy, Seth Parker, '16  
 Grant, James Smith, '86  
 Grantham, Richard I., Sp. '13  
 Gravell, Thomas Lawrence, '05  
 \*Gray, George Washington, '78  
 Gray, Harry Herman, '13  
 Gray, Harry Tilford, '83  
 \*Gray, John Calvin, '14  
 Gray, John Franklin, '81  
 Grayhill, Peter, '78  
 Grayson, John Lincoln, '87  
 Greaves, Alvah Frank, '11  
 \*Greaves, Florence Hunter (Mrs. A.  
 F.), '11  
 Grebe, William, '87  
 Green, Benjamin Wallace, '85  
 Green, Charles Wellington, '88  
 Green, Eli Noah, '21  
 Green, Francis, '06  
 Green, Frederick Hamilton, '87  
 Green, Harry Marshall, '18  
 Green, Howard Lee, '82  
 \*Green, Philip Henry, '88  
 Green, Raymond, '16  
 Green, Samuel, '20  
 Green, Simon, '18  
 Green, William Valentine, '92  
 Greenawalt, David Lehman, '95  
 Greenawalt, William Grant, '86  
 Greenberg, Hyman, '10  
 Greenberg, Jacob, '00  
 Greenberg, Leonard Edward, '15  
 Greene, Barnett Russell, '14  
 Greene, William Robert, '10  
 \*Greenfield, Lewis Thompson, '89  
 Greeninger, Charles Wenger, '08  
 Greeninger, Florence Minerva, '20  
 Greenleaf, Harry Raymond, '16  
 Greer, Mary Caroline, '98  
 Gregg, Henry Hamilton, '83  
 Gregory, Harrison W., '11  
 \*Gregory, John Ellsworth, '82  
 Gregory, Robert Nicholson, '94  
 Gregory, William Ellsworth, '07

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- Greim, Howard Milton, '09  
Greiner, Chloe Earl, '10  
\*Gressley, William Robert, '92  
Greyer, Charles Peyton, '06  
Grier, Robert, '04  
Griesemer, Frederick, '10  
Griesemer, James Adam, '96  
Griesemer, Lloyd Philip, '12  
Griesing, Howard William, '17  
Griesing, Sterling Myers, '21  
Griest, Joseph Taylor, '00  
Griffin, Edwin Clarence, '79  
Griffin, Howard Ezra, '89  
Griffin, William Harold, '14  
Griffin, Louis Franklin, '77  
Griffith, Charles, '76  
Griffith, Ivor, '12  
\*Griffith, J. Clarkson, '55  
\*Griffith, Joseph Thomas, '90  
\*Griggs, Allen G., '73  
Griggs, Anna Mae, Sp. '19  
Grim, Herman Charles, '06  
Grime, Robert Thomas, '81  
Grimshaw, C. B., Sp. '83  
\*Griscom, Joseph W., '73  
Griscom, William, Jr., '81  
Griswold, Charles Maust, '96  
Groblewski, Alphonse, Sp. '20  
Groff, C. L., '70  
Groff, Frank Barr, '84  
Groff, Harry Musselman, '98  
Groff, William, '03  
Groff, William Shakespeare, '21  
\*Grom, Roland Bismarck, '09  
Gros, Lucian Alfred, '88  
Gross, David, '21  
Gross, Edward Z., '73  
\*Gross, George A., '65  
Gross, George Richard, '17  
\*Gross, John Henry, '05  
Gross, Paul Herbert, '97  
Gross, William Henry, '21  
Grosse, Gottlieb Matthew, '89  
\*Grotjan, Peter Adolph, '42  
Grotz, Milton, '95  
Grove, Arthur Landis, '17  
Grove, Harry Ross, '02  
Grove, Norbert Harrison, '18  
\*Groves, John Dowling, '76  
Grube, J. Ralph, '15  
Gruber, Abraham, '13  
\*Gruel, John Edward, '01  
Gruenwald, Otto Arthur, '07  
Grubler, Christian, '91  
Gruhler, Martin, '94  
Grunden, Percival Edward, '98  
Gryning, John Francis, '99  
Guarini, Joseph Raymond, '16  
Gubbins, Charles Henry, '81  
Gubenko, William P., '18  
Guenther, Harold Dickinson, '10  
Guerin, Joseph Alexander, '92  
Guerra, Arthur Louis, '09  
Guest, Harry, '92  
Guest, Justice Black, '07  
Guest, Owen Lovejoy, '93  
Guest, Samuel Stratton, '83  
Guest, Warren Rogers, '16  
Guest, Wilbert Hillman, '00  
Guici, Arnold, Sp. '18  
Guier, Luis Javier, '03  
\*Guillou, Alfred, '34  
Guise, P. Nettleton, '87  
\*Gunn, Frank, '94  
Gunn, John Jay, '16  
\*Gutekunst, Frederick, '53  
Guth, Herbert Wallace, '98  
\*Guth, Morris S., '73  
Guthrie, DeWitt Clinton, '89  
Guthrie, Ira Culpepper, '03  
Guthrie, Joseph T., Jr., '56  
Guy, G. Omar, '70  
Guyn, Marion Eugene, '13  
Haak, Harry Capp, '89  
\*Haake, William Henry, '91  
Haas, Earl Oren, '21  
\*Haas, Frederick William, '94  
Haase, William Frederick, Jr., '15  
Haberstroh, Ambrose Rea, '20  
Hackenberger, George Washington, '91  
Hacker, Raymond Colby, '17  
Hackett, Henry James, '87  
\*Hackney, George Wyly, '91  
Hadfield, Edward John, '87  
Hadley, Harry Cornish, '93  
\*Haehnen, Jacob F., Jr., '60  
Haenchen, Emil Frank, '94  
Haentze, Frederick Edward, '21  
Haessig, Herman Thomas, '81  
Hafer, LeRoy Irvin, '17  
Hafla, George Adam, '85  
Haage, Doane Herring, '09  
Hagenbuch, James Hervey, '85  
Hagenman, Joseph Jeremiah, '14  
Haglin, Henry, '87  
\*Hague, William Henry, '91  
Hahn, Edward Titus, '95  
Hahn, Gustave, '83  
Hahn, Herman Frederick, '92  
\*Hahn, John Henry, '81  
\*Hahn, Moses Alexander, '94  
\*Haig, Charles Roberts, '67  
Haig, Charles Roberts, Jr., '96  
Haimowitz, Morris, (now Henry Morris), '11  
Hain, Landis R, '05  
Haines, Brooks Collins, '09  
Haines, Charles Henry, '96  
Haines, Emerson Snyder, '21  
Haines, F. Earl, Sp. '11  
Haines, Howard Jacob, '20  
\*Haines, John Warrington, '74  
Haines, Joseph Ridgway, '92  
Haines, Oliver Benjamin Jacob, '92  
\*Haines, Thomas, '39  
Haines, William Henry, '06  
Hains, Kirk Faust, '09  
Haldeman, Glenn Arthur, '17  
Haley, George Benjamin, '06  
Haley, John Joseph, '88  
Hall, Arthur Monroe, '09  
Hall, Edward Willard, '17  
Hall, Frank Devie, '86  
Hall, Frederick Compton, '21  
Hall, Harry Augustus, '78  
\*Hall, Harry Newbury, '86  
\*Hall, Humes, '84  
\*Hall, Jasper Bonsall, '14  
Hall, Jesse Barclay, '85  
\*Hall, Joseph J., '70  
Hall, Lionel Wayne, '07  
Hall, Marlborough, '90  
Hall, Robert Carson, '96  
Hall, Thomas Murphy, '94  
\*Hallberg, Carl Svanté Nicanor, '76  
Haller, Donald Eckel, '09  
Halligan, James Clement, '18  
Hallman, Albert Jefferson, '17  
Halloran, Francis Marion, '81  
Hallowell, Bruce Clyde, '92  
\*Hallowell, Charles Wesley, '83  
\*Hallowell, Horace G. J., '73  
Hallowell, Horace J., Sp. '09  
Hallowell, James Alexander Davis, '80  
Hamaker, Amos Leopold, '08  
Hamberg, Samuel Tilden, '90  
\*Hambright, Edwin A., '67  
\*Hambright, George M., '63  
Hamill, John Frederick, '87  
Hamilton, Charles Ernest, '94  
Hamilton, David Ambrose, Jr., '17  
Hamilton, Sylvester Sutton, '21  
Hamilton, Walter Scott, '95  
Hamilton, William Swearingen, '85  
Hamlin, Benjamin Baird, Jr., '81  
\*Hammer, Edwin Howard, '79  
Hammerquist, Charles E., '91  
Hammill, Arthur Vincent Francis, '17  
Hammond, Arthur Browne, '85  
Hammond, Nathan Brown, '99  
Hampson, William Harvey, '00  
Hampton, Powell, '05  
\*Hance, Edward Howard, '54  
\*Hance, George Headley, '96  
Hance, Howard Ivins, '99  
Hancker, William II., '70  
\*Hancock, Charles W., '57  
Hancock, Clyde Raymond, '11  
Hancock, Godfrey Olin, '06  
Hand, Charles, '69  
Hand, Harry Cobb, '92  
\*Hand, Jacob Hoeckley, '74  
Hand, Richard T., '62  
\*Hand, Wilson Howe, '00  
Handelsman, Benjamin, '21  
Handler, William, '90  
Handwork, Francis Collins, '02  
\*Haney, Edward Richard, '13  
\*Haney, Mary Augusta, '95  
Hanigan, William T., '83  
Hankey, William Tabor, '91  
\*Hannaman, John B., '70  
\*Hannan, Frank William, '96  
\*Hannon, Owen Burdette, '83  
\*Hannum, John Lewis, '99  
\*Hansell, Amos, '58  
Hansell, George, '62  
Hansell, Henry Lewis, '14  
Hansell, Wilmot, '71  
Hansen, Charles William, '07  
\*Hansford, William P., '33  
Hanson, Arthur Edward, '91  
Hanson, William Henry, '88



- \*Harbaugh, Duncan James, '03
- Harbold, Curtis Alexander, '92
- Harbold, John Tilden, '03
- Harbord, Kittie Walker (Mrs. 11. F. Graver), '01
- Harders, Mae Thompson (Mrs. Johnston), '93
- Harding, Henry, '67
- Harer, Charles Raymond, '15
- Hargreaves, Lottie, '20
- Haring, Henry Gettman, '79
- Harker, Frank Scott, '80
- Harmanson, John Henry, '82
- Harmening, Frederick Henry, '03
- Harmony, Edmund Franklin, '00
- Harms, Herman, '94
- Harner, James M., '67
- Harner, Jeremiah Ralph, '09
- Harnly, Miles Vern, '13
- Harnly, Paul J., Sp. '20
- Harpel, Luther Grant, '90
- Harper, Ernest Robert, '21
- Harper, Frank M., '73
- Harper, Henry Winston, '81
- Harper, Robert Newton, '84
- \*Harper, William Franklin, '85
- Harr, Charles Nelson, '08
- Harrrell, Herbert Dean, '96
- Harriss, J. Henry, '53
- Harrigan, John William, '86
- Harrington, Silas Marion, '85
- Harris, Charles Green, '76
- Harris, Clinton Kelty, '85
- Harris, Clarence Mulford, '96
- \*Harris, Frank Pierce, '83
- Harris, George Herbert, '14
- \*Harris, Levi H., '54
- Harris, Norton O., '85
- Harris, Oscar Eugene, '82
- Harris, Park, '76
- \*Harris, Thomas W., '38
- Harris, William, '77
- Harris, William Clyde, '10
- Harris, William Keuster Garfield, '01
- Harrison, Francis E., '80
- Harrison, James Oliver, '83
- \*Harrison, John Windham, '78
- \*Harrison, Lee S., '72
- \*Harrison, Thomas Wesley, '87
- Harrison, Thomas West Danville, '17
- Harrison, William D., '61
- Harrison, William John, '07
- Harrison, William Landon, '74
- Harrison, Joseph Whipple Eugene, '17
- Harrity, Michael A., '21
- Harrold, Charles Albert, '79
- Harrold, William Henry, '94
- Harrup, Joseph, '68
- \*Harry, David W., '59
- \*Harry, Hamilton Maxwell, '97
- Harry Jacob, '67
- \*Harry, James W., '65
- Harry, John William, '71
- Hart, Farel, '11
- Hart, Joseph, '81
- Hart, William Mathues, '12
- \*Harte, James H., '56
- Hartenstein, Earl Stewart, '11
- \*Harting, Alfred Martin, '10
- \*Hartman, Allen K., '12
- Hartman, Frank Gast, '91
- Hartman, Jennings Bryan, '20
- Hartwig, Charles Ferdinand, '75
- Hartwig, Martin Luther, Sp. '09
- \*Hartzell, Alfred Kerr, '80
- \*Hartzell, Charles, '49
- Hartzell, Franklin Thomas, '74
- Hartzell, William Lincoln, '87
- Harvey, Charles John, '99
- Harvey, George C., '09
- Harvey, Gilbert Leon, Sp. '15
- Harvey, John M., '72
- Harvey, John Parker, '20
- \*Hasbrouck, William L., '37
- Hassenplug, William Finley, '87
- \*Hassinger, Samuel E. R., '70
- Hassinger, Samuel Reed, '01
- Hassler, Daniel Herr, '85
- Hassman, David Morris, '05
- \*Hasson, Harry Decora, '91
- Hastings, Lorne Edward, '04
- \*Hastings, Samuel, '49
- Hatcher, Robert Anthony, '89
- Hathaway, Edwin Cowee, '05
- \*Hathwell, Charles, '28
- Hatton, Edgar Melleville, '74
- Hatton, Thomas Miffin, '94
- Hauber, Christian Henry, '00
- \*Hauck, Allen Wesley, '86
- \*Hauck, Samuel Light, '89
- Haupt, Herman, Jr., '73
- Haupt, William Grant, '90
- Haus, Ralph Leonard, '98
- Hausmann, Lewis Henry, Jr., '05
- Hausmann, Frederick William, '90
- \*Hawbaker, Omar, '17
- Hawk, Asher Miller, '15
- Hawkins, James Bryon, '18
- Hawkins, W. Barton, '72
- \*Haws, James William, '06
- Hay, Alvah James, '07
- Hay, Stacey Merritt, '04
- Haydock, Mabelle, '01
- Haydock, Susannah Garrigues, '93
- Hayes, Albert Hollan, '18
- \*Hayes, George E., '61
- \*Hayes, George Washington, '82
- \*Hayes, James Frank, '75
- Hayes, John Henry, '14
- \*Hayes, Robert G. II., '82
- \*Hayhurst, Henry Tower, '76
- \*Hayhurst, Susan, '83
- \*Haymaker, Milo Miller, '96
- Hayman, Walter, '96
- \*Haynes, Thomas Jerdone, '83
- Haynsworth, Julius Dargan, '85
- Hays, Nathan W. C., '67
- Hazard, Herbert, '72
- Hazel, Thomas Harold, '88
- \*Hazzlett, Edward Everett, '74
- \*Heacock, Clifton Elwood, '11
- Head, Raymond C., '92
- Headings, Prestie Milroy, '01
- Headley, William Henry Harrison, '84
- \*Healy, Joseph, '94
- Heart, Charles Russel, '12
- Heath, Raymond George, '17
- Heaton, Harold Johnson, '13
- Heberlig, Wilmer Martin, '13
- Heberling, Andrew Jackson, '87
- Hebsacker, William Frederick, '88
- \*Heckenberger, William, '74
- Heckenberger, William Wellecome, '14
- Hecker, Andrew Ned., '03
- Hecker, Jacob K., '68
- \*Heckerman, Adam Bruce, '96
- Heckerroth, William Conard, Sp. '98
- Heckert, Paul Franklin, '20
- \*Heckler, Edward Henry, '92
- Heckler, Franklin Jacob, Jr., '93
- Heckman, John George, '00
- Heckman, Paul Willard, '17
- Hedges, Frank Xavier, '11
- Hedges, T. Jefferson, '61
- Heffelfinger, William Edward, '02
- Heffley, Harry Baker, '88
- Heffner, Edgar Franklin, '96
- Heffner, Edgar Franklin, Jr., '21
- \*Hehr, Edward T., '71
- Heiberger, Eugene Samuel, '84
- Heider, Henry George, '85
- Heiges, George Leonard, '16
- Heiges, William Smith, '91
- Heim, Christian, '97
- Heim, Henry Lewis, '86
- Heim, William Joseph, '93
- \*Heinbach, Frank Walton, '96
- Heine, Edward, '17
- Heine, Edward D., Sp. '94
- Heineberg, Alfred, '99
- Heinitsh, Henry Ernest, '85
- Heinle, Charles Jacob, '14
- Heinle, Vincent Allen, Sp. '16
- Heintzelman, Joseph Augustus, '59
- Heintzelman, Joseph Augustus, Jr., '98
- Heinze, George Elmer, '00
- Heisler, John Clement, '83
- Held, John C. Jr., '11
- Held, Ray Charles, '14
- Helfrich, Edward Daniel, '96
- \*Helfrich, Llewellyn, '70
- Helgeson, Alfred, '73
- Heller, Charles Tompkins, '86
- Heller, Marx M., '65
- Heller, Theodore Rinehart, '12
- Hellerman, Edward Mann, Jr., '19
- Hellmich, Maximilian, '89
- Hellyer, Edwin Fayette, '96
- Helm, Gustav C. F., Jr., '83
- Helnore, John Charles, '17
- Helweg, Laurence William, '16
- Helwig, George Leon, '14
- Hemberger, Paul Edward, '00
- \*Hemmersbach, Henry Williams, '03
- Hemminger, Robert Elton, '11
- Hende, Ulysses Grant, '94
- \*Hendel, Samuel D., '52
- Henderson, Clarence Harry, Sp. '17
- Henderson, James Rutledge, '86
- Henderson, Robert Guy, '94



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- \*Hendricks, Elwood Gouldy, '78  
Hendricks, Lyle Vallington, '11  
\*Hendrickson, Charles P., '90  
Hendrickson, Raymond, '02  
Hendrie, William, '16  
\*Hendry, Charles D., '30  
Henkel, Joseph Victor, '10  
Henkel, Luther Sammel, '91  
Hennessy, Frank Augustine, '90  
Hennessy, Sherman Francis, '88  
Henning, Edward Francis, '12  
Henrie, Arthur Cecil, '10  
Henrie, John Lewis, '19  
Henrie, Robert R., '21  
Hennitzy, Oscar Edwin, '93  
Henry, Carl Racine, '10  
Henry, Clarence Augustine Adams, '15  
\*Henry, George Snavelly, '74  
\*Henry, George William, '79  
Henry, Harvey Abner, '06  
Henry, Ralph A., '13  
Henry, William Frederick, '92  
Hensel, Samuel T., '72  
Henshey, B. B., '58  
\*Hepler, William C., '88  
Herbein, George Winters, '90  
Herber, Conrad John A. S., '91  
\*Herbert, Eugene, '70  
Herbert, Thomas Lewis, '95  
Herbst, Fred John, '94  
Hering, Edwin Arney, '95  
Hering, George, '08  
Herman, Abraham Lincoln, '17  
Hermann, Ralph Christian, '87  
Hernandez Mena, Antonio Alejandro, '17  
Herr, Clarence Sloan, '11  
Herr, Jason Adam, '06  
Herring, Doane, '86  
Herrmann, Ernest William, '76  
Herrmann, William, '95  
Herron, Charles Selburn, '09  
Hersey, Walter Hayes, '93  
Hersh, Clifford Seltzer, '09  
\*Hertel, Frederick Gustave, '89  
\*Hertsch, Bernhard August, '81  
Hertzler, Gaius Bricker, '21  
Hertzler, Norman Brubaker, '17  
\*Hertzler, Norman Eberly, '02  
Hertzler, Oliver Henry, '02  
Herwig, Emil Moses, '82  
Herzog, Albert, '96  
Hess, Claude Thomas, '17  
Hess, Edwin Hutter, '85  
Hess, Harry Reed, '92  
Hess, Miles Roscoe, '94  
Hesse, Frederick William, '99  
Hesske, August Rudolph, '88  
Hessler, Elmer Hunsberger, '12  
\*Hesson, Robert Lewis, '84  
Hetherington, James Norton Crouse, '03  
Hetherington, Thomas, '88  
Hetrick, Annie Louise, '95  
Hetrick, Martin Luther, '21  
Hetrick, Harry Leady, '99  
Hettinger, Howard Huyett, '87  
Heverly, Fred Chase, '98  
Hewitt, Charles Ellsworth, '86  
Hewitt, James VanSant, '12  
\*Heydenreich, Emile, '61  
\*Heydenreich, F. Victor, '58  
Heyl, Charles Amhrose, '99  
Heymann, William John, '15  
Heyser, Jonas Edward, '96  
\*Heyser, William, '52  
\*Heysham, Horace Besson, '95  
Hibberd, Wesley Jackson, '88  
Hibbs, William Buckman, '04  
Hickman, Richard W., '71  
Hickman, Thomas Elwood, '93  
Hickory, Edward Calvin, '10  
Hicks, John Elias Faison, '09  
Hidlay, William Clair, '17  
Hiecke, William, '86  
\*Hiestand, John Summy, '86  
Hiffmyer, William Joseph, '96  
Higbee, Hugh H., '56  
Higgate, Wilford Oldham, '78  
Higgins, Charles Austin, '79  
High, Edmund Gilbert, '87  
High, Raymond, '99  
Highfield, Herbert Monroe, '01  
Hightower, George Almer, '94  
Higinbotham, W. Ralph, '61  
Hilbisch, John Henry, '00  
Hildebrand, Charles Pinkney, '11  
Hildebrand, Howard Ovid, '97  
\*Hildebrand, John Franklin, '87  
Hildeburn, Charles Swift Riche, '74  
Hildenbrand, Louis W., '70  
Hildreth, Charles Benjamin, '87  
Hile, Merrill Baird, Sp. '06  
Hill, Clayton Brooks, '16  
Hill, Frank Mallory, '13  
Hill, Frank P., '72  
\*Hill, Franklin C., '48  
Hill, George Price, '01  
Hillan, John Michael, '84  
\*Hillary, John F., '65  
Hillebrand, William Gustav, '00  
Hillegass, Eugene Ziegler, '74  
Hillegass, LeRoy Agnew Kern, '12  
Hillegass, Frank Stanley, '08  
Hilliard, Bayard, '02  
Hills, Daniel Henry, '90  
Hilpert, William, '93  
Hilton, George Perry, '78  
Hilton, Joseph A., Sp. 16  
Hilton, Norris Hepburn, '07  
\*Hilton, Thomas C., '74  
\*Himmelwright, Francis E., '67  
Hinchman, Walter Lippincott, '81  
\*Hinckley, Levi Ellsworth, '84  
\*Hinkle, James, '86  
Hinkle, Samuel Wisler, '93  
Hinkson, William Elwood, '90  
Hinman, Ralph Heber, '14  
Hinski, Herman Leo, '11  
Hinski, Oscar Nicholas, '03  
\*Hinterleitner, George Gustav, '86  
Hippler, Harry Richmond, '96  
\*Hires, Lewis Moore, '01  
Hirst, Levi Brook, '84  
Hirst, Ralston Sanford, Sp. '04  
Hirzel, George Edgar, '16  
Hite, Earl Milton, '15  
Hitzelberger, George Edward, '07  
Hitzelberger, Walter Frederick, '12  
\*Hoagland, Pratt R., '68  
\*Hoagland, Robert John, '99  
\*Hobson, William H., '92  
Hoch, Aquila, '88  
\*Hoch, Jacob, '91  
Hoch, Quintus, '99  
Hocker, Alvin Roy, '17  
Hodge, Mary Margaretta, '05  
Hodge, William Roseborough, '95  
Hodgkins, James Henry, '15  
Hodgson, Edwin, '94  
Hodgson, Francis, '81  
\*Hodil, Frank Dilworth, '96  
Hodil, James J., '94  
Hodnett, Walter Reuben, '21  
\*Hoeckley, Benjamin Frederick, '37  
Hoell, Conrad Gabriel, '80  
Hoenstine, John Calvin, '06  
Hoey, Helen Lanning, '20  
\*Hoffa, John Wilson, '80  
\*Hoffecker, James Perkins, '55  
\*Hoffecker, Robert Crockett, '89  
\*Hoffert, Charles Edward, '01  
Hoffman, C. Ferdinand, '63  
Hoffman, Charles Elbert, '09  
Hoffman, Erdman, '89  
\*Hoffman, Eleanor Grace, '15  
Hoffman, Ephraim Zeigler, '84  
Hoffman, George William Jacoby, '86  
Hoffman, Ira Calvin, '01  
Hoffman, John Henry, '15  
Hoffman, John V., '67  
Hoffman, Norman Boore, Sp. '04  
Hoffman, William Anton, '98  
Hoffman, William Christopher, '06  
Hoffstein, Albert Herman, '21  
Hoffstein, Benjamin Herman, '17  
Hoffstein, Esther S., Sp. '21  
Hogstad, Anton, Jr., '14  
\*Hohl, August, '73  
Hohman, Theodore Albert, '91  
Hohmeier, Frank, '05  
\*Hoke, Willis Andrew Balch, '81  
Holberg, Ferdinand, '86  
Holcombe, David Hamilton, '93  
Holcombe, John Heisler, '03  
Holden, George Blake, '76  
\*Holden, John, '52  
Holden, Louis Henry, '80  
Holland, Albert James Fowler, '99  
Holland, Edgar Atwood, '86  
Holland, George Samuel, '07  
Hollembach, William, '58  
\*Holloper, Arthur Stadiger, '95  
Holloway, John Wilson, '13  
Holroyd, Eugene M., '05  
Holstein, Charles E., '69  
Holstein, George Leon, '03  
Holt, Edwin Merrimon, '99  
Holt, James Stephen, '96  
Holtzhauser, George Jacob, '94  
Holtzhauser, Ludwig, '88  
Holzhauer, William C., '80  
Holzschuh, Frank Herman, '05  
Homerberg, Victor Oliver, '13

- \*Hommann, James W., '73  
Honsaker, Charles Coy, '10  
Hooper, Herbert Hill, '18  
Hooper, Oliver Pascal, '76  
Hooper, Sidney Lee, '88  
Hoopes, Wilmer Preston, '95  
Hoover, Henry Taylor, '88  
Hoover, Robert Adams, '03  
\*Hopkins, James, '35  
Hopkins, John Oliver, '08  
Hopkins, Maxwell, '08  
\*Hopkins, Thomas C., '39  
Hoopp, Lewis Christopher, '75  
\*Hopper, Edward, '33  
Horrine, Arlington Grove, '87  
Horn, Charles Lewis, '10  
Horn, Edgar Austin, '91  
Hornbeck, Molton C., '62  
\*Hornberger, Charles Eugene, '76  
Hornby, Walter Melvin, '92  
Horner, James W., '78  
Hörner, Kaspar, '87  
Horsey, John Marshall, '83  
Hörst, Harry Lewis, '97  
Horton, James Stanislaus, Sp. '17  
Hosfeld, Herman Francis, '11  
Hoskins, John, '95  
\*Hoskinson, John Thomas, '71  
Hostetter, Andrew Greider, '89  
Hostelley, William Henry, '87  
Hotchkiss, Harry Edward, '17  
Hottenstein, Peter David, '99  
\*Houck, Calvin Jerome, '84  
Houck, David Lee, '09  
Houck, Oscar, '84  
Hough, John Wallace, '91  
Houghton, John Almer, '90  
Houk, Joseph Howard, '05  
Housekeeper, Arndt K., '73  
Houser, Daniel Jefferson, '07  
Houston, Franklin Paxson, '01  
Hovsepian, Haig S., '17  
\*Howard, Carrie Emily, '90  
\*Howard, Jedediah Griffith, '81  
Howard, John Edgar, '96  
Howard, Tod, '87  
Howell, Edward Vernon, '94  
Howell, Samuel Emerson, '89  
Howell, Harry Field, '97  
Howells, James Owen, '85  
Hoy, Wilbur Bloom, '19  
Hoyt, Frank Ames, '81  
Hubbard, Gerald DeVon, '21  
\*Hubley, John Hiram, '94  
Huddart, John F., '70  
Huddleson, Frank W., '94  
Hudgin, Edward Lee, '78  
Hudson, Charles Marcus, '91  
Hudson, Leonard Adkins, '79  
\*Huebner, Walter Frederick, '08  
Huff, John Thompson, '84  
\*Hughes, C. Collin, '57  
Hughes, Edward James, '16  
Hughes, Frank Stacker, '90  
Hughes, Harry Bittenbender, '95  
Hughes, Harry Caswell, '06  
Hughes, Harry Wilbert, '00  
\*Hughes, J. Curtis C., '47  
Hughes, Jesse Thornley, '09  
Hughes, John Joseph, '19  
Hughes, Leonard, '05  
\*Hughes, Louis, '51  
Hughes, Paul William, '21  
Hughes, Thomas Danforth, Sp. '15  
Hukill, Oscar K., '97  
Hulick, George Bercauw, '10  
\*Hull, George Martin Shrinier, '74  
\*Hull, Morris Albert, '79  
Hulme, Joseph Herbert, '82  
Hulshizer, John Clayton, '86  
Hume, Ward Dutcher, '89  
Humma, Henry John, '90  
Hummel, David Fox, '95  
Humphrey, Harry Herbert, '12  
\*Humpton, Albert Norton, '96  
\*Humrich, William Beetem, '79  
Huneker, John F., '71  
Hunt, Robert Joseph, '05  
Hunt, Warren Ernest, '96  
\*Hunter, David, '74  
Hunter, Edward Lee, '12  
Hunter, Henry Blount, '95  
Hunter, James, Jr., '85  
Hunter, James Stanton, '85  
Hunter, Ralph Thomas, Jr., '09  
\*Hunter, Thomas, '70  
\*Hunterson, Charles Bradford, '81  
\*Huntingdon, Joseph, '98  
\*Huntsman, Howard D., '87  
Hurd, George Edward, '85  
Hurley, David George, '78  
Hurley, William James, '14  
Hurst, Benjamin Russell, '06  
Hurst, George Albert, '19  
\*Hurt, James F., '73  
Hurxthal, H. Lewis, '90  
\*Husband, Thomas J., '33  
Husband, Thomas J., Jr., '69  
Huston, Thomas Albert, '76  
Hutehings, Otway E., '70  
Hutehins, Parker Isaiah, '12  
\*Hutchinson, Hamilton, '69  
Hutchinson, Harry Briarley, '74  
Hutehison, Burt Taylor, '92  
Hutehison George Barkley, '13  
Huth, Harry Godfrey, '17  
Hutsou, Albert, '09  
Huzzard, Curtis, '99  
\*Hyers, Percy, '95  
Hymes, David, '18  
Hysore, Charles Alphenas, '17  
Ibach, William Henry, Jr., '16  
Ibberson, Fred Earl, '17  
\*Ihrig, Theodore Edward, '81  
Imler, Richard Monroe, '17  
Infante Maldonado, Antonio L., '12  
Ingling, Howard Edgar, '97  
Ink, Charles Thomas, '96  
\*Ink, Parker P., '71  
Inman, Florence Vatie, Sp. '18  
Inskeep, E. W., '58  
Irby, Moreland Russell, '00  
Ireland, Oscar Collins, '13  
Ireland, William Page, '96  
Irete, Frank Lewis, '18  
Irvin, Samuel Miles, '06  
Irwin, James Franklin, '06  
Irwin, Samuel Maxwell, '13  
\*Isard, George W., '69  
\*Ischler, George Herman, '84  
Ischler, George Herman, '12  
Israel, Joshua, '15  
Jaekel, John Otto, '94  
Jackson, Charles Edwin, '15  
Jackson, Charles Henry, '99  
Jackson, Clifford Payne, '17  
Jackson, George Henry, '80  
Jackson, Robert MacGregor, '95  
Jackson, Thomas, '96  
Jacob, Alexander Wilson, '74  
\*Jacob, Charles Pim, '90  
Jacob, David, '21  
Jacob, Walter William, '92  
Jacobs, Alexander H., '21  
Jacobs, Daniel LeRoy, '20  
Jacobs, Eugene Jacob, '88  
\*Jacobs, George Harris, '74  
\*Jacobs, Henry H., '62  
Jacobs, Joseph, '79  
Jacobs, Oliver Barron, '89  
Jacobs, Sinclair Sartorius, '09  
Jacoby, Aaron Peter, '74  
Jacoby, Charles Nicholas, '96  
Jacoby, David S., '54  
\*Jacoby, John Wesley, '81  
Jacoby, Reuben L., '75  
Jacoby, William Lawless, '98  
Jacoby, William Oscar, '80  
Jaeger, Ernest Charles, '93  
Jaeger, Marie Gertrude, '20  
\*Jaeger, William Charles, '00  
Jaffe, Hyman, '21  
Jaffe, Max, '21  
Jager, Charles Mathias, '90  
\*James, Arthur Bernstein, '99  
\*James, Henry Hugh, '89  
James, Rienzi, '16  
\*James, Robert Rosser, '96  
Jameson, George L., '58  
Janson, Edwin Leonard, '90  
Janvier, Charles Pierre, '75  
Janvier, Will Newbold, '73  
\*Jeannot, George Edward, '64  
Jefferis, David Strode, '97  
\*Jefferson, Charles L., '59  
\*Jefferson, Edward, '73  
Jefferies, James A., '71  
Jeliff, Glenn E., Sp. '13  
Jenkins, Benjamin Herr, '06  
Jenkins, David Evans, '99  
Jenkins, Frank Heiston, '98  
Jenks, William Earl, '81  
\*Jenks, William J., '42  
\*Jennings, Isaac Astor, '97  
\*Jennings, Joseph, '94  
Jerger, Louis Henry, Jr., '12  
Jessup, Walter, '06  
Jettou, James Stuart, '01  
Joerg, Walter Hamilton, '05



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- John, Harry Joseph, '92  
 John, Hibbert P., '72  
 Johns, Frank James, '97  
 Johnson, Adam Rankin, '91  
 Johnson, Albert Burtis, '96  
 Johnson, Barclay, '71  
 Johnson, Charles Emerson, '20  
 Johnson, Charles Herbert, '05  
 Johnson, Chancey Nicholas, '03  
 Johnson, Charlton Graham, '96  
 Johnson, Chester, '81  
 Johnson, Clarence Paul, '14  
 Johnson, Claude Grant, '88  
 Johnson, David Emil, '11  
 Johnson, Edward Franklin, '92  
 Johnson, Ernest Irvin, '14  
 \*Johnson, Frederick Leighton, '88  
 Johnson, George Hoopes, '74  
 Johnson, John George, '78  
 Johnson, Olive Curtis, '96  
 \*Johnson, Seth Caleb, '86  
 Johnson, Sidney, '21  
 Johnson, Silas Walton, '75  
 Johnson, Theodore Milton, '83  
 Johnson, William Anthony, '90  
 Johnson, William Arthur Sterling, '88  
 Johnston, Frank Elmer, '86  
 Johnston, Ralph Rupp, '08  
 \*Johnston, Robert H., '74  
 Johnston, Thomas Crawford, '84  
 Johnstone, Henry Havelock, '87  
 \*Jones, Alfred, '52  
 Jones, Charles Lyston, '95  
 Jones, Chester Kimmerer, '17  
 Jones, Clarence E., '03  
 \*Jones, D. Augustus, '69  
 \*Jones, Daniel R., '83  
 \*Jones, Daniel S., '43  
 Jones, David J., Sp. '09  
 Jones, Edward B., '67  
 \*Jones, Edward C., '64  
 Jones, Elisha Roy, '08  
 Jones, Ellsworth R., '10  
 Jones, Elwyn, '15  
 Jones, Evan Albert, '06  
 Jones, George D., '72  
 Jones, Harry Ellsworth, '85  
 Jones, Henry Morford, '83  
 Jones, Herbert Light, '17  
 \*Jones, Howard Grant, '75  
 Jones, Howard Harlan, '02  
 \*Jones, Isaac C., '50  
 Jones, Isaac Penrose, '78  
 Jones, J. Morris, '73  
 \*Jones, James Miles, '83  
 \*Jones, John Comer, '96  
 \*Jones, Joshua S., '43  
 Jones, Lester David, '96  
 Jones, Levi William Samuel, '04  
 Jones, Lysander Mann, '88  
 \*Jones, Peter Lawrence, '89  
 Jones, Robert Earle, '04  
 \*Jones, Roland Davis, '79  
 \*Jones, Samuel Stephen, '86  
 \*Jones, Samuel Taylor, '64  
 \*Jones, Thomas Morgan, '96  
 Jones, William Carroll, '88  
 Jones, William Hewitt, '91  
 Jones, William Willets, '94  
 Jorczak, Stanley Francis, '18  
 Jordan, Calvin, '94  
 Jordan, Herbert Victor, '15  
 Jordan, Howard Marion, '92  
 Jorden, Henry A., '68  
 Josephs, Aaron Harry, '19  
 \*Jost, Washington William, '80  
 Joy, Charles Linnaeus, '81  
 \*Judd, James Frederick, '84  
 Judd, James Frederick, '18  
 Jummel, Frank R., '74  
 Jump, Henry Draper, '90  
 Jungkunz, William Frederick, '83  
 Jungman, Emil, '79  
 Jungman, Julius, '71  
 Juresco, Samuel, '21  
 Justice, Richard Somers, '75  
 \*Kachline, Frederick William, '94  
 Kaderly, Eugene John, '99  
 Kadish, Charles J., '71  
 Kaebler, Carl Frederick, '11  
 Kaempfer, Emile F., '83  
 Kaercher, Henry Festus, '92  
 Kahler, Frank Lot, '14  
 Kahn, Charles, Sp. '20  
 Kahnweiler, Bertram, '05  
 \*Kain, John Kauffman, '98  
 Kain, William Wilkins, '79  
 Kalbach, Charles Peter, '95  
 Kalbach, Harry Adam, '94  
 Kalenborn, Rudolph Alexis, '93  
 Kalkman, Henry Alfred, '95  
 Kalmbach, Henry George, '83  
 \*Kalteyer, Moritz, '86  
 Kalteyer, William Charles, '88  
 Kalusdian, Vartan Mardiros, '16  
 Kane, Bernard, '17  
 Kane, Joseph Thomas, '21  
 \*Kannal, Emmet, '71  
 Kantner, Brooke Bryon, Sp. '20  
 Kantner, Harry Baker, '89  
 Kapler, Amos William, '17  
 \*Kappes, Frederick Franklin, '88  
 Kappes, George Lonis, '94  
 Kappes, John Jacob, '89  
 \*Karch, Joseph, '68  
 Karcher, James Daniel, '92  
 Karlheim, Dennis William, '18  
 Karn, John William, '17  
 Karnauskas, Agatha E., (Mrs. Runk), '16  
 Karns, Harry Clifford, '05  
 Katsky, Jacob Herman, '19  
 Katz, Ray Parris, (Mrs.), '21  
 Kauffman, Irwin Harry, '21  
 Kauffman, John William, '95  
 Kauffman, Walter Melvin, '14  
 Kaufman, John F., '57  
 Kaufman, Joseph, '71  
 Kaufman, Renben M., '95  
 Kay, Samuel D., '68  
 Kays, Loren Dewey, '79  
 Kazanjian, Rupen Hagop, '00  
 Kearney, Francis Joseph, '21  
 Kearney, Howard C., '61  
 \*Kearney, William H. Z., '56  
 Kearns, William, '93  
 Keasbey, Henry G., '73  
 Keck, Frank Peter, '87  
 \*Keck, George O., '73  
 Keefer, Charles DeWalt, '88  
 Keefer, Edgar Cyrus, '93  
 Keefer, Norman David, '16  
 Keeler, Charles Elmer, '88  
 Keely, Henry Edgar, '04  
 Keely, Robert Russell, '16  
 \*Keen, Francis, '65  
 Keen, George Carl, '98  
 \*Keenan, Augustus Henry, '74  
 Keenan, John Joseph, '98  
 Keene, Elmer George, '12  
 Keener, Carl Franklin, '12  
 \*Keener, James Blaine, '03  
 \*Keeney, Caleb R., '45  
 Keeney, William Reynolds, '78  
 Keesal, Sarah, '21  
 \*Keffer, Frederick A., '60  
 Kehr, Erney Cornelius, '10  
 Keifer, John, '87  
 Keim, Allen Christian, '09  
 Keim, Frederick John, Jr., '09  
 Keim, Joseph Paxson, '98  
 \*Keiper, Harvey Lafayette, '92  
 Keir, William George, '88  
 Keiser, Charles Raymond, Sp. '08  
 Keiser, Frederick Ilick, '99  
 Keiser, Max, '12  
 Keiser, Paul Raymond, '18  
 Keister, Vastine Atkinson, '10  
 Kelchner, Charles Eber, '96  
 Kelchner, Charles Franklin, '87  
 Kelchner, Lawrence Samuel, '17  
 \*Kellam, Stewart, '71  
 Kellam, Warrington Elwood, '21  
 Keller, William Albert, '02  
 Keller, Albert Paul, '75  
 Keller, Alexander George, '85  
 Keller, Alexander George, Jr., '18  
 \*Keller, Alvin Henry, '76  
 Keller, Augustus Herman, '90  
 \*Keller, Benjamin C., '90  
 Keller, Charles Emery, '87  
 Keller, Charles Franklin, Sp. '04  
 Keller, Frederick Eugene, '13  
 Keller, Frederick Rudolph, '84  
 \*Keller, George Dering, '84  
 Keller, John William, '84  
 \*Keller, Martin Luther, '03  
 Kelley, Alfred Logan, '96  
 Kelley, John Forrest, '17  
 Kelley, John Joseph, '94  
 Kellner, Henry Charles Frederick, '95  
 Kelly, Earl Leslie, '09  
 Kelly, Francis Patrick, '95  
 Kelly, Irving Washington, '81  
 Kelly, John P., '89  
 \*Kelly, Patrick Mulcahy, '79  
 Kelly, Thomas Joseph, '08  
 \*Kelly, William Clarence, '84  
 Kelly, William Daniel, '86  
 \*Kelty, Clement, '69  
 Kelty, Frederick Brauns, '06  
 \*Kemble, Henry B., '60  
 \*Kemble, James, '61  
 \*Kemmerer, Newton H., '72



- Kemp, Lucien Scott, '99  
 Kempte, Floyd Budd, '03  
 Kendall, John H., '56  
 \*Kendig, Allen Jesse, '90  
 Kennedy, Albert Dennis, '89  
 Kennedy, Charles Francis, '07  
 \*Kennedy, Charles W., '65  
 Kennedy, Edwin Russell, '93  
 Kennedy, Francis, '59  
 \*Kennedy, George W., '69  
 \*Kennedy, Harry Milton, '90  
 \*Kennedy, Robert J., '37  
 Kennedy, William, '05  
 Kenney, Edward Francis, Sp., '12  
 Kentch, Mortimer Adrian, '14  
 \*Kenworthy, James, '63  
 \*Kerworthy, John, '94  
 Keogh, Francis Joseph, '86  
 \*Kephart, James Watson, '15  
 Kepner, Russel Albert, '21  
 Kepner, Weldon Stover, '98  
 \*Keppler, Charles Lewis, '92  
 Keppler, John Fred, '13  
 Ker, Heber, Jr., '83  
 Kercher, Edwin Harry, '95  
 Kerchner, Robert, '18  
 Kern, Alvin Henry, '13  
 Kern, Franklin, '90  
 Kern, James Pecor, '80  
 Kern, Samuel Benjamin, '05  
 Kern, Stanley Atkins, '12  
 \*Kernan, Joseph Halbert, '78  
 Kernan, Thomas Edward Barron, '78  
 Kerr, Frank Gault, '83  
 Kerr, John Henry, '81  
 Kerr, Stirling, Jr., '80  
 Kerr, W. D'Olier, '83  
 Kervey, Harry R., '70  
 Kessler, Edward Francis, '91  
 \*Kessler, Lawrence Anthony, '97  
 Ketcham, Stephen Rush, '85  
 Ketterer, Martin, '96  
 Kettl, Robert Michael, '06  
 Keuper, Joseph Thomas, '20  
 Keyes, James Elihu, '91  
 Keyes, Frank Williamson, '86  
 Keyes, Minor Ellery, '94  
 \*Keys, John Cathcart, '83  
 \*Keys, Thomas Franklin, '80  
 Keys, William Wallace, '10  
 Kiedaisch, John Frederick, Jr., '86  
 Kiefer, William Frederick, '00  
 Kielhorn, Henry, '73  
 Kiely, Eugene Ignatius, '19  
 Kilgus, Harry Edward, '00  
 Kilgus, John Frank, '89  
 Kilgus, William Michael, '89  
 Kilion, Rebecca Elizabeth (Mrs. Steiner), '04  
 Kille, Harry George, '73  
 Killen, William Harry, '21  
 Killiam, William Smith, '96  
 \*Killingbeck, William John, '80  
 Kimberlin, Frederick William, '99  
 Kimbrough, James M., '75  
 Kinbach, Edwin Homer, '13  
 Kincaid, Raymond Keck, '00  
 Kind, Paul Adolph, Sp. '14  
 \*Kindig, Isaiah Henry Schuyler, '76  
 \*Kindig, Rudolph, '83  
 Kindt, Samuel Peter, '16  
 King, Albert Joseph, '95  
 \*King, Alexander, '74  
 King, Frank Martin, '15  
 King, George Henry, '79  
 King, Grant Wagner, '03  
 King, Jacob Harris, '16  
 King, James David, '98  
 King, John Blair Smith, '75  
 King, Lloyd Stanley, '00  
 King, Raymond Wesley, '21  
 King, Standish Boardman, '18  
 \*King, William, '51  
 King, William Henri, '84  
 King, William Henry, Sp. '06  
 \*Kingsbury, Howard, '74  
 Kingston, Charlie Davis, '89  
 Kinnear, James Aloysius, '74  
 Kinnear, William Kenneth, '09  
 Kinney, Floyd Carroll, '07  
 Kinney, John Francis, '21  
 Kinney, Marshall Gerton, Jr., '75  
 Kinports, John Henry, '77  
 Kinsel, Grantham Arthur, '91  
 Kinsey, Albert Henry, '84  
 Kinsey, Calvin Otto, Sp. '99  
 \*Kinsey, Joseph Samuel, '93  
 Kinsler, Lemuel Pastorius, '94  
 Kintzer, Harry Augustus, '00  
 Kirby, Charles Pitman, '81  
 Kirby, Frank Brennand, '98  
 Kirchhoff, Harry C., '93  
 \*Kirk, Frank Hall, '02  
 Kirk, Grant Elmer, '85  
 Kirk, James Edgar, '83  
 \*Kirk, John Hammond, '93  
 Kirk, Lewis Richardson, Jr., '94  
 Kirk, Samuel Bird, '94  
 \*Kirkbride, Joseph C., '63  
 \*Kirkbride, Joseph J., '70  
 Kirksam, Walter Agan, '86  
 Kirlin, Charles C. H., '97  
 Kisner, George Williamson, '03  
 Kitchen, Charles E., '91  
 \*Kitchen, William R., '35  
 Kitzmiller, Dixon Gorgas, Jr., '15  
 Kitzmiller, Frank Kurtz, '90  
 Kizer, Thomas Joseph, '86  
 Klapp, Elmer Augustus, '87  
 Klapp, Samuel Clarence, '97  
 Klebanoff, Bernard, '18  
 Klebanoff, David, '13  
 Kleckner, Solomon, '09  
 Klein, Lewis, '21  
 Kleinfeld, Louis J., Sp. '16  
 Kleinstuber, William George, '91  
 \*Klemet, John, '80  
 Kline, Alvin B., '92  
 Kline, Frank, '96  
 Kline, Harry Herbert, '95  
 Kline, Harry Joseph, '93  
 Kline, Horace Thompson, '83  
 Klingaman, Claude Raymond, '17  
 Klingensmith, Charles Daniel, Sp. '09  
 Klingler, John Harrison, Jr., '83  
 Klonoski, Edmund Jerome, '21  
 Klopfenstein, John A., '86  
 Klopp, Edward Jonathan, '01  
 \*Klopp, Eli Leimbach, '77  
 Klopp, Henry Leimbach, '89  
 \*Klopp, Lewis Calvin, '94  
 Klopp, Peter Paul, '89  
 Klopp, Wallace Ellwood, '10  
 Klopp, William Raymond, '09  
 Klotz, Luther Wenner, '04  
 Klucher, John Albert, '04  
 Klucher, Paul Edgar, '15  
 \*Klump, Charles C., '68  
 \*Klumpe, George Lewis, '84  
 Klumpey, Henry Chester, '99  
 Knabb, Daniel Milton, '02  
 Knauer, August Henry, '95  
 Knauf, Melvin Sterner, '12  
 Knaus, Frederick Jacob, '82  
 \*Knauss, Howard James, '02  
 Knauss, Niles Amadus, '15  
 \*Kneeder, Harry Howard, '82  
 \*Kneeshaw, William W., '66  
 Knerr, Charles George, '01  
 Knight, George W., '72  
 Knight, Harry Martin, '08  
 Knight, Howard, '86  
 \*Knight, William E., '38  
 Kniley, Eugene Walker, '10  
 Knissell, Sidney Lackey, '86  
 Knoefel, Arthur Eugene, '96  
 Knoepfel, Harry John, '17  
 Knoop, Edgar T., '93  
 Knouse, Jacob Hamilton, '82  
 Knouse, John Allan, '20  
 Knouse, Ralph Edward, '04  
 Knowles, George Alexander, '91  
 Knowlton, George Harry, '81  
 Knox, Richard C., '75  
 \*Koch, Charles Herman, '86  
 Koch, Charles Nicholas, '20  
 Koch, Chauncey Astor, '17  
 Koch, Christopher, Jr., '99  
 Koch, Francis Joseph, '74  
 Koch, Harry Warren, (now Cook), '93  
 Koch, Howard Jonathan, '12  
 Koch, Louis Homer, '91  
 Koehner, David George, '93  
 Koebert, Jacob Frank, '07  
 Koebler, Arthur Glenn, '07  
 Koehler, George, '98  
 \*Koehler, Otto F., '76  
 \*Koehler, Walter William, '77  
 \*Koempel, Robert August, '76  
 \*Koenig, Albert, '93  
 Koenig, Otto Louis, Jr., '19  
 Koenig, William Matthew, '84  
 Koeppen, Albert Charles, '93  
 Koffs, Joseph, '19  
 Kohl, Emil John, '82  
 Kohler, Charles, '93  
 Kohlerman, John William, '80  
 Kohnle, William Charles, '15  
 Koller, William Sides, '15  
 \*Kollock, M. Henry, '55  
 \*Kolp, Christopher Henry, '69  
 Kolp, Jacob Loudenslager, '76  
 Konover, Harold Doble, '98  
 Kooker, Jacob Glaes, '87

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- \*Kooker, John Leedom, '81  
 Kooker, John Leedom, Jr., '10  
 Koons, Milton Henry, '90  
 Kopp, Raymond Harold, Sp. '20  
 Kopp, Yocum Andrew, '04  
 Korb, Edward Michael, '10  
 Kornacvitz, Frank Stanley, '16  
 Korost, Leonard A., '21  
 Koser, Newton Alexander, '82  
 Kostenbauder, George Henry, '14  
 Kottcamp, Abraham Francis, '93  
 Kottka, Ray Weaver, '93  
 Kraemer, Henry, '89  
 Kraemer, William, '08  
 Krall, George Heyde, '92  
 Krall, John Thomas, '92  
 Kram, George Washington, '76  
 Kramer, Charles Frederick, '82  
 Kramer, George Henry, '97  
 \*Kramer, Howard Samuel, '77  
 Kramer, Ira Daniel Webster, '75  
 Kramer, James, '10  
 Kramer, Jerre Ray, '93  
 Kramer, Matthew, '20  
 Kramer, Nathan Henry, '20  
 Kramer, Raymond John, '11  
 \*Kratz, Mahlon, '78  
 \*Kraus, Jacob William, '12  
 Kraus, Otto, '75  
 Kraus, Otto Louis, '01  
 Kraus, William Frederick Constantine, '99  
 Krause, John Phaon, '05  
 \*Krauss, Edward, '17  
 Krauss, Frederick, '92  
 Krauss, Gustav Adolf, '89  
 Krauss, Gustav Adolph, Jr., Sp. '14  
 Krauter, Charles Henry, '81  
 Kreamer, Oscar Perry, '11  
 Krebs, Charles, '87  
 Krebs, Harry Jacob, '92  
 Krebs, Paul H., '91  
 Krechmer, Max Ellis, '17  
 Krehl, Benjamin, '99  
 Kreider, Frank Light, '94  
 Kreider, Obed Emmert, '21  
 Krell, Frederick Balthaser, '82  
 \*Kremer, Walter Harry, '82  
 Kresge, Harry Daniel, '09  
 Kressler, George D., '71  
 Krewson, William Egbert, Sr., '69  
 Krewson, William Egbert, Jr., '98  
 Krick, Harry Nunemacker, '14  
 Krider, James Delaplaine, '83  
 Krider, Richard C., '90  
 \*Kroeg, Andrew Alexander, '78  
 Kroh, Harry Kieffer, '86  
 Krollpeiffer, Frederick William, '89  
 Krout, Albert, '78  
 Kruell, Frederick John, '74  
 \*Krum, Charles Franklin, '84  
 Krum, Harry James, '09  
 Krumrine, Sidney, '94  
 Kuder, William, '88  
 \*Kuehnel, Gustav Frank, '85  
 \*Kuhn, George R., '71  
 \*Kuhn, Louis De Barth, '51  
 Kuhn, Norman Archibald, '77  
 Kuhns, Edwin Jacob, '94  
 Kulp, Jacob Harold, '14  
 Kulp, William Austin, '91  
 Kumpf, George Brenner, '04  
 \*Kunkel, Daniel, '93  
 Kunkel, William Evans, '85  
 Kunkle, William Henry, '90  
 \*Kunkle, Willis George, '92  
 Kunz, Charles Cornelius, '96  
 \*Kurtz, Augustus M., '67  
 Kurtz, David Haines, '86  
 Kurtz, John Rabold, '16  
 Kurtz, William Rabold, '20  
 Kurtzman, LeRoy William, '05  
 \*Kusenber, Louis Carl, '84  
 Kutcher, Maurice Richard, '21  
 Kutteroff, Charles Frederick, '14  
 Kutz, Wilson Luther, '75  
 Kutzner, John Douty, '84  
 Kwiatkowski, Adam John, '20  
 Kyle, Christian Bauer, '02  
 Kyle, Elmer Bryan, '85  
 \*Kyner, James Almer, '85  
 Kyser, George Herbert, '98  
 Labbé, Edward Blaise, '95  
 Lache, Oscar Julius, '87  
 Lachenmayer, Henry Julius, '96  
 \*Lack, Charles Eugene, '93  
 Lackey, Richard Henry, '87  
 LaCourse, Anthony, Jr., '14  
 Lactman, Jane, '18  
 Lacy, Burdett Seldon, '01  
 Lacy, William Reif, '83  
 Ladakis, Triantophyllo Constantine, '08  
 \*LaDow, Addington, '92  
 LaDow, Claude Spencer, '15  
 LaDow, Harry L., '08  
 Laessle, Henry Adolph, '93  
 Lafean, Alfred Henry, '81  
 Lafean, Edward Charles, '86  
 Lafean, William Leroy, '04  
 \*Laidley, Joseph, '50  
 \*Laird, William R., '66  
 Lamar, William Robinson, '93  
 Lamas, Fernando, Jr., '07  
 LaMaster, Harvey Gillette, '95  
 \*Lamb, Sylvan Deering, '10  
 Lambert, George Taylor, '93  
 Lambert, Herbert Grayson, '95  
 Lambert, John Albert, '82  
 Lambert, Roy Albert, '08  
 \*Lamhofer, Edward, '77  
 Lamm, Jasper Herman, Sp. '21  
 \*Lammer, Francis Joseph, Jr., '86  
 \*Lammer, Jacob Sigismund, '92  
 \*Lamparter, Eugene, '69  
 Lancaster, Brenton Solomon, '95  
 Lancaster, Thomas, '55  
 \*Lancaster, Thomas A., '59  
 Landauer, Oscar, '00  
 Lander, Mehnert, '15  
 \*Landis, Charles Paul, '92  
 Landis, Frank Theodore, '85  
 Landis, Frederick Samuel, '08  
 Landon, Francis Patterson, '92  
 Landschutz, Peter, '77  
 Lane, Paul Stewart, '07  
 Lang, Charles Nicholas, '10  
 Lange, Charles Richard, '73  
 Langeluttig, Joseph Ellis, (now Lange), '17  
 Langton, Daniel Joseph, '11  
 Lanius, Ross McDonald, '95  
 Lanterman, Bartley Larue, '94  
 \*Lantz, John Joseph, '87  
 Lantz, William Henry, '80  
 Lapayowker, Adolph, '21  
 LaPlace, Edgar Ransom, '91  
 Larkins, Charles Thomas, '92  
 Laros, William Jonas, '10  
 LaRue, Raymond Howell, '13  
 \*LaRue, Willis Leslie, '95  
 Lascheid, Peter William, '81  
 Lashell, Charles, '76  
 Laskowski, Adolph Leon, '20  
 Lasley, Matthew Ivey, '16  
 Latchford, Orwan Luther, '98  
 Latham, Daniel Henry, Jr., '77  
 Lathrop, William Norman, '11  
 Latin, Adolph, '89  
 \*Latin, George, '80  
 Latta, Eugene Stanton, '15  
 Latterner, Carl Daniel, '87  
 \*Latz, Frederick William, '74  
 Lan, Scott Wolford, '95  
 Laubach, Edwin John, '06  
 \*Laubach, William Harrison, '84  
 Laucks, Frederick Scholl, '17  
 \*Laucks, William Irwin, '96  
 Lauer, Emanuel Hiram, '95  
 \*Lauer, Julius Paul, '99  
 Laughlin, Albert Russell, '97  
 Lautenbacher, Irvin Lincoln, '85  
 \*Lautenbacher, William Roth, '96  
 Lauter, Mary Jennie (Mrs. Bellak), '04  
 Laval, William John, '85  
 Lavenson, Isaac, '80  
 \*Laver, Philip Jacob, '76  
 Law, Harold Noble, '20  
 \*Lawall, Charles Elsner, '84  
 LaWall, Charles Herbert, '93  
 LaWall, Edgar Seiple, '14  
 Lawall, Edmund D., '55  
 Lawall, Edward Jacob, '81  
 \*Lawall, Harry Clarence, '79  
 LaWall, William Harland, '20  
 Lawless, Martin Joseph, '07  
 Lawrence, Harry Dittmar, '12  
 Lawrence, Samuel Comfort, '86  
 \*Laws, James, Jr., '48  
 Laws, Thomas Davis, '08  
 Lawton, Henry Cuthbert, '95  
 Lax, Isadore, '16  
 \*Laycock, Washington, '58  
 Leaman, Davis Hendrix, '95  
 Leaman, John Henry Benjamin, '03  
 \*Leamy, James C., '55  
 Leaphart, Harry Landis, '12  
 Leathers, Fred S., Sp. '14  
 LeBar, John Amzi, '16  
 Lebo, Frank Clayton, '07  
 Lechler, Harry Percy, '75  
 \*Lee, Charles Sheppard, '70  
 \*Lee, Clement J., '35



- \*Lee, Emmor H., '71  
 \*Lee, Harry Francis, '96  
 \*Lee, Hiram C., '46  
 Lee, Joseph Lester, '18  
 Lee, Robert Edward, '03  
 Lee, Walter Evan, '98  
 \*Lee, William Estell, '72  
 Leech, David Malcolm, '96  
 Leech, Gordon, '12  
 Leedom, Charles, '81  
 Leedom, Morris, '95  
 Leeds, Harry Bellerjean, '84  
 LeFevre, Acton Ash, '94  
 Lefferts, Henry Tomlinson, '92  
 Leh, Elwood Henry, '18  
 Leh, George Dobson, '93  
 Leh, William Jennings Bryan, '20  
 \*Lehbach, Paul Frederick, '63  
 Lehman, Albert A., '12  
 Lehman, Anna Isabel, '21  
 Lehman, Edward, '91  
 Lehman, Frederick Charles, '83  
 Lehman, George Theodore, '99  
 Lehman, John Christopher, '05  
 \*Lehman, J. Ehrman, '71  
 Lehman, John Wesley, '78  
 Lehman, Joseph David, '95  
 \*Lehman, Samuel William, '00  
 Lehman, Walter, '70  
 Lehmann, Charles, '90  
 Lehmann, Louis John, '88  
 Lehr, Irvin Elias, '16  
 \*Lehr, Joseph Frank, '87  
 Lehrfeld, Manuel, '17  
 Lehrman, Isador, '13  
 Leib, Wilbur John, '01  
 Leibold, Louis Phillip, '74  
 Leibowitz, Jacob Lewis, '17  
 Leidich, Percy Landis, '12  
 Leidich, Stewart Grier, '14  
 Leidich, Sylvester W., '93  
 \*Leidy, Thomas, '45  
 \*Leigh, Charles Neal, '90  
 Leigh, Francis Bernard, '20  
 Leinbach, Allen Abraham, '14  
 Leinbach, Frank Irwin, '91  
 Leine, Arthur Morris, '89  
 Leithead, Robert, Jr., '84  
 Leix, Louis, '93  
 Lemberger, Joseph L., '54  
 Lemen, Hermann Light, '11  
 Lemley, Samuel, Jr., '72  
 Lengel, James Petri, '10  
 Lenhardt, Oliver Franklin, '88  
 Lenhart, Clarence Milton, '12  
 Lenhart, Enos Samuel, '97  
 \*Lenher, Samuel, '47  
 LeNoir, Philip Marion Hutchins, '05  
 Lenninger, Clifford, '16  
 Leonard, Isaac Edward, '84  
 Leonhard, Louis Charles, '83  
 Lerch, William I., '73  
 \*Lerchen, Hermann, '78  
 Lerman, Benjamin, '21  
 Lerner, Albert, '16  
 LeSage, George Louis, '96  
 Lescher, George Christian, '74  
 Lesoure, Anna Rosalie (Mrs. William Herbert Welch), '02  
 Leshner, John Becker, '89  
 Leslie, Harry Carter, '96  
 \*Leslie, Henry W., '62  
 \*Letchworth, Albert S., '40  
 Letoriere, Oscar F., '82  
 \*Letts, Charles, '61  
 Leuschner, Paul, '87  
 Leuschenring, Herman, '55  
 LeVan, Arthur Walter, '09  
 Levan, George B., '10  
 Levan, George Monroe, '09  
 Levan, Walter, '97  
 Lever, Abraham Wolf, '07  
 Levering, George Washington, '77  
 Levering, Howard Malcolm, '78  
 Levering, John Hartranft, '02  
 \*Levering, P. Wharton, '66  
 \*Levi, Alexander Benjamin, '79  
 Levi, Gustav Byron, '13  
 Levin, Sarah, '19  
 Levy, David Wilson, '75  
 Levy, Joseph Jacob, '00  
 Levy, Lewis, '61  
 Levy, Robert Allen, '15  
 Lewin, Richman Garrison, '04  
 Lewis, Albert Morgan, '12  
 \*Lewis, Arthur Everett, '80  
 Lewis, Arthur Rimmer, '95  
 Lewis, Daniel William, '97  
 Lewis, David, Jr., '54  
 Lewis, Fielding Otis, '01  
 Lewis, Griffith Robert, '89  
 Lewis, Howard Hornberger, '96  
 Lewis, Herbert Willard, '02  
 \*Lewis, John R., '47  
 Lewis, Llewellyn Hughes, '85  
 Lewis, William M., '85  
 Lewis, William Thompson, '77  
 \*Lichtenberger, Frederick Jacob, '85  
 Lichtenstein, Ivan, '09  
 Lide, Leighton Elba, '02  
 Lieber, Maurice L., '21  
 Lieberman, Anna R., '21  
 Liebert, Charles Frederick, '97  
 Liebert, Louis Williams, '01  
 Ligan, Robert Franklin, '15  
 Light, Albert Abraham, '08  
 Light, Charles Augustus, '03  
 \*Light, James Raymond, '96  
 Light, Mandel, '08  
 Light, Walter Felix, '94  
 Light, William H., '72  
 \*Light, William Wirt, '83  
 \*Lightcap, Thomas J., '70  
 Lightner, Walter Irvin, '11  
 \*Lillard, Benjamin, '68  
 Lilly, Charles Foster, '78  
 Lilly, Eli, '07  
 \*Lilly, Howard Harrison, '94  
 Lilly, Josiah Kirby, '82  
 Lincoln, George Washington, '98  
 Linden, Washington Emil, '81  
 Lindenbaum, Isadore Joseph, '16  
 Lindewald, Wilhelm Edward, '77  
 Lindig, Charles Warren, '98  
 Linford, Louis George, Sp. '16  
 Lindsay, John B., '65  
 Link, Ferdinand, '60  
 Link, John William, '08  
 \*Linn, Claudius B., '38  
 Linn, William Elliott, '95  
 \*Lins, Frank Pierce, '76  
 \*Lins, John Allen, '81  
 Linthicum, Theodric C., '76  
 Linton, Malcolm Kenneth, '07  
 Lippen, Harry, '88  
 Lippen, Jonathan Knight, '91  
 \*Lippincott, Charles Drum, '76  
 Lippincott, George C., '71  
 Lippincott, Jesse Diverty, '94  
 Lippincott, Melconur Restore, '17  
 \*Lippincott, Robert C., '66  
 \*Lippincott, Samuel Wesley, '89  
 Lippmann, Max, '93  
 Lipschultz, Maxwell E., '21  
 \*Lipscomb, Lawton Carlisle, '92  
 Lipsky, Benjamin, '21  
 Lischer, Henry, '16  
 Liss, Ethel, '19  
 Lissy, Joseph Myer, '21  
 Lits, Walter Kulp, '78  
 Litsch, George Mathias, '12  
 Lithgow, William David, '04  
 \*Little, Arthur H., '67  
 Little, Percel Hayden, Sp. '20  
 Littlefield, Bradford Allen, '96  
 Littlefield, Eugene Ricker, '05  
 \*Livermore, William W. D., '49  
 \*Livingood, Albert John, '90  
 Llewellyn, Walter Palmer, '14  
 Llewellyn, William Henry, '77  
 Lloyd, Ephraim Augustus, '96  
 \*Lloyd, Evan Davis, '78  
 Lloyd, Harry Ashton, '06  
 Lloyd, Henry H., Sp. '83  
 Lloyd, Richard Louis, '94  
 Lochman, Charles Napier, '85  
 Lock, Williams, '99  
 Locke, John Herrman, '79  
 \*Locson, James S., '67  
 \*Loder, Constantine G. A., '71  
 Lodge, Roy Paul, '14  
 Loehle, Frank Aloysius, '15  
 Loehle, John Francis, '81  
 \*Loelkes, Alexander George, '91  
 Loeper, Charles Peter, '93  
 Loesch, William, Jr., '90  
 Loewenthal, William A., '86  
 Lofland, William Frederick, '12  
 Lohrman, Leroy Oliver, '16  
 Londa, Lena, Sp. '19  
 Long, Charles Henry, '95  
 Long, Christian Leitner, '91  
 Long, Henry Clay, Jr., '04  
 \*Long, Howard Edgar, '93  
 Long, James Grier, '95  
 \*Long, John C., '61  
 Long, John Nathan Grier, '87  
 Long, Michael Richard, '04  
 Long, Samuel S., '72  
 Long, William Henry, Jr., '92  
 Longaker, Daniel, '79  
 Longaker, Louis, '11  
 Longfellow, Lawrence Layton, '07  
 Longmire, Charles Henry, '96  
 Longshaw, Thomas Elmer, '97  
 Longshore, John Liggett, '87



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- \*Loos, Frederick, Jr., '80
- Loper, Lorenzo Dow, '78
- Lorah, James Reber, '92
- \*Lorah, Lester Irwin, '92
- \*Lord, Anna (Mrs. J. E. S. Bell), '87
- Lord, George W., Sp. '07
- Lorenz, Charles Gustave, '95
- \*Loser, Damian Aloysius, '95
- \*Lott, Samuel, '70
- \*Louden, G. Graves, '47
- Louderbough, Franklin Pierce, '76
- Loughhead, Raymond Blythe, '86
- Loughlin, Helen Frances, '09
- \*Loughridge, Samuel Steen, '87
- Lounds, Albert Edward, '10
- Lounsbury, Harry, '16
- Lounsbury, William Atkinson, '10
- Lovatt, James Sidney, '04
- \*Love, John Henry, '81
- Love, Thomas B., '99
- Loveland, Roland Wayne, '94
- Loveless, Earl Martin, '10
- Lowe, Clement Belton, '84
- Lowe, Clement Wakelin, '08
- Lowe, Edgar Walthour, '11
- \*Lowenberg, Joseph, '89
- Lowenthal, Joseph, '20
- Lower, George Grafley, '95
- Lower, John Wesley, '18
- Lowry, Sydney Allen, '90
- Lowther, Frederick Samuel, '17
- Loyer, Marcus Brownson, '03
- Lubarsky, Abraham R., Sp. '20
- Luburg, Leon Franklin, '96
- \*Luckenbach, Edward H., '70
- Luddy, James Darragh, '01
- Ludlam, William Hall, '88
- Luebert, August Gustav, '98
- Luebert, Frederick George, '01
- Luedecke, Ernest, '12
- \*Luerssen, Frank, '81
- Luethe, Amandus Julius, '80
- Luft, George William, '94
- Luhr, Fred A., '97
- Lukens, Charles Baker, '97
- Lulie, George, '15
- \*Lumb, Abraham Lawrence, '74
- Lung, Kwai Shoon, '18
- Luongo, Guy R., Sp. '19
- Lupin, Emanuel, '92
- Lupus, Herman Ernst, '91
- Lustig, Emil, '77
- Luther, Maurice Augustine, '16
- Lutz, Irwin Breneman, '91
- \*Lutz, Walter Preston, '95
- Lutz, Wilbur P., Sp. '21
- Lutz, William Dellest, '91
- Lyman, David Christopher, '82
- Lynch, Albert James, '88
- \*Lynch, Daniel Joseph, '94
- Lynn, Carl Harold, '21
- Lynn, Ellsworth Waldemar, '11
- \*Lyneman, Felix Anthony, '77
- Lyons, Frank Lloyd, '91
- Lyons, George, '88
- Lyter, Charles Smith, '07
- McAleer, Harold, '16
- McAlister, Alexander, '82
- McAlister, James Criswell, '07
- McAllister, Lory Curley, '20
- McAninch, Harry Elmer, '10
- McAnulty, John Francis, Jr., '08
- McBath, William Andrew, '86
- McBride, James, '56
- McBride, Thomas Leroy, '18
- \*McCaffrey, Ward Boleyn, '00
- McCall, Enzer Lewis, '14
- McCambridge, John E., Jr., Sp. '06
- McCambridge, John Edward, '80
- McCandless, Edward Sloan, '92
- McCandless, John Penn, Jr., '21
- McCann, Joseph Augustus, '09
- McCann, Thomas Joseph, Jr., '17
- \*McCanna, John Milton, '95
- McCarney, Merle, '17
- McCarthy, Cornelius Joseph, '86
- McCartney, Frank Stewart, '92
- McCarty, Harland Adair, '13
- McCarty, Raymond Welles, '10
- McCauley, John Sloan, '84
- McCauley, William Aloysius, '20
- McCausland, Alexander Newton, '04
- \*McCausland, James Ralston, '84
- \*McClanahan, John Thomas, '87
- \*McCleary, Harry Walter, '98
- McClellan, Leslie Corwin, '88
- McClements, Oliver Becket, '06
- McClintock, James, '92
- McClintock, Theodore Brown, '99
- McClintock, Wm. Charles, '81
- McCloskey, Chas. Edward Reese, '89
- McCloskey, Sharon Tyndale, '15
- \*McClosky, Wilson Cathcart, '95
- McClure, Berthier, '88
- McClure, Chas. Nevin, '00
- McClure, Clarence Minor, '07
- McClure, Edward Everett Powell, '17
- McClure, Linwood Dunham, '91
- McClure, Maurice Axe, '19
- McClure, Richard Ferris, '99
- McClurg, Benjamin Hoffer, '01
- McCollin, James Garrett, Jr., '99
- \*McCollin, S. Mason, '64
- \*McComas, Chas. Edgar, '79
- \*McConaughy, Albert D., '57
- \*McConn, William John, '84
- \*McConnell, Charles Henry, '86
- McConomy, Paul Lucien, '96
- \*McCorkle, William, '92
- \*McCormick, Charles H., '26
- McCormick, Robert Rogers, '92
- McCorry, Leo Joseph, Sp. '18
- McCoubrie, John Hubert, '21
- \*McCouch, John Wanamaker, '89
- McCoy, Clarence Herbert, '86
- \*McCoy, Cornelius Joseph, '94
- McCoy, Franklin, '84
- McCoy, Thomas Francis, '88
- McCracken, James Henry, '96
- \*McCrea, J. Howard, '73
- \*McCreight, Charles, '94
- McCreight, Robert, '83
- McCullough, Clement Brook, '79
- McCullough, Madison Lovett, '90
- McCutcheon, Thomas Edward, '10
- McDevitt, Henry, '87
- McDermott, Charles A., '58
- McDermott, Robert Joseph, '01
- McDevitt, William, '04
- \*McDonnell, Charles Penceratus, '92
- McDonnell, Joseph Francis, '99
- McDonnell, William Joseph, '00
- McDougall, Robert Davis, '82
- McDowell, Charles Hunt, '89
- McElhenie, Thos. D., '72
- \*McElroy, Archibald C., '64
- McElroy, David Gregory, '08
- \*McElroy, James B., '65
- \*McElwain, Wm. Thomas, '00
- McElwee, John S., '71
- McEntire, Henry Lawrence, '05
- \*McFadden, Eugene A., '79
- McFadden, Robert, '89
- McFadden, Thos. Francis Joseph, '95
- McFadden, Thomas J., '21
- McFall, John Allen, '99
- McFarland, Robert, '93
- McFarland, Robert Montford, '92
- McFarland, Thaddens Day, '86
- McFee, George W., '55
- \*McFeeters, Andrew James, '80
- \*McFerren, Jeremiah Dull, '76
- McGarr, William J., '21
- McGarrah, Wm. Henry, Jr., '02
- McGarrity, Florence M. Raphael, '16
- McGavin, John Thomas, '20
- McGehee, Hanford Bell, '97
- McGhee, Saylor John, '95
- McGinnis, John Frederick, '16
- McGinty, James Michael, '12
- McGonigal, John Aloysius, '10
- \*McGovern, John Francis, '08
- McGowan, Samuel Harbeson, '82
- McGregor, Eugene Charles, '92
- McHale, Frank Patrick, '94
- McHenry, Walter Greenleaf, '96
- McIlvaine, J. L., '60
- McIntosh, John R., '90
- \*McIntyre, William, '63
- McKean, Charles William, '87
- McKean, Harold Andrew, '13
- McKee, Francis Town, '94
- McKee, James H., '61
- McKee, Joseph, '87
- \*McKee, Joseph Allen, '89
- \*McKeenan, George Henry, '77
- McKeel, Charles Baynor, '89
- McKeel, Charles Baynor, Jr., '17
- McKelway, George I., '70
- McKendrick, William James, '18
- McKenzie, Tracy, '84
- \*McKim, Andrew, '43
- McKnight, J. Irwin, '89
- McLarren, Chester Lee, '14
- McLaughlin, Charles Bishop, '96
- McLaughlin, Charles Henry, '05
- \*McLaughlin, Harry Aloysius, '02
- McLaughlin, John R., Jr., '18
- McLaughlin, John T., '70
- McLaughlin, Philip Celestine, '91

- \*McLaughlin, Raphael, '93  
 \*McLeroth, Alexander Hope, '59  
 McMabon, John Leo, '09  
 \*McMaken, Joseph A., '45  
 \*McMechen, Wm. Benjamin, '89  
 \*McMichael, Daniel Webster, '08  
 McMillen, Donald Atlee, '10  
 \*McMinn, Joseph H., '67  
 McMullen, Jacob B., '57  
 McMullin, Albert, '77  
 \*McMullin, Andrew, '77  
 \*McNabb, Henry Steely, '91  
 McNair, Wm. Righter, '95  
 McNeal, Harry B., '94  
 McNeil, Robert, Jr., '76  
 McNeil, Robert Carson, '89  
 McNeil, Thomas Hunter, '97  
 McNelis, Anna Camillus, '17  
 McNerney, Frank M., Sp. '21  
 McNess, Frederick William, '05  
 McNutt, William Clyde, '11  
 \*McPike, William C., '66  
 McRoberts, William B., '75  
 McVey, Vane Howard, '21  
 \*McVickers, John Clarence, '84  
 McWilliams, Lester Mahlon, '20  
 McWilliams, Samuel, '92  
 MacCracken, Edward Glover, '94  
 MacFadden, Warren Lester, '01  
 MacGregor, Albert Dell, '02  
 Machesney, Ray Henney, '12  
 Macias, Francisco P., '17  
 MacInall, Edward, '68  
 \*Mack, James William, '94  
 \*Mack, John Sanford, '90  
 Mackay, John Fraser, '07  
 \*Mackenson, Alonzo George, '78  
 MacKenzie, Edwin Golding, '95  
 Mackey, Edward Scudder, '92  
 Mackey, George Clarence, '92  
 Mackey, Joseph Quarll, '00  
 MacLennan, W. Feinour, '91  
 MacMahon, Francis J., Sp. '21  
 Mackler, Rose (Mrs. Makler), '17  
 \*MacMillan, John Charles, '89  
 MacNair, Edward Dudley, '89  
 MacNair, Ivy Forman, '93  
 MacNair, Whitmel Horne, '83  
 \*Macon, Gideon Hunt, '89  
 MacPhee, John James, '01  
 Macphee, Thos. Duncan, '95  
 MacPherran, Ivan LeRoy, '99  
 MacPherson, Frank Street, '89  
 \*Macpherson, William, '60  
 Maddock, George Frederick, '84  
 Maddock, William Worrell, '83  
 Madeira, Robert Wesley, '88  
 Mader, Elias, '95  
 Mader, James Wilson, '03  
 Madison, Joseph Summerfield, '80  
 Magill, B. Morris, '73  
 Magowan, James Harry, '15  
 Maguire, Andrew Herman Joseph, '84  
 Mahoney, Joseph Robert, '09  
 Maier, Albert Thomas, '17  
 Maier, Charles, '05  
 Maier, Frank Joseph, '00  
 Maier, John, '80  
 Main, Clinton Eugene, '91  
 \*Maish, Henry Chas. Christian, '85  
 \*Maitland, Henry Wilbur, '84  
 \*Malatesta, Joseph Mark, '85  
 Mallard, Oscar Paul, '16  
 \*Mallas, Maurice Louis, '10  
 Mallon, James Peter, '86  
 Malloy, Westley General, '03  
 Malsbury, Hillman Gaskill, '96  
 Maltman, Wm. Stewart, '08  
 Mandelbaum, Benjamin, '18  
 \*Mandelbaum, Lena Leven, '09  
 Manger, Charles Christian, '94  
 Manheimer, Edward Adolphus, '81  
 Manko, Emanuel, '95  
 Manlove, Harry Clayton, '75  
 \*Mann, Charles, '06  
 Mann, George Wagner, '78  
 Mannel, Henry Conrad, '82  
 Manning, Charles LaForge, '92  
 Manter, Fred Augustus, '91  
 Manus, Joseph, '20  
 \*Manus, Richard, '20  
 \*Manz, Constanz, '81  
 Maples, Murf Ford, '96  
 Marbourg, John George, '86  
 March, Garfield, '07  
 \*March, Gilbert, '05  
 Marcus, Simon, '02  
 Margerum, Donald C., Sp. '18  
 Margolin, Fannie Bezman, '02  
 \*Maris, Robert Wood, '89  
 \*Markle, Howard Overholt, '03  
 \*Markley, George H., '54  
 Markley, William Arnold, '91  
 Marley, Richard Cordelion, '78  
 Marquardt, Carl Heinrich, '76  
 Marquardt, Jesse Claude, '87  
 Marsh, Frank Florance, '07  
 Marshall, Alfred Stanger, '80  
 Marshall, Charles Gross, '96  
 Marshall, D. W., '73  
 Marshall, Forrest Scott, '14  
 Marshall, Joseph Hall, '74  
 \*Marshall, Robert T., '68  
 \*Marshall, Rush Porter, '81  
 Marshall, Thomas Carpenter, '10  
 Marshall, Thomas Chew, '83  
 \*Marshall, William Cranthers, '18  
 Marshall, William Elisha, '11  
 Marsteller, Harold Wilson, '21  
 \*Marth, Alfred Robert Franklin, '13  
 Martin, Charles Edward, '02  
 \*Martin, Charles Henry, '87  
 Martin, Emlen, '84  
 Martin, Frederick Adam, '02  
 Martin, George, Jr., '77  
 \*Martin, Isaac J., '35  
 Martin, James Henderson, '92  
 Martin, John Albert, '77  
 Martin, John Albert, '16  
 Martin, John Chrysostom, '76  
 Martin, John Edwin, '84  
 Martin, Joseph Stanislas, '11  
 Martin, Lyman Cleveland, '07  
 Martin, Merry O., '96  
 Martin, Reuben Kanfman, '20  
 Martin, Roy Edgar, '07  
 \*Martin, Samuel W., '73  
 Martin, William Frederick, '90  
 Martindell, William N., '73  
 Martinez, Carmen Aurora, '20  
 Martinez Rebelgo, Cristobal, '17  
 Martinez, Matilde, '20  
 Martz, Samuel George Waslington, '11  
 \*Marvill, Joseph Howard, '91  
 Marxuach, Aciselo, '20  
 Mason, William E. F., '61  
 Masser, Chester Luther, Sp. '16  
 Massenburg, T. L., '57  
 \*Maston, James Augustus, '75  
 Mathers, Grace (Mrs. H. H. Snyder), '98  
 Mathews, William Joseph, '95  
 Mathewson, William, '08  
 Mathis, Franklin Augustus, '82  
 Mathis, Wilbert, '05  
 Matlack, Walter Ball, '02  
 \*Matos, Louis A., '72  
 Matter, Robert Burton, '85  
 Mattern, Russell Kerkslager, '21  
 Mattern, William Kline, '74  
 Matthews, Charles C., '68  
 Matthews, Edgar Morton, '92  
 Matthews, Harold Clifford, '18  
 Matthews, John E., '73  
 \*Matthews, W. Leaming, '82  
 \*Matthias, Joseph Ingles, '81  
 Mattison, Richard V., '73  
 Mattison, Richard V., Jr., '99  
 Mattocks, Brewer, '61  
 Mattson, Hugh Leo Ignatius, '12  
 Matusow, Harry, '97  
 \*Mauch, Charles Milton, Jr., '85  
 Mauger, Harry Fillmen, '01  
 Mauger, Henry Snyder, '87  
 Mauger, John Harvey, '04  
 Mauger, Lee Fillmen, '08  
 Maulick, William Frederick, '77  
 \*Maurer, George Bright, '86  
 Maust, Jonas Gilbert, '17  
 Mawhinney, Frank D., Jr., '87  
 May, Charles Henry, '81  
 \*May, Edward Anslam, '09  
 May, John A. J., '88  
 \*May, Rollin R., '85  
 May, William Harry, '82  
 \*Mayer, Albert Henry, '87  
 \*Mayer, Charles Eugene, '85  
 Mayer, Harry Oscar, '19  
 \*Mayer, William Christian, '81  
 Mayerberg, Emil Rosenthal, '12  
 Mayers, Henry John, '89  
 Mayers, James Curtis, '03  
 Mayhew, Charles Holmes, '95  
 Mayo, Caswell Armstrong, '87  
 Mays, Alfred George, '74  
 Meagher, Matthew Clarence, '17  
 Meals, Ira Dale, '02  
 \*Means, Samuel Robert, '86  
 Means, William Brown, '75  
 Mear, James Frederick, '20  
 \*McCray, Alexander Mackenzie, '60  
 \*McCray, James, Jr., '61  
 Medd, Henry, '86  
 Medrano Polanco, Joaquin H., '06  
 Medvedkin, Jacob Louis, '17



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- \*Meek, William Henry, '86  
 Megill, Watson, '79  
 Mehl, Henry William, '82  
 Mehring, Charles Augustus, '06  
 Meier, August Jacob, '96  
 Meier, Virginia A. P. (Mrs.), '21  
 Meink, Frederick William, '93  
 Meissner, Frederick William, Jr., '88  
 Meissner, Roger Meyer, '21  
 \*Meissner, Paul Ernest, '85  
 Melamed, Solomon S., '18  
 Melick, Ralph LaShelle, '95  
 Mell, Samuel Stansbury, '87  
 Meller, Joseph Adolph, '93  
 Mellor, Alfred, '63  
 \*Melot, Irvin G., '86  
 Melville, Frederick Thornton, '11  
 Mendenhall, Harry Carleton, '91  
 Mengel, Charles Edward, '92  
 Mengel, Levi Walter, '92  
 \*Menger, Edward Frederick, '79  
 Menger, Ruth Caroline (Mrs. Homer E. Yarp), '18  
 Mengle, Charles William, '81  
 Menkemeller, William, Jr., Sp. '17  
 Mentzer, Harvey H., '93  
 \*Mercein, James R., '57  
 \*Mercer, James Honey, '82  
 Mercer, John T., '57  
 Meredith, Charles Clyde, '89  
 Meredith, Charles Howard, '96  
 Meredith, Harry Lionel, '00  
 Meredith, Wilbur Curtis, '02  
 Merkin, Israel E., '18  
 Merkle, Benjamin Franklin, '20  
 \*Merklein, Charles H., '69  
 \*Merriam, Paul Marcus Pfeiffer, '15  
 \*Merriam, Evan B., '82  
 Merrifield, Robert, '93  
 \*Merritt, Joseph Wayne, '76  
 Mervine, Graydon Duncan, '99  
 Mervine, Joseph, Sp. '18  
 Merz, Alfred William, '00  
 Merz, Elmer Frank, '14  
 Meserofsky, Jacob (now Messey), '19  
 Messimer, Guy William, '13  
 Messing, Jacob, Jr., '75  
 Messinger, Martin Lester, '11  
 Messmer, Eugene William, '07  
 Mest, Gerard Stephen, '21  
 Metcalf, Elliott Harrison, '10  
 Metz, Abram Lehman, '96  
 Metz, John Bowman, '06  
 Metzger, George Franklin, '93  
 \*Metzger, John Benjamin, '81  
 Metzler, Claude Dallas, '97  
 Metzler, Oscar LeRoy, '02  
 Metzler, Robert, '10  
 \*Metzler, Walter Scott, '98  
 \*Meyer, C. Carroll, '73  
 Meyer, Frank Benjamin, '81  
 Meyer, Hobart Bird, '07  
 Meyer, Walter William, '12  
 Meyer, William, '75  
 Meyers, Harry Joseph, '88  
 Meyers, Louis Fred, '17  
 Meyers, Louis Joseph, '93  
 Meyers, Quillas Alfred, '91  
 Miceli, Leonardo Antonio, '15  
 Michael, George Albert, '00  
 Michael, Horace, '03  
 Michael, John Ernest, '09  
 \*Michael, Robert White, '13  
 Michel, Bernard, '83  
 Michels, Victor Clyde, '01  
 Michener, Elmer David, '55  
 Mickey, Harry Edgar, '87  
 Mickley, Ewald G. F., '83  
 Middlekanff, Homer Pattison, '07  
 \*Middleton, Claude Ruoff, '98  
 Milburn, Arland Roland, '17  
 Milby, Arthur Robinson, '80  
 Miles, Charles John Anstin, '89  
 Miles, John Jacob, '74  
 Miles, John Quicksall, '58  
 \*Milleman, Philip Lionel, '66  
 Miller, Aaron Gable, '82  
 Miller, Albert Donald, '94  
 Miller, Albert T., '95  
 Miller, Adolph W., '62  
 Miller, Charles Borden, '90  
 Miller, Charles Meyer, '75  
 Miller, Clark McCord, '16  
 Miller, Clayton Franklin, '12  
 \*Miller, David Patrick, '78  
 Miller, Edward Paul, '16  
 Miller, Earl Thomas, '17  
 \*Miller, Frank, '91  
 Miller, Frank E., '73  
 Miller, Franklin Peter, '08  
 Miller, George Alvin, '21  
 Miller, George McCrea, '18  
 \*Miller, George Washington, '05  
 Miller, Harold Baughman, '83  
 Miller, Harper Guiley, '95  
 Miller, Harry Lovett, Jr., '84  
 \*Miller, Jacob J., Jr., '11  
 Miller, James A., '87  
 Miller, James Augustus, '96  
 Miller, John Harold, '20  
 Miller, John Harvey, '92  
 Miller, John Henry, '96  
 Miller, John Knox, '82  
 Miller, Noble Collins, '11  
 Miller, Robert Jacob, '16  
 Miller, Robert William, '17  
 Miller, Roy Leonard, '02  
 Miller, Samuel Warren, '81  
 Miller, Solomon M., '90  
 Miller, Thomas Gilbert, '15  
 Miller, Turner Ashby, '83  
 Miller, William Edwin, '91  
 Miller, William H., '91  
 \*Miller, William J., '54  
 Miller, William Leland, '80  
 Miller, William Moses, '80  
 \*Miliac, John A., '66  
 \*Milligan, Decatur, '61  
 Milliken, William Houston, '92  
 Millikin, Thomas Newman, '83  
 \*Millrood, Samuel, '11  
 Mills, John Herman, '17  
 Mills, John Leopold, '98  
 \*Milner, James P., '65  
 Milner, Louis, '17  
 Miner, Mary Olds (Mrs.), '90  
 Minner, Louis Augustus, '89  
 Minton, Henry McKee, '95  
 Mintonye, Byron Amzy, '93  
 Miraldi, Valdo Antonio, '21  
 Mitchell, Albert Tippett, '95  
 \*Mitchell, Charles L., '72  
 \*Mitchell, George H., '44  
 \*Mitchell, Henry, '92  
 Mitchell, Jacob Myers, Jr., '79  
 \*Mitchell, Thomas R. F., '37  
 Mitchell, William Seager, '75  
 Mitcheson, Robert Stockton Johnson, '85  
 \*Mitsch, George Joseph, '76  
 \*Mittelbach, Henry, '89  
 Mittelbach, William, '79  
 \*Mittnacht, Henry, '55  
 Moeller, Carl Frederick Edward, '00  
 Moenkemoeller, Charles, '76  
 Moerk, Frank Nicolai, Sp. '13  
 Moerk, Frank Xavier, '84  
 Moeschlin, Reinhart Julius, '09  
 Moeszinger, Philip Pierre, '86  
 Moffet, David, '79  
 Moffet, James, Jr., '83  
 \*Moffet, John, '89  
 Moffett, Thomas James, '87  
 \*Moffit, William G., '73  
 Moffitt, Edward Thomas, '86  
 Mohler, Edwin Royer, '05  
 Mohler, Henry Keller, '07  
 Mohn, Emory Shinkle, '10  
 Mohn, John Ellsworth, '89  
 \*Moise, Benjamin Franklin, Jr., '81  
 Mokes, Albert Bert, '21  
 Moleen, George Arnold, '96  
 Moll, Horace, '83  
 \*Moller, John Daniel, '89  
 Molofsky, David, '19  
 Monaghan, Charles Aloysius, '06  
 Monaghan, Thomas Francis, '98  
 Monaghan, William Joseph, '93  
 \*Monroe, William Robeson, '98  
 \*Montgomery, John Custis, '96  
 Montgomery, John Swift, Jr., '04  
 \*Montgomery, Thomas H., '51  
 Moody, Fred Leroy, Sp. '21  
 Moody, Lucius Wright, '82  
 Moody, Thomas Frank, '88  
 Moody, William Bossienx, '89  
 Moon, Clarence Donald, '12  
 Moon, John Arthur, '13  
 Mooney, Robert Henry, '09  
 Moor, Edward, Jr., '90  
 Mooradian, Thomas Mooshake, '94  
 Moore, Albert Worthington, '11  
 \*Moore, Charles C., '67  
 \*Moore, Christian, '84  
 Moore, Clair Channell, '20  
 \*Moore, Fontaine Bruce, '07  
 \*Moore, Frank, '77  
 Moore, George Cooper, '96  
 Moore, James Johnson, '91  
 Moore, James Kulp, '06  
 Moore, John Demuth, '86  
 \*Moore, Joseph E., '64  
 Moore, Julius Sheppard, '04  
 Moore, Orlando L., '68



- Moore, Richard Jesse, '77  
 \*Moore, Robeson, '29  
 Moore, Wilbert Jacob, '04  
 \*Moore, William David, '90  
 Moorhead, William W., '69  
 Moosbrugger, Charles Otto, '95  
 Morales, Conrad, '18  
 Morales, Guadalupe, '91  
 Moran, Rose Mary, '20  
 Morehead, Pressley Leland, '07  
 Morehead, Robert Crosier, '14  
 Morell, Charles Joseph, '98  
 Morell, Elijah S., '63  
 \*Morgan, Clayton Edward, '97  
 \*Morgan, David U., '55  
 Morgan, Frank E., '81  
 Morgan, Frank William, '98  
 \*Morgan, Harold Bertram, '03  
 Morgau, James Hamilton, '81  
 Morgan, Lulu Aunette, '00  
 Morgan, Matthias Drostan, '04  
 Morgan, Thomas Asaph, '17  
 Morgan, Thomas Charles, '74  
 Morison, John Louis Dales, '88  
 Moritz, Birdis Emanuel, '95  
 Morley, John Edward, '11  
 Morrette, William Henry, '86  
 Morris, Charles Henry, '93  
 Morris, Edwin Kramer, '11  
 Morris, George Thorn, '13  
 \*Morris, Henry B., '64  
 Morris, John August, '84  
 Morris, Joseph Garrison, '89  
 \*Morris, J. H. M., '52  
 Morris, Lemuel Ierwerth, '81  
 Morris, Max, '95  
 Morris, William Torrey, '00  
 \*Morrison, Charles, '78  
 \*Morrison, James, '86  
 Morrison, John William, '90  
 Morrow, Benjamin Rowland, '74  
 Morse, Frank, '85  
 Morse, Thomas, '99  
 Morton, Eugene Faunce, '08  
 Morton, Wm. John, '82  
 Mosebach, Ferdinand Adam, '96  
 \*Moseley, Arthur, '67  
 Moser, Americus H., '65  
 Moser, Earl Spencer, '10  
 Moser, John, Jr., '09  
 Moses, Matthew U. S. Grant, '85  
 Moss, William, '89  
 Mossberg, John Frederick, '78  
 Motley, Ferdinand, '20  
 \*Mouer, Clayton Henry, '16  
 Moul, William Edward, '04  
 Mount, Elmer Marshall, '85  
 Mount, Henry L., '81  
 Mountain, Lloyd Lott, '98  
 Mountaine, William Lewis, '96  
 Mounry, Joseph Daniel, '99  
 Mower, William Taylor, '21  
 Moyer, Charles Franklin, '15  
 Moyer, Edwin Oliver, '85  
 Moyer, Ella Louise, '21  
 Moyer, Irvin, '20  
 Moyer, Lewis Nathan, '03  
 Moyer, Lloyd Rickert, '19  
 Moyer, Raymond John, '17  
 Moyer, Reuben Emanuel, '89  
 Moyer, William Ervin, '87  
 Moyer, William Vance, '13  
 Moylan, Joseph Aloysius, '17  
 Muchnick, David Samuel, '20  
 Mueller, Sister Bertha, '10  
 \*Mueller, Charles Augustus, '97  
 Muhlenberg, Henry Melchoir, '81  
 Muir, Edwin S., '81  
 Muldoon, Edward John, '82  
 Muldoon, Ralph Vincent, '07  
 Mulford, Henry Kendall, '87  
 Mulford, Henry Kendall, Jr., '17  
 Mulherin, James Patrick, '17  
 Mulheron, John Dunaway, '90  
 Mullen, Edward Andrew, '13  
 \*Mullen, James Scanlan, '12  
 \*Mullen, Wesley W., '62  
 \*Müllhaupt, Alfred, '82  
 \*Mulloy, William Alsobrook, '12  
 Mumma, Frank Gereon, '88  
 Mundhenk, Russell Lowell, '09  
 \*Mundorf, Harry Kempton, '93  
 \*Munson, James Harry, '86  
 \*Müntzer, William Christian, '88  
 \*Murringer, Jules, '72  
 Murjahn, Louis, '84  
 Murphey, Edwin Mason, '01  
 Murphy, Frank Anthony, '18  
 Murphy, Frank Edward, '88  
 \*Murphy, Michael Charles, '95  
 Murray, Allen Foster, Sp. '20  
 Murray, Bayard, '79  
 Murray, Bernard James, '80  
 Murray, Edward Anthony, '09  
 Murray, Emmett Leroy, '90  
 Murray, Francis Marion, '76  
 Murray, James Joseph, '89  
 \*Murray, John Henry, '82  
 Murray, Joseph Leo, '08  
 Murray, Lindley Rhea, '17  
 \*Murray, Malcolm, '83  
 \*Murray, Talbot Chambers, '63  
 Murrell, Alexander Harrison, '92  
 \*Murray, James White, '84  
 Murtagh, John Anthony, '84  
 Murtoft, Robert Goulden, '14  
 \*Muschamp, Stanley C., '71  
 Musgrave, Aaron Wallace, '89  
 Musselman, John, '96  
 Musselman, Morris Myers, '95  
 Musser, Guy Musselman, '01  
 Musser, Omar Henry, '78  
 Musson, Katharine Johanna, '03  
 \*Mutchler, Henry M., '72  
 Muthersbough, Jacob Ardt, '74  
 Muthig, Charles, '11  
 Mutty, Joseph Edwin, '10  
 Mutty, Walter Clement, '99  
 Myer, Edward Vincent, '15  
 Myers, Arnold Armstrong, '94  
 Myers, Carvosso Oursler, '89  
 Myers, Charles William, '81  
 Myers, Clayton Ricker, '78  
 \*Myers, Edwin, '77  
 Myers, Henry Joseph, '94  
 Myers, Louis Henry, '11  
 Myers, Luther Melancthon, '02  
 Myers, Nervin Amos, '14  
 Myers, Robert Lester, '15  
 Myers, Theodore McCloskey, '12  
 Myers, William Bryan, '20  
 Myers, William Henry, '95  
 Myers, William Tice, '92  
 Myerson, Myer Charles, '21  
 Nace, Earl Gray, '17  
 \*Nagle, Asher C., '81  
 Nagle, Clayton Moyer, '94  
 Nagle, Philip Eugene, '17  
 Nahikian, Kissag Marookeh, '08  
 Nairn, Thomas Shields, '81  
 Naly, Sarah Susan, '95  
 \*Nardyz, Emma Bour, '89  
 \*Naudain, Edgar Harman, '85  
 \*Naulty, William H., '62  
 Nauman, Roy Augustus, '20  
 Nauss, George Hill, '01  
 Neal, Charles Bodine, '88  
 Neal, Clark, '08  
 Neal, Leander, '57  
 Nebel, Charles William, '97  
 Nebig, William George, '86  
 Nebinger, Jacob Lewis, '85  
 \*Needles, Caleb H., '41  
 \*Needles, William Norwood, '45  
 Neeld, Percy Ingham, Sp. '18  
 Neely, Charles Godfrey, '86  
 Neff, Aaron, '17  
 Neiffer, Grover Wellington, '20  
 Neil, William Edgar, '86  
 Neiler, William Mackie, '04  
 Neiman, Levi Allen, '87  
 Nelden, Ralph, '08  
 Nelson, Augustus W., '21  
 Nelson, Carl Harold, '17  
 Nelson, William Edgar, '15  
 Nelson, William Heisley, '87  
 \*Neppach, Peter Frederick, '78  
 Neppach, Stephen A., '73  
 Netherton, Samuel Oliver, '92  
 \*Neuhart, Lawrence August, '83  
 Neumeister, Otto Christian, '87  
 Nevins, George Lohman, '05  
 \*Newbold, Henry Austin, '70  
 \*Newbold, Thomas M., '66  
 Newcomb, Edwin Leigh, '05  
 Newcomer, Edward Jacobs, '78  
 Newcomer, Leo L., '17  
 Newcomer, Samuel Snyder, '05  
 \*Newman, George A., '60  
 Newsome, Henry Clay, '18  
 Newton, Alfred W., '64  
 \*Newton, John S., '66  
 Newton, John W., '85  
 Newton, Robley Dunglison, '93  
 \*Nice, Harry J., '73  
 \*Nicholas, William C., '73  
 Nicholl, Ellwood Ervin, '20  
 Nicholl, Elmer Thomas, '17  
 Nicholl, Robert Milton, Sp. '20  
 Nichols, Adley Bonisteel, '17  
 Nichols, Albert Spencer, '93  
 \*Nichols, William St. Clair, '44  
 Nick, Wm. Herman Frederick, '94  
 Nicklas, David Edward, '99  
 Nickum, Ellwood George, '91  
 Nickum, James Weller, '95

- \*Nisley, Lee Armstrong, '13  
 \*Nitschke, August Harry, '13  
 \*Nixon, William Gilmore, '82  
 \*Noble, Thomas, '59  
 Nock, Thomas Oliver, '84  
 Noedel, Ernest Amiel, '09  
 Nofer, Walter Washington, '04  
 Nolan, Daniel Andrew, '94  
 Nolen, Albert V., '58  
 Nolin, Wm. Moseby, '90  
 Nolte, Henry Augustus Selle, '88  
 Noon, Edward John, '93  
 Norcross, Alfred Black, '83  
 Norton, Allison Sheeler, '21  
 Norton, Charles, Sp. '17  
 Noss, Henry, '78  
 \*Notson, Charles B., '65  
 \*Notson, George W., '64  
 Novak, Edward Andrew, '21  
 Noveck, Morris, '21  
 Nugent, Thomas Francis, '95  
 Null, Harry Watson, '17  
 Nunez, Manuel Francisco, Sp. '19  
 Nye, Frederick John, '92  
 Nyhart, Natalie Neita, '21
- \*Ober, Gustavus, '37  
 \*Obergh, Walter Herman, '09  
 Oberhauser, Wm. Philip, '92  
 Oberholtzer, Charles Herman, '84  
 Oberly, John S., '02  
 O'Brien, Christopher, '83  
 O'Brien, J. Bryan, '68  
 O'Brien, Wm. Cramer, '07  
 O'Brien, Wm. Joseph, '92  
 Oehse, George Henry, '80  
 O'Connor, William James, '21  
 O'Daniel, Andrew Allison, '80  
 Odenwelder, Asher J., '71  
 Odenwelder, Asher J., Jr., '08  
 \*Odenwelder, Harry Louis, '85  
 O'Donnell, David Howard, '96  
 Oellig, John Bayer, '05  
 \*Oerter, Albert Eugene, '38  
 Oesterle, Joseph Frank, Sp. '07  
 Oetinger, Albert, '86  
 \*Ogden, Charles Sheppard, '91  
 \*Ogden, Edward H., '53  
 Ogden, John, '83  
 Ogilby, William, '84  
 Ogram, Thomas Edwin, '80  
 O'Hail, Irvin Edwin, '94  
 O'Hare, Charles Vincent, '14  
 \*Ohl, William, '86  
 Ohliger, Willard, '00  
 Ohming, Harry W., '08  
 Oleason, Olaf Martin, '77  
 Oleweiler, George Irvine, '06  
 \*Oliphant, Louis, '72  
 \*Olmstead, Anthony J., '35  
 Olmstead, Frank Boyd, '84  
 Olsen, Olaf Joseph, '21  
 O'Mara, John Aloysius, '21  
 O'Neill, Vincent Patrick, '16  
 Opdycke, William Maxwell, '80  
 \*Opperman, John Wm. Hugo, '74  
 Orrick, Walter Harper, '06  
 \*Orsell, Jacob Francis, Jr., '78  
 Orth, Frederick C., '65
- Osborne, Albert Edgar, '94  
 Osborne, James Edmund, '13  
 \*Osborne, Melmoth M., '84  
 Osmun, Milton Mackey, '89  
 Osterlund, Otto Wm. '99  
 Oswald, Anthony Cyril, '20  
 Oswald, Lewis William, '11  
 Otgen, Gustave Adolph, '81  
 Ott, Charles Wm., '83  
 \*Ott, Emile, '79  
 Ott, George Leonard, '82  
 \*Ott, Harold William, '09  
 Ott, Pearl M., Sp. '19  
 \*Ottinger, Franklin, '68  
 Ottinger, Harry P., Sp. '17  
 \*Ottinger, James J., '70  
 Ottman, Richard Henry, '05  
 \*Ouram, Charles, '74  
 Ousey, Samuel Byron, '87  
 \*Outerbridge, John William Pear-  
 man, '04  
 Outten, Elmer, '87  
 Over, John J., Sp., '16  
 Owen, Gomer David, '84  
 \*Owen, Horace Hildebrand, '80  
 \*Owen, John D., '71  
 Owens, Albert Henry, '07  
 Owens, David, '05  
 Owens, Evan Richard, '10  
 \*Owens, Harold Duche, '89  
 Owings, Irl Washington, '14  
 Owings, Osmund Young, '89  
 \*Oxley, Jefferson, '72
- Pachali, Theodore, Jr., '94  
 Pachuta, Michael, Jr., '19  
 Packard, Karleen, '18  
 Packer, Emmett Edward, '16  
 Padgett, Elizabeth Dorris, '21  
 Page, Edward Lewars, '96  
 Painter, Edward Churchman, '70  
 \*Painter, Imlen, '66  
 Painter, Howard Thatcher, '88  
 \*Palen, Joseph Alphonse, '88  
 \*Palethorp, John H., Jr., '54  
 \*Palmer, Charles W., '89  
 Palmer, Lloyd Preston, '05  
 Palmeque Harmida, Edwardo, '21  
 Pancoast, Ambrose, '12  
 \*Pancoast, Dillwyn Parrish, '56  
 \*Pancoast, George W., '85  
 \*Pantzer, F. Will, '86  
 \*Pape, Wm. Frederick, '81  
 Parish, Thomas Pleasant, '83  
 \*Parker, Frederick Henry, '77  
 Parker, Howard Eugene, '96  
 \*Parker, James A., '73  
 Parker, James Heber, '02  
 Parks, James Edward, '12  
 Parris, Bertha (Mrs. Solomon S.  
 Melamed), '18  
 Parrish, Callistus Mitchell, '86  
 \*Parrish, Clemmona, '68  
 \*Parrish, Dillwyn, '30  
 \*Parrish, Edward, '42  
 \*Parrish, Wm. G., '60  
 \*Parry, Edward, '97  
 \*Parry, George R., '62  
 \*Parry, William Hugh, '97
- \*Parse, Andrew Connet, '98  
 \*Parse, John Merritt, '95  
 Parson, Henry Edwin, '08  
 Partee, Wm. Arkey, '87  
 Parvin, Edwin Cyrus, '17  
 Pascoe, John Gwinner, '16  
 Pasold, Julius Martin, '98  
 Paterno, Feliciano I. Ygnacio, '08  
 \*Patrick, George W., '46  
 Patrick, Wm. Smith, '99  
 Patten, Lloyd Harry, Sp. '15  
 \*Pattengill, Evan Ingstrum, '84  
 Patterson, Albert Raymond, '85  
 Patterson, Donald Malcolm, Sp. '14  
 Patterson, George William, Jr., '11  
 Patterson, James Lemon, '75  
 \*Patterson, Robert M., '46  
 Patterson, William R., '79  
 Patton, Daniel J., '70  
 Patton, Frank Oakman, '71  
 Patton, John George, '87  
 Paul, John Leroy, '21  
 Paul, Preston Arlington, '16  
 Paulin, George Lambert, '93  
 Pawling, William Luther, '20  
 \*Paxson, Elliott D., '70  
 \*Paxson, Elmer May, '93  
 Paxson, George W., 3rd, '21  
 Paxson, Leon Kirk, '11  
 \*Paxson, Oric Henry, Jr., '80  
 Payne, George Alexander Wood-  
 son, '79  
 Paynter, Woodman S., '56  
 Pazmiño, Francisco, '95  
 Peabody, Wm. Edward, '93  
 Peabody, Wm. Legria, '95  
 Peacock, Josiah Comegys, '91  
 Pearce, Samuel Robert, '97  
 Pearson, Samuel Appleton, '09  
 \*Peat, Edward, '78  
 Peberdy, Grafton Marvin, '13  
 Pechin, Edward Vogan, '86  
 \*Pechin, George Joseph, '86  
 \*Pechin, Jesse Walton, '81  
 Pechin, Wm. Joseph, '80  
 Peck, Aulay W., '69  
 Peck, Henry Thomas, '62  
 Peck, Wm. George, '00  
 \*Pedrick, Charles W., '55  
 \*Peiffer, Arthur, '00  
 Peiffer, Charles Oscar, '97  
 Peiffer, Irwin Isaac, '04  
 Pellett, Edmund Burnham, '96  
 Pellett, Gurdon Ellis, '92  
 \*Peltz, Richard, '52  
 Penney, Theodore Rufus, '11  
 Pennack, Charles Adrian, '15  
 \*Pennock, Edward, '87  
 Pennock, Joseph L., '08  
 \*Pennypacker, Leroy Ludwig, Sp.  
 '15  
 Pennypacker, Nathan, '80  
 Penrose, Stephen F., '69  
 Penrose, Thomas Wm., '01  
 Pentz, Fletcher Orville, '21  
 Pentz, John Fleming, '91  
 \*Pepper, Charles William, '15  
 Pereira, David daSilva, '04  
 Perlman, Henry Harris, '13



- \*Perot, Elliston L., '35
- \*Perot, Joseph S., '52
- \*Perot, T. Morris, '49
- \*Perrenot, Emile Alphonse, '90
- Perrine, Norman, '12
- \*Perrot, E. Raphael, '56
- \*Perry, James Conrad, '91
- Perry, Mason George, '81
- Persing, William E., '17
- Perrin, Leah (Mrs. Rosin), '09
- Peters, Cyrus Adam, '20
- \*Peters, David Augustus, '87
- Peters, Harold Frederick, '06
- Peters, Henry Eugene, '80
- Peters, Horatio Gates, '79
- Peters, Howard Lewis, '16
- \*Peters, Leopold, '85
- Peters, Rewellein Cornelius, '92
- Peters, Warren Lucien, '13
- \*Peterson, Wetherill, '51
- Peterson, William James, '12
- Petrie, Alexander Bain, Jr., '91
- Petrie, Edward Sing, '84
- \*Pettigrew, Harlan Page, '84
- Petit, Albert Worrell, '11
- \*Pettit, Louis Clark, '80
- Pettit, Roland Levi, '14
- Pettyjohn, Harry Jackson, '10
- Pettyjohn, Wm. Quinn, '93
- \*Petzelt, Christopher, '73
- Picaille, Robert William, '86
- \*Piciffier, Charles Alfred, '90
- Piciffier, Frederick August, '09
- Piciffier, George Louis, '06
- \*Picoffer, William, '91
- Plaum, Alexander Eberhardt, '07
- Plieger, Adam William, '01
- Plieger, Elwood Keech, '99
- Pirrom, Adam, '69
- Pirrom, George Washington, '92
- Phelps, Frederick H., '69
- Phillips, Earle Charles, '15
- Phillips, Jacob Franklin, '77
- Phillips, I. Spencer, '83
- Phillips, Lehman Blew, '91
- Phillips, Oscar Wilson, '95
- Phillips, Robert Earl, '11
- Phillips, Thos. Jefferson Woodworth, '78
- Phillips, William J., '05
- \*Phillips, Wm. Newton, '96
- Phillips, William Tell, Jr., '18
- Pickett, Charles Torbert, '91
- Pickling, Jacob Sylvester, Jr., '01
- Pickarski, Joseph William, '16
- Pierce, Herman Judson, '96
- Pierce, Wm. Abner, '89
- \*Pierce, Wm. Chandler, '84
- \*Pierpont, Ernest, '72
- Pie, Gustavos, '66
- \*Pie, Wilson H., Jr., '63
- \*Pilgrim, John W., '96
- \*Pinchback, Pinckney Napoleon, '87
- Pine, Lynwood Carleton, '20
- Pinos, Charles Clifton, '21
- Pinsky, Harriet Florence, '19
- Pitt, Charles Henry, '20
- Pitman, Gerald Suttan, '17
- Pinsinger, Roland Chapin, '09
- \*Place, Charles Ross, '96
- Platt, Addison Atkins, '09
- Platt, Edwin Montague, '88
- Platt, George Fisk, '91
- Platt, George Hilyard, '06
- \*Pleasants, Charles E., '29
- \*Plehel, Charles Frederick Wm. '79
- Plenge, Henry Charles, '64
- Plum, Harry Freeman, '05
- Plumer, William S., Jr., '79
- \*Plummer, Edward, '75
- Plunket, Fred James, '13
- Plunkett, Frank, '71
- Podolski, Louis Adolph, '78
- Poehner, Adolph Adam, '86
- Poffenberger, Howard Lee, '12
- Point, Leonard Joseph, '21
- \*Poley, Francis Henry, '76
- \*Poley, Linnacus S., '80
- Poley, Warren Henry, '75
- \*Pollard, Oscar, '53
- Pollins, Harry George Lemison, '01
- \*Pollitt, Edmond, '68
- Pond, William Henry, '09
- Pool, James Adam, '84
- \*Poole, William, '76
- \*Poppenhusen, Henry August Chas., '88
- Porr, John Wolf, '16
- Porter, Andrew Richard, '76
- Porter, Clarence Frank Turner, '14
- Porter, George Cooper, '78
- Porter, Harry W., '73
- Porter, John Morris, '95
- Porter, M. Arthur, '89
- Porter, Samuel H., '94
- \*Porter, Wm. David, '87
- \*Porter, Wm. Edgar, '95
- Porterfield, Wm. Perry, '78
- Portugal E., Jose Augustin, '06
- Potmansky, Maurice Albert, '19
- Post, Arthur Edward, '01
- Post, Edward Meigs, '96
- Post, Francis Elmer, '92
- Post, Philip Van Riper, '86
- Potzeiger, Wm. Franklin, '82
- Potterfield, Garland Blair, '15
- Potts, David G., '73
- Potts, Earl Luther, '17
- Potts, George Cimon, '90
- \*Potts, John Franklin, '89
- Potts, Milton George, '21
- \*Potts, Robert R., '58
- Potts, Thomas H., '71
- Powders, John Arthur, '83
- Powell, Alfred Leon, '21
- Powell, Charles Dietz, '96
- Powell, Edyth Bird (Mrs. Robert Keelsch), '17
- Powell, James Clayton, '17
- Powell, Louis, '12
- Powell, Mary Gertrude, '10
- Powell, William Reuben, '75
- Powell, William S., '07
- Power, Edward Samuel, '82
- Power, Frederick Relding, '74
- Powers, Martin Francis, '07
- \*Powers, Thomas H., '53
- \*Prall, Delbert Elwyn, '78
- \*Prass, John Nicholas, '90
- Pratt, William H., '56
- Pratt, William Henry, '91
- Prual, Walter Francis, '97
- Press, Henry William, '19
- \*Preston, David, '65
- \*Preston, Edmond, Jr., '84
- \*Preston, Gilbert Kent, '96
- Prewett, Samuel Washington, '86
- Price, Arthur Chew, '99
- \*Price, Ferris, '69
- Price, Harry Dunbar, '94
- Price, John Abram, '82
- \*Price, John Beatty, '74
- Price, John Wesley, '18
- \*Price, Richard, '35
- Price, Samuel Howard, '19
- Prickett, Frank W., '86
- Prickett, Eldridge Hancock, '12
- Prickett, Elmer Delaney, '84
- Prickin, John Kandle, '09
- Pringle, James Maxwell, '88
- \*Prior, Edwin Alfred, '90
- Pritchard, Frederick R., '78
- \*Prichett, Hartwell Harrison, '86
- \*Prochaska, Oma, '88
- \*Procter, Stephen, '54
- \*Procter, Wallace, '72
- \*Procter, William, Jr., '37
- Promisla, Charles, '18
- Promisloe, Israel Samuel, '19
- Pryor, Charles Taylor, '17
- Puget, Jose Antonio, Jr., '18
- Puhlick, Theodure J., '21
- Pulsifer, James Perlie, '96
- Punt, Arnold Anthony Joseph, '87
- Pursel, Robert Clayton, '01
- Purman, Silas Oscar, '92
- Purt, Milton Thomas, '96
- \*Pyder, Howard F., '93
- Pyle, J. Lindley, '53
- Quackenbush, Fred Briggs, '89
- Quattlebaum, Michael Jenkins, '93
- Quering, Rudolph Henry, '09
- Quick, Benjamin Chamberlain, '95
- Quick, Jacques Voorhees, '85
- Quin, John Frederick Gartner, '14
- Quinn, John William, '76
- Quinn, Edward Schley Francis, '18
- Quinn, Joseph Aloysius, '04
- Quinn, Vincent De Paul, '02
- Raab, Ernest P., '79
- Rabensau, Arwed, Gustav, '95
- Rabensau, John Herman, '88
- Rabin, William Hagedorn, '18
- Rabinowitz, Charlotte Gertrude, '18
- Rabinowitz, Morris, '21
- Rachmell, Nathan, '14
- Rachmil, Albert (now Rathmild), '11
- Radefeld, Frederick, '73
- Radefeld, Robert Hugo, '99
- Radley, Aaron William, '79
- \*Raley, Irvin, '76
- Raines, Edward William, '10
- Raker, John Wilson, '98
- Ralston, George Forster, '83



- Ralston, John Morrow, '11  
 Ramanuskas, Peter Paul, '21  
 \*Rambo, Milton, '69  
 \*Rambo, Ross, '82  
 Rambo, Samuel Lee, '86  
 Ramey, Charles Clifton, '85  
 Ramirez Cabrera, Hermogenes, '18  
 Ramirez Flores, Jose, '17  
 Rainsaur, David Wilfong, '02  
 \*Ramsden, Robert, '51  
 \*Ramsay, Charles Carroll, '89  
 Ramsey, William H., '75  
 Ranck, David Walter, '99  
 Ranck, John William, '65  
 \*Rand, Charles S., '50  
 Randal, Harry Lee, '92  
 Randolph, B. Alfred, '91  
 \*Randolph, Charles Fitz, '83  
 Randolph, Coleman Lafayette, Jr., '21  
 Randolph, John Roanoke, '19  
 Randolph, Tucker Lucas, '12  
 \*Rankin, Alfred J., '61  
 Rankin, Robert F., '70  
 Ranney, Edwin Cole, '92  
 Ranson, John Lester, '07  
 Rappaport, Julius George, '11  
 \*Rapp, Benedict Nicholas, '83  
 Rapp, Ernest K. DeHaven, '21  
 Rapp, Frederick, '79  
 Rappaport, Isadore, '18  
 Rappaport, Nathaniel Herman, '18  
 Raser, Amand P., '73  
 Raser, George Prentice, '82  
 Raser, John B., '71  
 Raser, William H., '68  
 Raser, William Heyl, '01  
 Rather, Hugh Henry, '08  
 Rau, Eugene A., '70  
 \*Rau, Robert, '66  
 Rauh, Frederick Miller Dickson, '91  
 Raubenheimer, Herbert Carl, '18  
 \*Raudenbush, Charles Hunter, '91  
 Rawlins, Wilbur Fisk, '88  
 Ray, George Herbert, '89  
 Raymond, Henry Simon, '20  
 \*Rayner, Howard Lincoln, '89  
 Rea, John H., '88  
 Rea, Scott Coyle, '13  
 Read, Charles B., '69  
 Read, Ralph Maynard, '90  
 Read, Thomas Preston, '11  
 Reading, Joel Salter, '89  
 \*Reading, Wm. Van Dyke, '84  
 Reagan, Dennis, '85  
 Reahard, Ralph McDonnell, '05  
 Reap, Edward Augustus, '93  
 Reharber, Isidor, '20  
 Reber, Robert Elmer, '20  
 \*Rebner, Charles Morris, '85  
 Rebsamen, Charles Frederick, '85  
 Reburn, Albert Randolph, '03  
 Rectenwald, Daniel Lewis, '00  
 Rectenwald, Louis Aloysius, '95  
 Reddon, Frank Jerome, '15  
 \*Redner, Thaddeus Rowland, '89  
 Reed, Arthur Benjamin, '96  
 Reed, Charles Sumner, '83  
 Reed, David Reynolds, '81  
 \*Reed, Edward Albert, '74  
 Reed, Eugene Lewis, '79  
 Reed, Howard, '89  
 Reed, James Garfield, '03  
 Reed, Oras, '93  
 Reed, Willoughby Henry, '79  
 Reel, Joseph, '61  
 Reese, Charles Christian, '20  
 Reese, Charles Hoffman, '06  
 Reese, David John, '90  
 \*Reese, John Bull, '97  
 Reese, Lewis, '94  
 Reeser, John Wesley, '83  
 Reeser, Richard, '95  
 Reeser, William Howard, '93  
 Reeve, Alfred Warfuell, '02  
 Reeve, James Whitaker, '96  
 \*Reeve, Richard M., '32  
 Reeves, Joanna Stretch, '20  
 Regar, David Schaeffer, '95  
 Regar, Wayne Schaeffer, '93  
 Rehfluss, Charles, '87  
 \*Rehfluss, Emil G., '81  
 Rehfluss, Jacob H., '93  
 Reice, Isaac Stephen, '02  
 Reich, Solomon Mittler, '95  
 Reichard, Charles Wolf, '83  
 Reichard, William Edward, '13  
 Reichel, Edward B., '73  
 \*Reid, Vivian Ivanhoe, '93  
 Reidenbach, Elmer Augustus, '92  
 Reider, Edwin Stanton, '89  
 Reidinger, Lawrence Ernest, '20  
 Reif, Ernest, '93  
 Reifsnnyder, Howard Dunfee, '75  
 Reig, Eugene George, '89  
 \*Reighter, David Henry, '08  
 Reighter, Frank Clymer, '86  
 Reighter, William Erle, '19  
 Reimann, George, '81  
 Reimann, Louis Philip, '75  
 Reinard, William Ray, '21  
 \*Reinecke, Ernest William, '78  
 Reinish, Henry Isadore, '13  
 Reinnoldt, Henry Otto, '85  
 Reinoehl, David Vogt, '94  
 Reisch, William Henry, '06  
 Reisert, William, '84  
 Reiter, George Hager, '19  
 Reith, Emil, '90  
 Reizenstein, Albert George, '91  
 Remington, Joseph Percy, '05  
 \*Remington, Joseph Price, '66  
 \*Remington, Samuel Jacobs, '92  
 Renfrew, Clarence Hull, '05  
 Renshaw, Millicent Saxon (Mrs. C. H. LaWall), '04  
 Rentschler, Charles, Jr., '86  
 \*Renz, Gustav Adolph, '82  
 Resag, Charles Edward, '79  
 Resser, Alphens William, '16  
 Retzer, George Henry, '05  
 Reubush, Robert Floyd, '18  
 Reudelhuber, Ludwig William, '09  
 \*Reuting, Theodore William, '82  
 Reuwer, Henry George, Jr., '06  
 Rewalt, Jay William, '96  
 \*Rex, Thomas A., '62  
 Rex, Walter William, '17  
 Reynes, Jose Santiago, '17  
 Reynolds, Clarence Hyatt, '01  
 Reynolds, John Brewster, '80  
 \*Reynolds, John J., '69  
 Reynolds, May, '92  
 Reynolds, Ralph Eli, '21  
 Reynolds, Robert Garland, '07  
 Reynolds, Walter, '85  
 Reynolds, William Davis, '82  
 Rhein, Francis Xavier, '94  
 Rhein, John H. W., '92  
 \*Rhoads, Edward Elliott, '95  
 \*Rhoads, Elam, '61  
 Rhoads, Lemuel Gilbert, '21  
 Rhoads, Luther K., '01  
 Rhoads, Paul Edward, '16  
 Rhoads, William Stevens, '85  
 \*Rhoads, Wilmer Beaver, '05  
 Rhodes, Francis Reynolds, '90  
 Rhodes, George Washington, '02  
 Rice, Irene Esther (Mrs. Van De Boe), '20  
 Rice, Thomas Jackson, '93  
 Rice, Wallace Stoddard, '11  
 Rice, William C., '68  
 Richards, Alfred Nathan, '79  
 Richards, Augustus, '71  
 \*Richards, Clayton French, '61  
 \*Richards, Davis Bruce, '91  
 Richards, Frank Gore, '94  
 Richards, George K., '59  
 Richards, Herbert Leonard, '06  
 Richards, Hervey Taylor, '05  
 \*Richards, Howard Newton, '89  
 \*Richards, Uriah F., '70  
 Richardson, Arthur Norris, '95  
 Richardson, Harry, '91  
 Richardson, Harrie Knox, '83  
 Richardson, James, '93  
 Richardson, James Harry, '92  
 \*Richardson, Joseph G., '57  
 Richardson, Nathaniel, '61  
 \*Richardson, Neafe, '96  
 Richardson, Odilon Barret, '75  
 Richardson, T. S., '72  
 Richardson, W. D., '72  
 \*Richman, Edward Milton, '95  
 \*Richman, Samuel Thompson, '17  
 Richter, Gustave Adolph, '90  
 Rickart, G. Emerson, Sp. '20  
 Ricker, William Homer, '96  
 \*Rickert, William McKinstry, '93  
 \*Ricketts, Clarence Emerson, '00  
 Ricketts, John Gregory, '13  
 Rickey, Charles Frank, '83  
 Ridenour, William Edward, '95  
 Rider, Joseph Albert, '04  
 \*Ridgway, Charles Alexander, '91  
 Ridgway, William Frederick, '95  
 Ridgway, William T., '69  
 Ridington, William Augustus, '86  
 Rieben, Ernest, '97  
 \*Riedenauer, Frederick Philip, '89  
 Riegel, Charles Heber, '93  
 Riegel, Samuel Jacob, '91  
 Riegner, Frederick Eli, '09  
 Rienhamer, Frederic, '74  
 Rigg, John, '08  
 Rigg, Mark, '15

- Riggs, Charles Naphtel, '82  
 Riggs, Elias Ellsworth, '85  
 Righter, Wm. Henry, Jr., '76  
 \*Riley, Charles Wm., '66  
 Riley, Frank Louis, '11  
 Riley, John Arthur, '12  
 Riley, William Guy, '06  
 Rinck, Charles A., '81  
 \*Rinedollar, Charles Wesley, '87  
 Rinedollar, Robert Grant, '92  
 Ringer, Louis Johnson, '98  
 Ringler, George Parson, '87  
 Rinker, Francis, '92  
 \*Rinker, Henry Paul, '98  
 Rinker, William, '01  
 \*Rinker, William II., '65  
 Rinn, Hazel Marie, '17  
 Rippetoe, John Ross, '05  
 Rishell, John Dauberman, '89  
 Risher, Harry Cook, '86  
 Rishton, Myron Parker, '17  
 Rishton, William Sloan, '92  
 \*Risk, Clarence Henderson, '76  
 Risley, Leon Stewart, '89  
 Ritchey, George Edgar, '10  
 Ritchey, Jacob Clever Lehman, '10  
 \*Rittenhouse, Henry N., '55  
 \*Ritter, Benjamin I., '40  
 Ritter, Bradford, '52  
 Ritter, Charles Templeton, '84  
 \*Ritter, Eugene D., '73  
 Ritter, Frederick William, '95  
 Ritter, John, '76  
 \*Ritter, Norman G., '87  
 Ritz, Charles August, '98  
 Rixstine, Livingston Everett, '87  
 \*Roach, Charles Peter, '96  
 Roach, Jeremiah Thomas, '06  
 Roan, Patrick Aloysius, '05  
 Roatch, Karl Hobart, '20  
 \*Robbins, Alonzo, '55  
 Robbins, George Delbert, '95  
 \*Robbins, James W., '59  
 Robbins, William Henry, '76  
 Robechek, Louis, '93  
 Robeck, Walter Henry, '04  
 Roberts, Charles E., '71  
 Roberts, Charles Haines, '80  
 Roberts, Charles H. B., '79  
 Roberts, DeWilton Smith, '99  
 Roberts, Everett Joseph, Sp. '18  
 Roberts, George William, '01  
 Roberts, John Austin, Sp. '03  
 Roberts, John Griffith, Sp. '06  
 Roberts, Joseph Cattell, '85  
 Roberts, Joseph Von Culin, '86  
 Roberts, Rees Conard, '93  
 Roberts, Victor Christopher, '79  
 \*Robertson, Henry E., '69  
 Robertson, William Franklin, '93  
 Robinson, David Crogman, '02  
 \*Robinson, Edward T., '53  
 Robinson, James S., '69  
 \*Robinson, Joshua K., '66  
 \*Robinson, Paul Patton, '06  
 Robinson, Peale Dillard, '12  
 \*Robinson, Raleigh, '96  
 Robinson, Samuel E., '78  
 Robinson, Thomas Holmes, Jr., '02  
 Robinson, William Duffield, '76  
 Roche, Edward Manning, Jr., '80  
 Roche, William F., '67  
 Rock, Peter Joseph, '95  
 \*Rodes, Harry Beard, '17  
 Rodes, Zebulon Harrison, '10  
 Rodgers, G. Raymond Hamilton, '12  
 Rodgers, Paul S., Sp. '15  
 Rodis, Louis, '17  
 Rodriguez Oquendo, Pedro Manuel, '19  
 Roe, Thomas Coombe, '77  
 \*Roedel, William Ruthrauff, '83  
 Roeder, Jonas Eberhart, '74  
 Roeder, Maurice Albert, '02  
 Roeder, Paul S., '21  
 Roehrig, Albert Henry, '88  
 \*Rochrig, George Frederick, '83  
 Roepper, Francis Abraham, '76  
 \*Roessel, William Ernest, '82  
 Roessler, George, '85  
 \*Roessner, Benjamin, '99  
 \*Roessner, Frank George, '95  
 Rogers, Edson William, '11  
 Rogers, Edward Bancroft, '99  
 \*Rogers, Franklin Pierce, '81  
 Rogers, Joseph Collard, '76  
 Rogers, Ralph Benjamin, '14  
 \*Rogers, Walter Clyde, '01  
 Rohn, A. B., '73  
 Rohn, Herma Alice, '13  
 Rohr, Reuben Abraham, '18  
 Rohrbach, George William, '19  
 Rohrbacher, Frederick, '57  
 Rohrbaugh, Milton Eugene, '04  
 \*Rohrer, Earl Penn, '63  
 Rohrer, Howard, '90  
 Rohrer, Joshua Ellis, '84  
 Robrman, Frank Randall, '83  
 Roland, George Weidler, '81  
 Rolleston, Arthur Raymond, '91  
 Roman, Jose, '08  
 Roof, William George, '10  
 Rose, Edward S., Sp. '09  
 Rose, Frank, '98  
 Rose, Herbert Leon, '20  
 Rose, William Wilson, '11  
 \*Roseberry, John Mackey, '86  
 Roseman, Charles Edward, '94  
 Rosen, David, '21  
 \*Rosen, Gustave, '88  
 Rosenbaum, David, '86  
 Rosenberg, Julius Jacob, '14  
 \*Rosenberg, Samuel, '09  
 Rosenberger, Joseph Mervin, '13  
 Rosenfeld, Lawrence Marx, '17  
 Rosenfeld, Stanley Wachtel, '21  
 Rosenfield, Albert William, '21  
 Rosengarten, George D., Sp. '84  
 Rosenkrans, Cyrill Depue, '89  
 Rosenthal, David Abraham, '76  
 \*Rosenthal, Edward, '78  
 Rosenwald, Herman, '18  
 Rosenwasser, Nathan, (now Rose-water), '77  
 Rosenzweig, Benjamin, '85  
 Rosoff, Maurice, '14  
 Ross, Anna Catherine (Mrs. G. Van Gilder Heberton), '98  
 \*Ross, Augustus Harvey, '79  
 \*Ross, David Hamilton, '78  
 \*Ross, David William, '77  
 Ross, Dell Noblitt, '99  
 Ross, Eben Jackson, '90  
 Ross, Frank Budd, '96  
 Ross, George Redsecker, '80  
 Ross, Hendric Arnold, '08  
 Ross, H. Frank, '90  
 Ross, Hugh H., '66  
 \*Ross, John Patterson, '87  
 Ross, William McOwen, '89  
 Ross, William Robinson, '82  
 Ross, William Smith, '04  
 Rossman, George Albert, '95  
 Roth, Emil Krieger, '03  
 Roth, Francis J., '97  
 Roth, Herbert Joseph, '20  
 Roth, Milton W., '72  
 Roth, Samuel George Jeremiah, '90  
 Roth, Theodore William, '92  
 Rothenberger, Charles B., '10  
 Rothermel, John Palmer, '92  
 \*Rothrock, Harry George, '94  
 Rothrock, Roswell John, '11  
 Rothwell, Eugene, '03  
 Rothwell, Walter, '95  
 Rotman, Harry, '18  
 Rottner, Charles Selmar, '87  
 \*Rourke, Michael Joseph, '89  
 Rovner, Arthur, '16  
 Rovner, Israel, '11  
 \*Rovno, Pinkas, '96  
 Rowand, Alexander H. C., '73  
 Rowe, Charles Edward, '81  
 Rowe, John Markley, '74  
 \*Rowe, William Clymer, '88  
 Rowen, Robert, Sp. '16  
 Rowland, Norris Dean, '14  
 Rowley, Isaac Hansell, '74  
 Royston, James Lytle, '74  
 Ruan, James, '63  
 \*Rubican, Charles E., '65  
 Rubio, Enrique y Diaz, '71  
 Ruch, John H., '55  
 Ruch, Walter Edward, '10  
 Ruddy, Gerald John, '15  
 Rudolph, Harold Clarence, '02  
 Rudolph, John M., '79  
 Rudy, Harry Robert, '96  
 Rudy, Jacob Albert, '90  
 \*Ruete, Otto Moyer, '93  
 Ruff, Ulysses Gilbert, Jr., '17  
 Ruff, William, '76  
 Ruge, Oscar Gustave, '93  
 Ruhl, Harry Fry, '91  
 Ruhl, Howard Payne, '07  
 \*Rulon, Edwin, '60  
 Rumsey, Blair Grier, '12  
 Rumsey, Walter Arabin, '84  
 Runyan, Edwin Percy, '11  
 Ruoff, William, '90  
 Rupert, John Ralph, '12  
 \*Rupert, Vaughn Ross, '15  
 Ruplis, John Albert, '20  
 Rupp, Paul Frederick, Sp. '21  
 Rupp, Robert Adam, '17  
 Rupp, Walding George, '17  
 Rusch, Sylvester James, '12



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- \*Rush, Charles S., '47  
 \*Rush, Warren Blachley, '79  
 \*Rushton, Richard, '38  
 Russell, Charles Allen, '14  
 \*Russell, G. M., '73  
 Russell, Hamilton, '06  
 Russell, Lillian, '13  
 Russell, Miriam Fay, '21  
 Russell, Percy Reginald, '10  
 Ruth, Elton Sunday, '13  
 Ruth, Robert Jacob, '13  
 Ruth, William Augustus, '83  
 Rutherford, Charles A., '65  
 Rutherford, Frank Parke, '90  
 Rutter, Lee Deitrich, '13  
 Ryan, David Stephen, '88  
 Ryan, Edward Henry, '11  
 \*Ryan, Frank Gibbs, '84  
 Ryan, Thomas Andrew, '01  
 Ryerson, Henry Ogden, '77  
 Ryland, George Bertram, '96  
 \*Rynard, Charles Warren, '92
- Saalfrank, Charles William, '80  
 Sachs, Samuel Frederick, '20  
 Sackaloucas, Joseph William, '18  
 Sage, Thomas, '94  
 Sager, Verner Edward, '96  
 Sahn, John Louis, '93  
 Sahn, Louis Napoleon, '92  
 St. Clair, Theodore A., '62  
 St. Jacques, Gaston, '01  
 \*Sallada, Hunter Albert, '96  
 \*Salot, George Washington, '83  
 Salisbury, Venola Bruce, '14  
 Sames, Joseph Howard, '95  
 Samet, Gustav, '13  
 Sammons, George Israel, '11  
 Sample, George William, '78  
 Sample, Joseph Frank, '90  
 Samsel, George Woodward, '15  
 Samuels, Bernard, '15  
 Sanchez Mestril, Felix Enrique, '16  
 Sanders, Annetta Mildred, '19  
 Sands, Paul Douglass, '11  
 Sandt, Clarence Lerch, '13  
 Sandt, George Lewis, '76  
 Sankey, Foster John, '10  
 Santee, Andrew Curtin, '85  
 Santee, Boyd Arthur, '08  
 \*Santos, Charles A., '48  
 Sarlo, Joseph, '16  
 Sasse, Arno Richard, '11  
 Saul, George Milton, '08  
 Saul, Irvin Ellsworth, '01  
 Saunders, Henry Scholey, '85  
 Saunders, William E., '83  
 Saurer, William Henry, '87  
 \*Saurman, James Spang, '00  
 Saurman, John Shelly, '05  
 Savage, Frank Stewart, '74  
 Savage, Thomas Albert, '86  
 \*Savery, John C., '51  
 \*Savery, William, Jr., '53  
 Saylor, John Adam, '12  
 Saylor, Wesley Melvin, '15  
 Sayre, Lucius Elmer, '66  
 Scarborough, George W., Jr., '86  
 Scargle, William, '10
- Scatchard, Elmer Ellsworth, '06  
 Scattergood, Charles Rinear, '88  
 \*Scattergood, George J., '56  
 \*Scattergood, Joseph, '29  
 Schaak, Milton Franklin, '91  
 Schabacker, Horace Martin, '10  
 Schabinger, Charles, '96  
 Schad, Frank Casper, '00  
 Schad, Harry John George, '96  
 Schadt, Morris Granville, '18  
 Schadt, Ralph Monroe, '14  
 Schaefer, Joseph William, '20  
 Schaeffer, Charles R., '20  
 Schaeffer, Otis Oliver, '96  
 \*Schaffer, Frank Warren, '08  
 Schaible, Emil, '85  
 Schamps, George Mathias, '82  
 Schampan, Alexander, '20  
 Schandain, Harry, '80  
 Schaueremann, Howard George, '11  
 Schearer, P. Weaver IL, '94  
 \*Scheele, George Philip, '77  
 \*Scheffler, James Samuel, '83  
 Scheffey, Lewis Cass, '15  
 Scheible, Edmund Morris, '16  
 \*Scheible, Frederick Charles, '82  
 \*Scheidt, James A., '71  
 Scheirer, Franklin Benjamin, '91  
 Scheirer, Victor Daniel, (now Shürer), '93  
 \*Schell, Frank Wacker, '11  
 \*Schell, Henry D., '70  
 \*Scheller, Thomas K., '61  
 Schellinger, Clarence M., '68  
 Scher, Walter Raymond, '15  
 Scherer, Bernhard Frederick, '93  
 Scherling, Gustav, '83  
 Schersten, Hilbert Julius, '12  
 Schetky, Lawrence Oliphant, '91  
 Schick, Frederick Martin, '90  
 Schimminger, George W., '80  
 Schimpf, Frederick William, '05  
 Schindel, David Philip, '96  
 Schindel, Harry Ellsworth, '90  
 Schindler, Charles, '83  
 \*Schirmer, William Gustave, '75  
 \*Schively, William Henry, '42  
 Schlaepfer, August James, '89  
 Schlauch, Theodore Storb, '98  
 Schlegel, Alvin Lester, '18  
 Schlegel, Carl Edward, '85  
 Schlegel, Lawrence Brown, '16  
 Schleif, William, Jr., '90  
 Schlenker, Claude Edward, '09  
 Schlitzer, Henry Joseph, '05  
 Schlitzer, William Frank, '06  
 Schloer, Charles Albert, '92  
 Schmehl, Irvin S., '92  
 Schmerker, Adolph Alexander Beyer, '01  
 Schmickle, Charles Franklin, '93  
 Schmidt, Carl Emil, '05  
 Schmidt, Christian, '62  
 Schmidt, F. Joseph, '83  
 Schmidt, Frank Louis, '04  
 Schmidt, Henry, '70  
 Schmidt, Henry, '73  
 Schmidt, Justus, '91  
 Schmidt, Oscar Carl, '02
- Schmidt, Otto Waldemar, '03  
 Schmidt, Selma L., '10  
 Schmiege, Joseph Alphonse, '96  
 Schminky, Allen Beecher, '91  
 Schmitt, Albert Herman, '95  
 \*Schnabel, Charles, '73  
 Schneck, William Owen, '17  
 Schneider, Charles, '92  
 Schneider, Edward Francis, '87  
 Schneider, Emil Sebastian, '01  
 Schneider, Karl, '21  
 Schneider, Kingsley Clark Thompson, '96  
 Schnuerer, George John, '93  
 Schnurman, Harry Samuel, '96  
 Schoenenberger, Charles Augustus, '82  
 Schoenthaler, Russell John, '17  
 Schoff, J. John, '90  
 Schofield, Allen Curtis, '85  
 Schofield, Helene Edith May, '15  
 Schofield, Thomas LaBlanc, '87  
 \*Scholl, Alfred K., '47  
 Scholl, Benjamin Franklin, '82  
 Schollenberger, William Watts, '15  
 Schomo, Charles Cornelius, '06  
 Schooley, Joseph Griggs, '01  
 Schools, George William, '77  
 Schoonover, Harold Nelson, '14  
 Schoppe, Leonard A., '90  
 Schor, Morris, '21  
 Schrack, Robert Franklin, '95  
 Schrader, Curtis Fink, '06  
 Schrader, George Ralph, '05  
 Schraedley, Frederick Abraham, '90  
 \*Schramm, Daniel, Jr., '83  
 Schroeder, George Adolphus, '81  
 Schroeder, Henry, '76  
 Schroeder, Johann Heinrich, '96  
 Schroeder, Luther Johnson, '84  
 Schroeter, Hermann J. M., '88  
 Schuchard, Herman Julius, '85  
 Schuehle, Christopher, Jr., '10  
 Schuehle, Martin Charles, '08  
 Schuldt, Henry Francis, '84  
 Schulhoff, Arthur S., Sp. '18  
 Schulte, Henry John, '89  
 \*Schultheis, Christian, '64  
 Schultz, Albert, '90  
 Schultz, Anna L., '17  
 Schurk, Peter, Jr., '57  
 \*Schuster, George Robt. Wm., '88  
 Schuster, Joseph Bernard, '94  
 Schutzenbach, Augustus A., '89  
 Schwab, Leslie Watts, '89  
 Schwacke, Charles Albert, '89  
 Schwacmmler, Fred Philip, Jr., '99  
 \*Schwartz, Arthur, '77  
 Schwartz, David M., '21  
 Schwartz, Frederick, '85  
 Schwartz, Harry Leet, '17  
 Schwenk, William Henry, '89  
 Schweitzer, Samuel Edward, '82  
 Schwenzer, Carl Wilhelm, '06  
 Scott, Charles Abbey, '94  
 Scott, George C., '92  
 Scott, Henry William, '01  
 Scott, James Patrick Edward, '96



- Scott, John C., Sp. '20  
 Scott, John Calvin, '00  
 \*Scott, Joseph Harry, '81  
 \*Scott, Levi, '00  
 Scott, Robert Burns, '91  
 Scott, Stanhope McClellan, '03  
 Scott, Theodore William, '90  
 \*Scott, Thomas James, '46  
 Scott, Walter Edward, '05  
 Scott, William Clement, '19  
 \*Scott, William James, '88  
 Scouller, James N., '71  
 Scull, Andrew Stewart, '86  
 Scull, James Ireland, '93  
 Seabold, Henry Adam Fahnestock, '00  
 Search, George Bruce, '20  
 Searight, John Woodburn, '16  
 Seary, William Notson, '87  
 Sechler, Harmon M., Sp. '10  
 \*Seeger, Roland, '59  
 Seeler, Andrew Jackson, '83  
 Seeley, Chester Belting, '03  
 \*Seeley, Hosea F., '71  
 Seger, Joseph William, '75  
 Segal, Nathaniel Jules, '11  
 Segner, William, '66  
 \*Segrest, Louis F., '70  
 Seiberling, Joseph Dallas, '98  
 Seibert, Edward Grant, '87  
 Seibert, Finley Page, '07  
 Seidelman, Ida (Mrs. W. C. Kramer), '18  
 Seidell, Warren Reuben, '09  
 Seidman, Harry, '06  
 \*Seif, Louis Edward, '13  
 Seiffert, Frank Morris, '93  
 Seiffert, John Henry, '89  
 Seiffert, Otto, '88  
 Seiler, Robert H., '58  
 \*Seiler, William Frederick, '85  
 Seip, Charles Louis, '00  
 \*Seipel, Harry Bertram, '97  
 Seiple, Thomas Chester, '20  
 Seither, Charles Albert, '87  
 \*Seitz, Frederick, '82  
 Seitz, John Alphonsus, '99  
 \*Seitz, John George, '82  
 Seitzinger, Robert Lawrence, '16  
 Seitzinger, William Oscar, Jr., '20  
 \*Seler, Charles Augustus, '92  
 \*Selfridge, Matthew M., '52  
 Selim, Aly, '16  
 Selinger, John Anthony, '78  
 Sellen, Edward C., '93  
 \*Sellers, Albert Tobias, '83  
 Sellers, George Whitefield, '82  
 \*Sellers, Oscar William, '94  
 \*Sellers, Walter Spangler, '96  
 Seltzer, Charles Jacob, '91  
 Seltzer, Joseph Pincus, '19  
 Seltzer, Robert Hoode, '17  
 Semmel, Frank Pierce, Jr., '96  
 Semmel, Irvin Clarence, '14  
 Semple, Henry Beidleman, Jr., '95  
 Semple, John, '95  
 Senkowski, Ladislaus Anthony, '20  
 Senneff, Jacob, '62  
 Senseman, William Thomas, Jr., '20  
 Seraballs, Enrique Aulet, '20  
 \*Serfass, Abraham Lincoln, '85  
 Settle, Peter Smith, '00  
 Seubert, Charles Aloysius, '99  
 Seuret, J. Pedro, '57  
 Severa, Lumir, '10  
 \*Seybert, Robert L., '68  
 Seyforth, Julius Frederic, '96  
 Shaak, Franklin Philip, '87  
 Shaak, John Franklin, '17  
 Shade, George Washington, '13  
 Shafer, Edward Frederick, '07  
 \*Shafer, Clarence Eugene, '01  
 Shafer, Erwin Clement, '92  
 Shafer, Frederick William, '04  
 Shafer, Herman S., '18  
 Shaffer, James Walter, '16  
 Shaker, Elias, '11  
 Shales, Marvin Asa, '13  
 \*Shallcross, William Gooding, '93  
 Shamalia, George M., '75  
 Shannon, Byron Guest, '01  
 Shannon, Samuel Coward, '99  
 Shapiro, Henry, '00  
 Sharadin, Ralph Clarence, '04  
 Sharp, Edward Wolf, '84  
 Sharp, Raymond, '06  
 \*Sharp, Robert C., '69  
 Sharp, Warren Reed, '96  
 \*Sharp, William, '26  
 Sharp, William Walls, '93  
 Shaw, Frederick Charles, '92  
 Shaw, Henry Clay, '85  
 Shaw, John Donald, '17  
 \*Shaw, Joseph B., '68  
 \*Shaw, Louis, '71  
 Shaw, Neal Wendle, '17  
 Sheaffer, Edward Parke, '90  
 \*Sheaff, John F., '53  
 Shear, Lewis Maurice, '06  
 Shearer, George Keyworth, '11  
 Shearer, William Reuben, '06  
 Sheatz, Lloyd A., '98  
 Shechter, Edward, '21  
 Sheehan, Edward Joseph, '92  
 Sheehan, John Peter, '90  
 \*Sheehan, William Henry Aloysius, '99  
 Sheely, Edward Valentine, '94  
 Shelly, Jacob, '80  
 Shelly, John Culp, '04  
 Shelly, William Harrison C., '10  
 Shelton, Charles F., '94  
 Shemp, Russell Nicholas, '98  
 Shenk, John Benjamin, '96  
 Shenk, Robert William, '20  
 Shenkle, Albert Philip, '02  
 Sheppard, John Ware, '93  
 \*Sher, Francis Peter, '75  
 Sher, Frederick Paul, '85  
 Sheridan, James Henry, '76  
 \*Sheridan, John F., '60  
 \*Sheridan, Richard B., '61  
 \*Sherk, Harry Huber, '80  
 Sherman, Alexander, '17  
 \*Sherman, Austin Charles, '84  
 Sherman, Joseph Bennett, '89  
 Sherman, Oliver G., '58  
 Sherwin, Robert Seithers, '96  
 Shewell, Charles Tripler, '81  
 \*Shick, Andrew J., '56  
 Shields, Edwin Fay, '08  
 Shiffer, Abraham Milton, '06  
 Shiffer, Daisy Rhodes (Mrs.), '03  
 Shiffer, Horace Roy, '07  
 Shiffer, Samuel Arthur, '05  
 Shiles, Stanley Andrew, '11  
 Shiley, Harry Allen, '17  
 Shillito, Charles Emmert, '03  
 Shimer, Arthur Burton, '94  
 Shimer, Miles Herman, '95  
 Shingle, Samuel Howard, '81  
 Shinn, Edward, '17  
 \*Shinn, Howard Granville, '76  
 \*Shinn, James T., '54  
 \*Shinn, Samuel E., '50  
 \*Shinn, Walter, '39  
 Shirer, Arthur Enos, '06  
 Shirey, Orville Ludwig, '99  
 \*Shivers, Charles, '67  
 \*Shoemaker, Alfred Weikel, '18  
 \*Shoemaker, Allen, '66  
 \*Shoemaker, Benjamin, Jr., '66  
 \*Shoemaker, Charles, '66  
 Shoemaker, Charles Benjamin, '94  
 Shoemaker, Clayton F., '70  
 Shoemaker, Clayton French, Jr., '11  
 \*Shoemaker, Clinton Llewellyn, '95  
 Shoemaker, Ellery Best, '87  
 Shoemaker, George Washington, '86  
 \*Shoemaker, Richard M., '62  
 Shoemaker, Stowe, '08  
 Shoemaker, William Guy, '21  
 \*Shoffner, John N., '68  
 Sholl, Walter Douglas, Sp. '21  
 Shomberg, Albert Frederick, '90  
 Shoop, James Harper, '17  
 Shore, Thomas Walter, '92  
 Shorr, Orrin, '20  
 Short, William Huntley, '80  
 Shoults, Robert Grafton, '99  
 Shover, Raymond Leslie, '14  
 \*Showers, Guy Warren, '16  
 Shrenk, Murray Hamilton, '03  
 \*Shreve, Alexander, '96  
 \*Shreve, Charles S., '35  
 Shreve, Joseph Frith, '90  
 \*Shrom, Charles F., '53  
 Shrom, Joseph Alexander, '06  
 \*Shropshire, Joseph B., '68  
 Shrum, John H., '72  
 \*Shryock, Allen, '68  
 Shtofman, Jacob, '12  
 Shugar, William Grant, '90  
 \*Shugard, B. Franklin, '68  
 \*Shugars, George Forrester, '11  
 \*Shugars, William Styers, '05  
 Shull, Carl Whittaker, '91  
 Shull, David Franklin, '78  
 Shull, David Franklin, Jr., '04  
 \*Shull, Silas Henry, '80  
 Shumaker, Charles M., '92  
 Shumaker, Henry Ward, '14  
 Shumaker, Ralph Ritter, '18  
 Shuman, Calviu Bruce, '91  
 Shuman, Morris, '21  
 Shute, Joseph, '18

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- Shwab, George Augustus, '98  
 Sibila, Clement Jerome, '05  
 Sickel, William Ellen, '92  
 \*Siddall, Francis H., '56  
 \*Siddall, Robert J., '61  
 Sides, Howard Buckman, '76  
 Sidler, Mae Jennison, '20  
 Sieber, Isaac Grafton, '98  
 Siegel, Philip, '10  
 Siegfried, Charles Francis, '17  
 Siegfried, Howard Joseph, '93  
 Siegle, Herman Christian, '00  
 Siegrist, George Anthony, '04  
 Siemionkowski, Pauline, (now Siemion), '18  
 Siemon, William Herman, '09  
 Siggins, Frank Morris, '88  
 \*Siglinger, Charles J., '79  
 Silk, Jacob, '19  
 \*Sillyman, Lewis T., '58  
 Silva, Charles Romey, '15  
 \*Simes, J. Henry C., '64  
 \*Simes, John W., Jr., '36  
 \*Simes, Samuel, '33  
 Simes, Samuel, '67  
 \*Simes, Samuel F., '68  
 Simmons, George Arthur, '92  
 Simmons, Robert E. Lee, '87  
 Simms, William, '71  
 Simon, Mathias, '68  
 Simonin, Mignon Gray, Sp. '16  
 \*Simonis, Otto, Jr., '95  
 \*Simons, Charles Willis, '38  
 Simons, Harry Fisher, '95  
 \*Simons, Robert, '89  
 Simpers, Jay Scott, '09  
 Simpler, Willard Eugene, '96  
 Simpson, Ernest Biddle, '20  
 Simpson, George T., '67  
 Simpson, John Morton, '08  
 Simpson, Moses S., '79  
 \*Simpson, Robert, '71  
 Simpson, Robert, '83  
 \*Simon, William H., '66  
 \*Sinne, Hans Heinrich, '85  
 Singer, Irvin, '21  
 Singer, Robert Lamberton, '92  
 Singer, William August, '84  
 \*Sipe, George Walter, '90  
 Sipes, Clarence Leslie, '99  
 Sisler, Leroy William, '96  
 Sisman, Morris, '12  
 Sister Mary Beatrice, '17  
 Sister Mary de Chantal, '17  
 Sitgreaves, Wesley Cline, '91  
 Skeath, Alexander Hamilton Butler, '17  
 Skillman, Lionel Gilliland, '01  
 Skinner, Harry Wharton, '95  
 Skinner, William James, '12  
 Skloff, Myer, '17  
 Slack, A. Schuyler, Sp. '18  
 Slaughter, John Virgil, '87  
 \*Slayton, Edmund Elliott, '06  
 Sless, Ephraim Gershin, '21  
 Slick, Ross Merryman, '92  
 Slifer, Edward Wilson, '06  
 Slifer, Hannah Wilson, '05  
 Slifer, Leo Engelman, '95  
 Slipakoff, Isadore, '14  
 Slipakoff, Samuel Albert, '19  
 Slobig, Charles Henry, '02  
 Slobodkin, Rose, '98  
 Slocum, Charles Eben, '01  
 Slocum, Frank Leroy, '81  
 Slocum, Fred Williams, '13  
 Slothower, George Ammon, '18  
 Slotter, Charles Franklin, '18  
 Slough, Charles Edward, '80  
 Slough, Herbert Elmer, '07  
 Small, John Hamilton, Jr., '89  
 \*Smedley, Albert Webster, '90  
 \*Smedley, Bennett L., '62  
 Smedley, Harry Leedom, '80  
 Smeltzer, Jacob Daniel, '79  
 Smiler, Nathan Norman, '12  
 Smiley, Laura Marguerite, '97  
 \*Smink, Robert Wilson, '93  
 \*Smith, A. E., '73  
 Smith, Albert, '92  
 Smith, Albert H., '19  
 Smith, Albert Henry, '77  
 Smith, Alfred Homer, '02  
 Smith, Allen Henry, '92  
 \*Smith, Ambrose, '34  
 Smith, Amos Clark, '21  
 \*Smith, Arthur Joseph, '13  
 Smith, Arthur Nelson, '99  
 Smith, Augustus Swartz, '79  
 Smith, Beaton, '94  
 Smith, Benjamin Franklin, '91  
 Smith, Benjamin James, '98  
 \*Smith, Benjamin R., '46  
 Smith, Charles Adam, '91  
 Smith, Charles Ellwood Rupert, '99  
 Smith, Charles Hye, '95  
 Smith, Charles Michael, '83  
 Smith, Charles Oscar, '90  
 Smith, Christopher Columbus, '85  
 Smith, Clarence Daniel, '03  
 Smith, Clayton Kerper, '76  
 \*Smith, Daniel Evans, '93  
 \*Smith, Dole McClure, '16  
 Smith, Donald Benner, '17  
 Smith, Edgar Chellis, '11  
 Smith, Edward Gibbon, '08  
 \*Smith, Edward Newton, '81  
 Smith, Edward W., '81  
 \*Smith, Edwin R., '63  
 \*Smith, Ephraim K., '61  
 \*Smith, Frank F., '86  
 \*Smith, Frank G. D., Sp. '01  
 Smith, Frank H., '89  
 Smith, Frank Luther, '86  
 Smith, Frank MacFarland, '20  
 \*Smith, Frank Roop, '78  
 \*Smith, Franklin R., '29  
 Smith, Fred Harlow, '90  
 Smith, Fred Merrels, '13  
 \*Smith, Frederick William, '90  
 Smith, George Anselm, '92  
 Smith, George Carroll, '00  
 Smith, George Farrar, Jr., '80  
 Smith, George Leo, '18  
 \*Smith, George Lewis, '92  
 Smith, George Mark, '85  
 Smith, Harry Allen, '91  
 Smith, Harry Lanich, '15  
 Smith, Henry Addison, '03  
 Smith, Henry George, '79  
 Smith, Henry William, '02  
 Smith, Herbert Johnson, '91  
 Smith, Homer, A., '68  
 Smith, Howard Melancthon, '88  
 \*Smith, Isaac Jones, '30  
 \*Smith, Isaac Whitehouse, '58  
 \*Smith, Jacob Lybrand, '43  
 \*Smith, Jacob Schall, '03  
 Smith, James Auburn, '94  
 Smith, James Vogelsang, '07  
 Smith, Jay A., Sp. '15  
 Smith, Jay Fisk, '05  
 Smith, John Preston, Sp. '14  
 Smith, John Ritner, '96  
 Smith, John Stewart, '89  
 Smith, John William, '09  
 Smith, Joseph Granville, '77  
 Smith, Joseph Stahle, '77  
 Smith, Joseph Vanest, Jr., '94  
 Smith, Judson Stewart, '82  
 Smith, Marcus Samuel, '19  
 Smith, Milton Lovett, '12  
 Smith, O. L., '73  
 Smith, Paul, '96  
 Smith, Pharis Edwin, '87  
 Smith, Robert Alfred, '12  
 Smith, Robert Edgar, Jr., '11  
 Smith, Robert Victor, '94  
 Smith, Rodney, '95  
 Smith, Rose Frances, '17  
 \*Smith, Rush Blackfan, '74  
 Smith, Russell C., Sp. '17  
 Smith, Samuel Lester, '20  
 \*Smith, Selden W., '71  
 \*Smith, Stanley Gloninger, '05  
 Smith, Stanley Warren, '13  
 \*Smith, Stephen Douglas, '83  
 \*Smith, Theophilus II., '59  
 Smith, Walter Adam, '87  
 Smith, Walter Valentine, '87  
 Smith, Willard Eugene, '87  
 Smith, William Clay, '81  
 \*Smith, William David Harris, '02  
 Smith, William George, '16  
 Smith, William Harold, Jr., '80  
 Smith, William Henry, '03  
 \*Smith, Wilson B., '65  
 Smith, Winfield Frederick, '21  
 Smucker, Milton Clyde, '92  
 \*Smyser, George M., '62  
 \*Smyser, John Riemann, '88  
 Smyser, Willis Lanus, '93  
 Smythe, Edward Stanhope, '89  
 Snavely, Clarence Osborne, '98  
 Snavely, Harry Barr, '85  
 Sniteman, Charles C., '71  
 Snavely, Fred Hege, '21  
 Snook, Aura Estes, '07  
 Snuggs, Stephen Gregory, '90  
 Snyder, Bertram, '88  
 Snyder, Charles A., '17  
 \*Snyder, David Stahl, '03  
 Snyder, Erwin Cleveland, '13  
 Snyder, E. D., '71  
 Snyder, Frederick Maurice, '05  
 Snyder, Harold Berlin, '18  
 \*Snyder, Henry Nissley, '88



- Snyder, Herman Hugo, '99  
 \*Snyder, Howard Grant, '90  
 Snyder, John Paul, '98  
 Snyder, Louis Elliott, '21  
 Snyder, Marshall Prescott, '11  
 Snyder, William Henry, '15  
 Snyder, William Lincoln, '88  
 Soken, Joseph Louis, '02  
 Sollenberger, Maud, '05  
 Sollenberger, Norman W., '09  
 Solomon, Roscoe, '10  
 Solorzano Bermudez, Porfirio, '21  
 Solot, Louis Jay, '21  
 \*Sombart, John Edward, '80  
 \*Sombart, Joseph Louis, '90  
 Somers, Wilbert, '11  
 \*Sommers, Richard Miller, '76  
 Sonne, Ernest Harley, '16  
 \*Sonnick, John William, '76  
 Sonntag, Maximilian, '90  
 Sontag, George Lewis, '90  
 Sorber, Benjamin A., Sp. '17  
 \*Sorber, Lewis Samuel, '94  
 Sorber, Russell R., '21  
 Souder, George Reed, '88  
 \*Souder, Joseph A., '66  
 Souder, Lewis Reed, '83  
 Southall, Charles Morton, '89  
 Southall, James Morton, '13  
 \*Southall, Turner H., '53  
 Southard, Paul Harriman, '11  
 Southerland, Thomas Raibe, '90  
 \*Soyles, James Samuel, '15  
 Spalding, Andrew Eaton, '05  
 Spalding, Charles, '86  
 Spangler, Chester Arthur, '15  
 Spangler, Edwin Royer, '14  
 Spangler, George Ellsworth, '84  
 Spangler, Harry Albert, '04  
 Spangler, Luther E., '21  
 Spargo, Stephen Treverton, '15  
 Sparks, Alfred Denny, '79  
 Sparks, Edgar Reed, '92  
 Sparks, Ruth Everest, '18  
 Sparrow, Charles, '74  
 Spath, George Balthaser, '96  
 \*Speaker, George Sylvester, '79  
 \*Speakman, William Ellwood, '81  
 \*Spear, Owen Crow, '88  
 Spears, Edward Gibson, '01  
 Speck, Herbert Arthur, '00  
 Spector, Simon Louis, '21  
 Speer, Edgar Lacy, '92  
 \*Spence, Samuel Benjamin, '74  
 \*Spence, William Bayne, '83  
 \*Spenceley, Cornelius Ederson, '78  
 Spencer, Edward Thomas, '91  
 Spencer, Eugene W., '72  
 \*Spencer, Hallam H., '58  
 Spencer, Lorraine Robert, '20  
 Spencer, William, '78  
 \*Spengler, Allen, '76  
 Spengler, John George, '81  
 Spickler, Walter Scott, '94  
 Spotts, Albert Oyster, '96  
 Spragle, Elmer, '91  
 Spenger, William Alfred, '94  
 Spriggs, John S., '73  
 Springer, Altha Raymond, '19  
 \*Springer, John A., '48  
 Sprissler, Clara, '93  
 Sprissler, Oscar Alfred, '87  
 Sprissler, Theodore, '79  
 \*Spruance, James Harvey, '91  
 \*Stackhous, David L., '54  
 \*Stackhouse, George P., '68  
 Stacks, Abraham Homer, '68  
 Stadelman, Alfred George, '12  
 \*Stager, Edwin Wesley, '86  
 Stagmer, Robert Irving, '21  
 Stahel, Albert William, '96  
 Stahl, B. Franklin, '84  
 Stahle, Robert Nevin, '99  
 \*Stahler, Eugene Abraham, '82  
 Stahler, Harry Lincoln, '86  
 Staley, Frederick Walton, Sp. '01  
 Stallman, Harry Reader, '82  
 Stallsmith, Walter Edgar, '03  
 Stam, Lillian Roberts, '19  
 Stang, Peter, '99  
 Stanger, Lawrence Albertson, '93  
 \*Stanhope, W. Bellingham, '56  
 Stansbury, Wilson Vanard, '75  
 Stapleton, Richard Michael, '17  
 \*Starck, Albert August Gustav, '79  
 Stark, Louis S., '21  
 Starkey, Isaac Wayne, '20  
 Starkey, Thomas Earl, '21  
 Starr, Mabel Charlotte, '09  
 States, Franklin Pierce, Jr., '05  
 \*Statbem, Beach Jones, '81  
 Staub, Brown Charles, '21  
 Staub, Luther Slifer, '21  
 Staudt, Albert John, '88  
 Stauffer, Wilford Gilbert, '12  
 Staver, Guy, '06  
 \*Steady, Frank Hernlie, '83  
 Steadman, Merrill Linn, '96  
 Stedem, Frederick Wm. Edward, '82  
 Stedem, Laurence S. A., '93  
 Steel, Chalmers Alexander, '99  
 Steel, Maxwell Wensel, '16  
 Steele, John Wesley, '93  
 \*Steele, Oscar, '49  
 Steelman, Ethelbert, '11  
 \*Steen, J. Henry, '57  
 Steere, Frederick Eugene, '93  
 Steever, Ernest Leo, '14  
 Steever, Henry Clay, '54  
 Steever, William Forsaith, '01  
 Steidle, Carl Frederick, '17  
 Steigerwalt, Frederick William, Sp. '06  
 Steigrod, Harry Archie, '17  
 Stein, Abraham Mordecai, '16  
 Stein, Bessie, '21  
 Stein, Edward Theodore North, '92  
 \*Stein, Jacob Henry, '69  
 Stein, Joseph, Sp. '14  
 Stein, Milton, '18  
 Stein, Morris, '11  
 Stein, Samuel, '12  
 Steinau, Lee, '91  
 Steinberg, Samuel S., '21  
 Steinel, Edward J., Sp. '20  
 Steiner, Benjamin, '09  
 Steiner, Ephraim Henry, '91  
 Steinhilber, Harry Ehrhart, '82  
 \*Steinicken, George Augustus, '85  
 Steinmann, Gustave, '87  
 \*Steinmetz, Charles Mays, '84  
 \*Steinmetz, William Baer, '98  
 Steinsnyder, Barnett, '17  
 Stell, John J., '58  
 \*Steltz, Harry Smoyer, '93  
 Steltzer, Lewis Gustave, '16  
 Steltzer, Lewis Joseph, '80  
 Stem, Harvey Nevin, '92  
 \*Stem, W. Nelson, '73  
 Stengel, Arthur, '95  
 \*Stengelin, William, '88  
 \*Stephen, Annie Rex, '95  
 Stephen, Walker Lewis, '95  
 Stephen, Willie Leisse, '89  
 \*Stephens, Everard Potter, '81  
 Stephens, Halsey DeForest, '96  
 \*Stephens, Jacob R., '72  
 Stephens, Stanley R., Sp. '19  
 Stephens, Sylvia Fay, Sp. '21  
 Stermer, John Henry, '85  
 Stern, Aaron, '71  
 \*Stern, Charles Wilson, '95  
 \*Stern, Oliver Henry, '79  
 Stetler, Henry Aaron, '08  
 \*Stevens, Charles Henry, '08  
 Stevens, Fred Madison, '89  
 Stevens, Gerald Henry, '13  
 \*Stevens, Hennell, '53  
 Stevens, Thomas Ray, '96  
 Stevenson, Frederick Lee, '94  
 Stevenson, John Stuart, '90  
 Stevenson, Nellie Jane, '05  
 Stevenson, Richard Graham, '77  
 Stevenson, William Denny, '82  
 Steves, Bertram Clarence, '20  
 Steward, Charles Roberts, '20  
 Stewart, A. B., '73  
 Stewart, Aaron Walter, '89  
 Stewart, Francis Edward, '76  
 Stewart, John, '93  
 Stewart, Robert James, '15  
 \*Stewart, Robert Reed, '74  
 Stewart, Samuel Shelton, '94  
 Stickle, Morton Donaldson, '17  
 Stichter, Henry Deischer, '85  
 Stief, Bernard Harry, '21  
 \*Stiefel, Louis, '68  
 \*Stifel, Albert F., '73  
 Stikarofsky, Albin, '16  
 Stiles, Arthur H., Sp. '83  
 Stiles, Henry Horace, '15  
 Stiles, Henry Lippincott, '85  
 \*Stillwell, Walter C., '70  
 Stimmel, Irvin Siegfried, '03  
 Stimmel, Walter, '91  
 Stimus, Howard George, '98  
 Stine, Clair Shaffer, '07  
 Stine, Howard F., '96  
 Stine, William Earl, '03  
 Stines, George Findley, '14  
 Stinson, William Samuel, '00  
 Stirling, Samuel Robinson, '75  
 Stites, Albert H., '79  
 Stitt, Edward Rhodes, '87  
 Stock, Jacob Frederick, '79  
 Stock, Roy Albert, '18



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- \*Stockton, William Wood, '76  
 \*Stoeever, Charles F., '46  
 Stoeever, Harry VanHoff, '90  
 \*Stoeever, J. Melancthon, '61  
 Stofflet, Raymond Arthur, '09  
 Stoffregen, Louis Franklin, '91  
 Stokely, Harvey Venton, '16  
 Stokes, Edward Verry, '08  
 \*Stokes, Isaac W., '49  
 Stoll, Samuel Franklin, '85  
 \*Stoltz, John Frederick, '74  
 Stolz, David, '03  
 Stolz, Louis, '00  
 Stommel, Henry Aloysius, '97  
 Stone, Edward Browning, Jr., '00  
 Stone, Mimms Baker, '88  
 Stoneback, William Jennings, '17  
 Stoner, Clarence, '09  
 Stoner, Ephraim Frank, '35  
 Stoner, J. Buchanan, '83  
 Stoner, John David, '21  
 \*Stoner, William James, '75  
 Stonesifer, Howard Abraham, '04  
 Stoppel, Albert, Sp. '17  
 Storks, L. Scott, '69  
 Stouidt, Irwin Sylvester, '01  
 Stouffer, Chester Beals, '21  
 Stouffer, Harvey E., '15  
 Stouffer, James Cochran, '06  
 Stout, Benjamin Franklin, '01  
 Stout, Charles A., '94  
 \*Stout, Charles Pettit, '80  
 Stout, Edward Clayton, '96  
 Stout, Lynn Francis, '21  
 Stout, Oliver, '91  
 Stout, Philip Samuel, '99  
 Stover, Fred Hersman, '12  
 Stover, Harman Albert, '08  
 Strater, Henry Herman, '81  
 Strathie, Alexander John, '01  
 \*Stratton, Charles Clark, '88  
 Stratton, Ernest Kenneth, '10  
 \*Stratton, James, '51  
 Stratton, James Pennington, '93  
 Strauch, Robert, '08  
 Straup, John Wesley, '16  
 Strauss, Herbert Emanuel, '09  
 Strauss, Raymond Albert, '11  
 Strauss, Robert Franklin, '02  
 Strawinski, Jacob Franklin, '98  
 Streamer, Charles Hayden Alexander, '18  
 Streen, Paul, '21  
 Streeper, Austin, '97  
 Streeper, Frank Park, '88  
 \*Street, Leonidas Hamlin, '75  
 Streeter, Nehemiah Dunham, '83  
 Strehl, Louis, '66  
 Streitz, Alexander Frederick, '84  
 \*Stretch, Charles F., '70  
 Strickler, George, Jr., '95  
 Strickler, Jacob, '78  
 Strobel, John, Jr., '77  
 Strode, R. Clark, '99  
 \*Strode, William Alvah, '91  
 Strohacker, Samuel Martin, '90  
 Stroud, John Geary, '91  
 Stroup, Clement Bryant, '93  
 Stroup, Freeman Preston, '96  
 \*Strouse, Theodore Herman, '91  
 Strunk, Edward Josiah, '04  
 Strunk, William Elwood, '12  
 Strunk, Samuel W., '80  
 \*Stryker, Cornelius Whitenack, '82  
 Stuart, James Earle, '16  
 Stuart, Manilus Henry, '75  
 Stuart, Robert Cummins, '95  
 Stuck, Willard Steans, '03  
 Stucker, Lester Eldridge, '08  
 Study, Edwin Lever, '08  
 Stump, Adam Franklin Marshall, '96  
 Stump, Frank Arthur, '04  
 Stuver, Henry William, '02  
 Suenick, Max Herbert, '21  
 Suess, Ignatz, Sp. '00  
 Suess, John Paul, '78  
 Suhr, Charles Louis, Sp. '98  
 Sukonick, Louis, '20  
 Sullivan, James Francis, '00  
 Sulonff, Samuel Henry, '94  
 Sultzbach, Harry Miller, '92  
 Sumnshy, Carroll Burrill, '15  
 Sunday, Carlton Pierce, '00  
 Sunday, Harvey James, '06  
 Sunday, Jesse Hartzell, '17  
 Sunderland, Henry, '86  
 Sunshine, Abraham J., Sp. '19  
 \*Supplee, Isaac Morris, '89  
 Supplee, Jesse L., '70  
 Supplee, William Edward, '86  
 Sussdorf, Frank Leopold, '75  
 Sutcliffe, John Lewis, '13  
 Suter, Lester Ambrose, '16  
 Suter, Louis Adolph, '08  
 Sutliff, Jacob, '03  
 Sutton, Samuel, '92  
 Sutton, Stanley Eugene, '14  
 Sutton, William Henry, '87  
 Sutton, William Henry, Jr., '17  
 Suttly, Arthur Paul, '20  
 Suydam, John Derr, '87  
 Swabon, John Joseph, '18  
 \*Swain, George M., '67  
 Swain, Harry, '85  
 Swain, J. Harry, Sp. '11  
 Swainbank, Charles Miller, '96  
 Swainbank, Harry Harlan, '90  
 \*Swann, Samuel Davis, '85  
 Swanson, Charles Adolphus, '86  
 Swartley, Harry C., '91  
 Swartley, Harry Mahlon, '98  
 Swartz, Calvin I., '96  
 Swartz, Charles Michael, '88  
 Swartz, Edward F., '95  
 Swartz, William Luther, '02  
 Swavely, Leon William, '20  
 Swayne, Walter Scott, '82  
 \*Sweeney, Edward James, '08  
 \*Sweeney, John Edward, '05  
 Sweeney, John Francis, '05  
 \*Sweeney, Joseph Henry, '91  
 Sweitzer, Morris Kemerer, '78  
 Swentzell, William Montelius, '82  
 \*Swisher, David Falls, '89  
 Switzer, Luin Burt, '88  
 Swope, James Wills, '81  
 Swyers, Sadie, Sp. '16  
 Sylvester, Howard George, '05  
 Sylvester, William Grimes, '11  
 Sypherd, Clarence Draper, '84  
 \*Tag, William, '81  
 Tagg, Norman Harvey, '16  
 \*Taggart, Howard M., '92  
 \*Tait, Stewart, '67  
 \*Talbot, Stephen Liversidge, '80  
 Tallman, Franklin Lewis, '07  
 Tamayo, Miguel Ocroa, '20  
 Tamplin, John S., Sp. '20  
 Tannura, Sokichi, Sp. '19  
 Tanner, Thomas Bernard, '11  
 Tarr, Robert H., '95  
 \*Tatem, Charles Henry, '75  
 \*Tatzel, Anton Swaberter, '83  
 \*Taylor, Alfred B., '44  
 \*Taylor, Alfred Lafayette, '47  
 Taylor, Alice Williams, '12  
 Taylor, Bennett Lewis, '87  
 Taylor, Frank Cochran, '06  
 \*Taylor, Gove Saulsbury, '88  
 \*Taylor, Harry B., '69  
 Taylor, Horace B., '57  
 Taylor, Howard Davis, '94  
 Taylor, James, '67  
 Taylor, John Dalzell, '81  
 \*Taylor, Joseph Yeager, '75  
 Taylor, Leandor Gifford, Jr., '14  
 Taylor, Lynwood S., '00  
 \*Taylor, Merle Hampton, '92  
 Taylor, Roy Horton, '13  
 Taylor, Thomas Clarkson, '88  
 \*Taylor, Walter Adolphus, '76  
 \*Taylor, William, '51  
 Taylor, William Francis, '94  
 Taylor, William Henry, '14  
 Taylor, Winfield Scott, '76  
 Taylor, Winfield Scott, Jr., Sp. '15  
 Teah, Philip Ash, '21  
 Tedford, Edward Weeks, '84  
 Teisen, Aase, Sp. '12  
 Temperton, Leibt Sylvester, '11  
 Tenney, William Randolph, '15  
 Terne, Henry Bruno, '95  
 \*Terrell, Thomas Daniel, '74  
 Terrill, George Morton, '77  
 Terry, John Herman, '95  
 Teter, Claude Jacob, '08  
 Tesman, Jacob, '17  
 Texter, Charles Henry, '01  
 Thayer, Guy Parker, '95  
 Thayer, Houston Talbott, '94  
 Thieband, C. O., '72  
 Thieband, Hugh McCallum, '85  
 Thomas, Bessie Estella, '17  
 Thomas, Daniel Judson, '82  
 Thomas, David Walter, '94  
 Thomas, Edward Sutton, '06  
 \*Thomas, Edwin, '64  
 \*Thomas, Emil Conrad, '79  
 \*Thomas, Frank W., '68  
 Thomas, Frederick William, '06  
 Thomas, George Carroll, '02  
 Thomas, James Harry, '84  
 Thomas, Jason P., '63  
 Thomas, John, '15  
 Thomas, John Aubrey, '18

- Thomas, John Carter, '17  
 \*Thomas, N. Spencer, '47  
 Thomas, Oscar Ernest, '82  
 Thompson, Alexander Peterson, '96  
 \*Thompson, Benjamin Spangler '93  
 \*Thompson, Charles Leonard, '91  
 Thompson, Ebenezer Francis, '90  
 Thompson, Frank Davenport, '14  
 Thompson, George Washington, '86  
 Thompson, Henry Kirk, '98  
 Thompson, Henry Merrill, '98  
 Thompson, James De Witt, '12  
 Thompson, Joseph Brinton, '93  
 Thompson, Nathan Lincoln, '95  
 Thompson, Oan Joshua, '92  
 \*Thompson, Samuel P., '34  
 Thompson, W. Herbert Moodie, '89  
 Thompson, Wilfred Steadman, '06  
 Thompson, William A., '56  
 \*Thompson, William Beatty, '58  
 Thompson, William Cochran, '85  
 Thompson, William Franklin, '90  
 Thompson, William H., '54  
 Thoms, Herman Emanuel, '82  
 \*Thomson, Frank Frazer, '90  
 Thorley, Samuel Early, '06  
 Thorn, Albert Livingston, '76  
 Thorn, Henry Prickett, '75  
 Thorne, Elizabeth Kathryne, '17  
 \*Thornley, William James, '80  
 Thornton, Edward Quin, '89  
 Thornton, Harry Carl, '16  
 Thornton, Henry, '81  
 Thornton, Thomas Redman, '95  
 Thrush, Morris Clayton, '96  
 Thum, John Carl, '96  
 Tidd, Harry, '86  
 Tiefenbach, Jacob Fred, '96  
 Tielke, Maxwell Gustav, '91  
 Tift, Frederick Alden, '85  
 \*Tilge, F. A., '63  
 \*Tilghman, John H., '34  
 \*Tilton, Francis Marion, '74  
 Timm, Clara Louise, '12  
 Tingle, John Beard, '01  
 Tinsman, John Fine, '91  
 Titcomb, Joseph Alexander, '80  
 Titus, Frank DeWight, '08  
 Titus, Samuel Henry, '83  
 Tobachnick, Pauline, '21  
 Tobachnick, Samuel, '21  
 \*Tobey, Avery, '49  
 \*Tobey, Charles William, '76  
 Tobias, Isaac Herbert, '97  
 Tod, Alva Forman, '83  
 Toelke, Charles, '98  
 \*Togans, James Albert, '16  
 Tomassevich, Leopoldo, '70  
 Tomkinson, Horace Lessy, '94  
 Tomlin, Charles Isaac, '15  
 \*Tomlin, Millard Fillmore, '74  
 \*Tomlinson, Edwin, '63  
 Tomlinson, George Walton, '98  
 \*Tomlinson, Thomas Cullen, '75  
 Toplis, William George, '80  
 Toplis, William Samuel '13  
 Topper, Louis LeRoy, '10  
 Toulson, John Milbourn, '02  
 Toulson, Milbourn Asbury, '76  
 Tourtelot, Frank J., '58  
 Towles, Therret Rankin, '96  
 Townsend, James Vaughan, '96  
 Tragesser, Edward Charles, '92  
 Train, Earl Fred, '14  
 Train, H. Jane, '21  
 Trainer, Maurice Winfield, '08  
 Trambley, Leo Thomas, '14  
 Tranb, Charles Godfrey, '81  
 \*Trauck, Charles Cowdrick, '90  
 \*Traul, Glenwood Elmo, '06  
 Travis, J. Walton, '88  
 \*Trednick, John B., '63  
 \*Trefry, Thomas Crowell, '85  
 Tregellas, Guy Smith, '09  
 Treichler, Frank Albert, '10  
 Treichler, Lonis Alpinus, '69  
 Tremby, E. C., '72  
 \*Tretthewey, Samuel Aaron, '15  
 \*Trimble, David B., '34  
 Trimble, Frank Fremont, '78  
 \*Trimble, Henry, '76  
 \*Trimble, Joseph, '34  
 \*Tripmaker, Walter William, '03  
 Tripplé, John Franklin, '09  
 Trist, Edwin Allen, '84  
 Troll, Conrad W., '79  
 Troop, William Winebert, '93  
 Troth, Ernest Augustine, '98  
 \*Troth, Henry M., '51  
 Trotman, Aaron J., '18  
 \*Troat, John Henry, '84  
 Trout, Manrice Elmer, '09  
 Tront, Winfield Scott, '86  
 Trout, William Wesley, '76  
 Troutman, George Franklin, '92  
 Troxell, John Isaac Peter, '97  
 Truckenmiller, Frank Edward, '94  
 Truckenmiller, G. Louis, '73  
 True, Chester Arthur, '08  
 Truman, Elliott Davis, '93  
 Trumbower, Russell Stanley, '19  
 Trump, Thaddeus Thomas, '92  
 Trunpp, Louis, '77  
 Trusler, Charles Lawrence, '83  
 Tu, Kuen-Hua H., '18  
 Tuck, Henry Cornelius, '17  
 Tucker, George W., Sp. '16  
 Tucker, Oscar George, '16  
 Tucker, Robert Woodcliffe, '00  
 Tucker, S. Allen, Sp. '97  
 \*Tull, Isaac, '72  
 \*Tull, John, '70  
 Tuller, Charles, '61  
 Tunnitsky, Samuel M., '21  
 Tuohy, James Louis, '03  
 \*Turnbull, Lawrence, '42  
 \*Turner, Alexander, '79  
 Turner, Charles Chester Carrington, '18  
 Turner, Curtis Waugh, '79  
 \*Turner, D. H., '70  
 Turner, Herbert Wilkinson, '90  
 Turner, John Basketter, '79  
 Turner, Joseph Constant, '99  
 \*Turner, Joseph M., '36  
 Turner, Philip Percy, '92  
 Turner, Thomas Jefferson, '04  
 Turner, Walter William, '10  
 \*Turnpenny, Joseph C., '33  
 Tyler, Ephraim Shaw, '02  
 Tyler, George Cone, '90  
 Tyler, Thomas Van Dyke, '90  
 Tyler, William Watson, '99  
 Tyree, Josiab S., '81  
 Tyson, Jacob Homer, '17  
 Udell, William Howard, '11  
 Ueberroth, Harry Milton, '93  
 Uhland, John Augustus, '79  
 Uhler, Samuel Elliott, '90  
 Uller, Emil Joseph, '88  
 Ulmer, Albert Herman, '19  
 Ulmer, Stephen Edward, '95  
 Ulrich, Julius Hirsch, '95  
 Ulrich, Ralph Thomas, '02  
 Umlauf, Harry Jacob, '08  
 Umstead, Walter Horace, '93  
 \*Unangst, Eugene Peter, '77  
 \*Unangst, Harvey Edgar, '95  
 Underwood, James Harris, '98  
 Unterberger, Louis, '17  
 Unczicker, Charles B., '69  
 Upham, Samuel W., '89  
 Urben, Frederick Lang, '84  
 Urffer, Samuel, '01  
 Usher, William Francis, '17  
 Utech, Philip Henry, '93  
 Vadner, Charles S., Sp. '92  
 Vaile, Thomas, Sp. '21  
 Valentine, Frank Elliott, '84  
 Van Allen, Herman, '80  
 Van Antwerp, James Callanan, '05  
 \*Van Buskirk, Samuel Levick, '85  
 Van Buskirk, Thomas Franklin, '93  
 Vandegrift, Harry Umsted, '16  
 Vandegrift, Isaac P., '67  
 Van Dyke, Alfred Nelson, '92  
 Van Dyke, James Packer, '03  
 Van Dyke, James Wilber, '99  
 Van Dyke, William Clinton, '89  
 Van Gilder, Levi Morton, '01  
 Van Gorder, Albert Haggood, '76  
 \*Van Horn, Edward Rogers, '94  
 Van Inwegen, Frank P., '09  
 Van Korb, William, '95  
 Van Norden, Frances, Sp. '20  
 \*Van Nort, William Augustus, '85  
 \*Vansant, Robert Hays, '79  
 \*Van Scoter, Jay Chester, '87  
 Van Valzab, John Adams, '90  
 Vaughan, Parry Wyche, '84  
 Vehrs, Ernest Edward, '18  
 Veigel, Charles Joseph, '14  
 Venn, Joseph Harry, '91  
 Venner, Frank Atman, '12  
 \*Vernon, George R., '71  
 Verstine, Samuel Philip, '11  
 Vidaurreta, Saturnino, '20  
 Viley, John T., '71  
 \*Vincent, Lorren Stiles, '86  
 Viner, Lewis, '10  
 Vink, John Alexander Logan, '09  
 Virden, Edwin, '81  
 Virgiliis, Arturo De, Sp. '20  
 Visanska, Samuel Albert, '91



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- Voelcker, Rudolph Fred George, '75  
 Vogel, John Michael, '13  
 Vogel, Mary Lynch (Mrs.), '20  
 Vogelbach, Edmund, '65  
 \*Vogelbach, Hermann A., '60  
 \*Vogelbach, Jacob Harrison, '93  
 \*Von Achen, Frank Herman, '85  
 Von Cotzhausen, Louis, '76  
 Von Stanley, Eugene, '21  
 Von Wittkamp, Harry Louis, Jr., '76  
 Voshage, Herman F., '73  
 Voss, Frederick John, '92
- Wachtel, Leo Michael, '04  
 Wachtell, John Kirby, '93  
 Wack, Norman Aloysius, '13  
 Wade, Joseph Louis, '05  
 Wade, McClanahan, '79  
 Wagaman, Emmett, E., '21  
 Wagaman, Samuel Edward, '89  
 \*Wagener, Charles Hugh, '79  
 Wagner, Charles Louis, Sp. '12  
 Wagner, Charles Wesley, '93  
 Wagner, Clarence Kinney, '17  
 Wagner, George Frederick, '04  
 Wagner, George Lewis, '87  
 Wagner, Harry David, '15  
 Wagner, John George, '08  
 Wagner, Joseph, '60  
 Wagner, Otto Gross, '12  
 Wagner, Raymond Charles Bernard, '17  
 Wagner, Robert Sidney, '88  
 Wagner, Vernon Wilbert, '21  
 Wagner, William Finley, '86  
 \*Wahle, Edwin, '92  
 Waidelich, Harold Russell, '19  
 Waker, James Schureman, '14  
 Walch, Robert Henry, '75  
 \*Waldenberger, Louis, '88  
 Waldner, Herman Theodore, '98  
 Waldner, Paul Jacob, '96  
 Walker, George Allen, '83  
 Walker, Henry Crawford, '77  
 Walker, John Thomas, '65  
 Walker, Lynne D., '18  
 Walker, Samuel Edwin, '74  
 \*Walker, Thomas A., '66  
 Wallace, Edwin Corby, '88  
 Wallace, Frank Brisbane, '88  
 \*Wallace, Harlan Lewis, '90  
 Wallace, John Aloysius, '19  
 Wallace, William Alexander, '16  
 Wallace, William Romine, '14  
 Wallace, William Sampson, '80  
 \*Wallen, Jarvis R., '69  
 \*Wallington, Edward Morrell, '79  
 Wallis, James Francis, '89  
 Wallis, John Edward, '81  
 Walls, Frank, '88  
 Walls, John Henry, '92  
 Wallschlaeger, Paul Charles H., '82  
 Walmsley, Charles Edward, '03  
 Walter, Andrew Wendel, '92  
 Walter, Charles Arthur, '04  
 Walter, Charles Frederick Wm., '07
- Walter, William Bell, '98  
 Walter, William Henry, '83  
 Walter, William John, '18  
 Walters, Charles Ellsworth, '13  
 Walther, Raymond Joseph, '06  
 Walton, Harry Hurley, '93  
 Walton, John Carroll, '10  
 Walton, Lucius Leedom, '88  
 Walz, Frank John, '93  
 Walz, Louis W., Sp. '09  
 Wamsley, James Winter, '92  
 Ward, Christopher Columbus, '86  
 \*Ward, John, '59  
 \*Ward, John Martin Broomall, '84  
 Ward, Joseph Poletus, '86  
 \*Ward, Merton Barber, '94  
 Ward, Percy Hall, '89  
 Ward, Robert Toomer, '91  
 \*Ware, Frank, '69  
 \*Ware, Samuel F., '69  
 Warfel, William Sylvester, '95  
 Warg, Edwin Connor, '82  
 Warne, Henry Lee, '81  
 Warner, Clarence Gardiner, '12  
 Warner, Frank Stephen, '80  
 Warner, Harry Edwin, '12  
 Warner, William II., '58  
 \*Warner, William Richard, '56  
 Warner, William Richard, Jr., '81  
 Warnick, Canby Paul, '05  
 Warricks, James Robert, '17  
 \*Warrington, Charles Williams, '76  
 \*Warrington, Edward, '80  
 Warshawsky, Reuben, (now R. W. Warner), '04  
 Wasley, Fred Stanley, '96  
 \*Wasley, Harry Malcolm, '94  
 Waterall, Charles Albert, Sp. '91  
 Waterman, Benjamin Carpenter, '78  
 Waters, Cyrus Albert, '16  
 \*Waters, Thomas Carey, '95  
 Watkins, Edmund Howell, '89  
 Watkins, Llewellyn James, '11  
 Watkins, Mack McInnis, '96  
 \*Watson, Charles Wesley, '79  
 Watson, Herbert James, '01  
 Watson, Herbert Tustin, '08  
 Watson, Ilite, '90  
 Watson, James Nathaniel, '99  
 Watson, John Russel, '14  
 \*Watson, Jonathan Ingham, '96  
 \*Watson, Maurice, '89  
 Watson, Walter Irving, '14  
 Watson, Walter Walton, '95  
 Watson, William C., '71  
 \*Watson, William J., '53  
 Watson, William Porter, '84  
 \*Watt, Harry Calvin, '76  
 Watts, Glenn Leland, '12  
 Waxman, Max, Sp. '16  
 Way, Helen, (Mrs. Hess), '17  
 Way, John Cloud, Jr., '14  
 Way, Julius, '82  
 Wayman, John Martin, '86  
 \*Weaber, John Alvin, '84  
 Weagley, Marburg Downia, '18  
 Weakley, William Stair, '99  
 Weaner, Howard Henry, '21
- Wear, John, '11  
 Weatherford, Boyd, '16  
 \*Weatherly, William Henry, '61  
 Weaver, Frank Craven, '81  
 Weaver, Henry Bacon, '81  
 \*Weaver, John A., '71  
 Weaver, John Dabney, '07  
 \*Weaver, Thomas, '56  
 Weaver, Wilmer John, '95  
 Webb, Abner, '94  
 Webb, Alvin Chester, '14  
 Webb, Harry Cornelius, '16  
 Webb, John Karl, '95  
 Webb, Morrison Wright, '76  
 Webb, Paul Carleton Hill, '10  
 Webb, Samuel W., '67  
 Webb, Waller Nardin, '10  
 \*Webb, William Barber, '45  
 \*Webb, William H., '68  
 Webber, Joseph LeRoy, '76  
 Webbert, Harry Sigler, '95  
 Weber, Alexander Arthur, '84  
 Weber, Charles Henry, '89  
 Weber, Frank Charles, '91  
 Weber, Frederick C., '71  
 Weber, Frank Nicholas, '93  
 Weber, George Washington, '83  
 Weber, Henry J., '63  
 Weber, Morris Ellsworth, '83  
 Weber, Reinhard Julius, '83  
 Weber, Robert Boyd, '21  
 Weber, William, '71  
 Weber, William, '89  
 Webster, George C., '80  
 Webster, Henry, '82  
 Webster, Henry Clay, '71  
 Webster, Leslie Sharpless, '17  
 Webster, Samuel C., '85  
 Weck, Charles Erastus, '86  
 Weckler, Gustavus Adolphus, '87  
 Wedemeyer, Frederick George, '88  
 Weeks, Kenneth, '16  
 Wegener, August Gerhard, '94  
 Wegener, Henry J., Jr., '85  
 Wehler, Ira Randolph, '93  
 Weichselbaum, Jacob, '67  
 Weida, Charles Arthur, '96  
 Weidemann, Charles Alexander, '67  
 Weidemann, George Buzby, '02  
 Weidemann, Warren Rawson, '20  
 Weidler, Charles Lincoln, '94  
 Weidler, Walter Franklin, '16  
 Weidman, Isaac Snader, '20  
 Weidner, Elmer Milton, '16  
 Weigester, Wilson, '02  
 Weil, Joseph L., '89  
 Weiler, John Fogel, Jr., '12  
 Weiler, John Wilson, '92  
 Weinberg, Charles Berenda, '04  
 Weinberg, David Hanan, '13  
 Weinberg, Esther, '15  
 Weinberg, Isadore Binder, '19  
 Weinberg, Isadore Thomas, '20  
 Weinberg, Maurice, '20  
 Weinberg, Reba, '21  
 Weinberg, Samuel, '08  
 Weiner, Albert Maurice, '15  
 Weinstein, Abram, '14  
 Weinstein, Leah, '21



- Weinstein, Samuel, '21  
 Weir, John Wesley, '83  
 Weir, William Partec, '17  
 \*Weirich, George Alcinus, '84  
 \*Weis, William, '78  
 Weisbard, Leonard, '20  
 Weise, Frank Herman, '20  
 Weisel, Benjamin Franklin, '85  
 Weiser, Clinton Robert, '05  
 Weiser, Frank Ressler, '88  
 Weiser, Spencer Bucher, '95  
 \*Weiser, Thomas D., '58  
 Weiser, Walter Rupert, '92  
 \*Weiser, William Peiffer, '76  
 Weisner, Nicholas Frederick, '92  
 \*Weiss, Christian, '81  
 Weiss, Edward Louis, '18  
 \*Weiss, Frederick Andrew, '90  
 Weiss, Hervy Beale, '98  
 Weiss, Joseph F., '21  
 Weiss, Louis, '77  
 Weiss, William Erhard, '96  
 Weitzel, Sue C., '97  
 Weitzman, Sydney Alan, '18  
 Welch, Louis Joseph Frederick, '05  
 Welch, William Herbert, '02  
 \*Welding, Watson, J., '33  
 Wellcome, Henry S., '74  
 Weller, John Roberts, '12  
 Welliver, Robert F., '87  
 \*Wells, Ebenezer Miller, '76  
 Wells, Eleanor H., Sp. '19  
 Wells, Frederick Barton, '90  
 \*Wells, James G., '60  
 Wells, Walter Neff, '16  
 Welsh, Oscar Connor, '90  
 Welsh, Ralph Liguori, '03  
 Welsh, Robert Emmet, '95  
 \*Wendel, Frederick W., '65  
 \*Wendel, H. Edward, '65  
 \*Wendel, John, '60  
 Wendel, Paul Herman, '08  
 \*Wendel, William, '79  
 \*Wenner, Alfred Jefferson, '84  
 \*Wenner, George Victor, '88  
 Wenner, John Alfred, '18  
 \*Wenrich, Alfred B., '70  
 \*Wenzel, William T., '55  
 \*Wentz, Silas H., '44  
 Wentzler, Hartman Gotthard, '97  
 Wepfer, Adolph Gustave, '11  
 Wepfer, Emil Albert, '17  
 Werckshagen, Otto, '78  
 Werkheiser, Harold Edward, '15  
 Werner, David T., Sp. '94  
 Werner, Karl, '16  
 Werner, Reinhold Charles, '87  
 Wernitz, Cecil Semmons, '16  
 Werst, Allen Ledig, '83  
 \*Wert, John Mumbauer, '74  
 Werts, John LaMonte, '00  
 Wertz, Harry Elmer, '04  
 Wescott, William Carter, '90  
 Wessels, John Louis, '79  
 West, David MacGowan, '04  
 West, Hans Peter, '13  
 West, Katherine Powell, '99  
 Weston, Edythe (Mrs. Geo. C. Parry), '96  
 Weston, Geary Augustus, '91  
 Westphal, Hermann, '90  
 Westphal, Karl Henry, '92  
 \*Wetherill, Henry M., '72  
 \*Wetherill, J. Bloomfield, '57  
 \*Wetherill, Samuel P., '42  
 Wetzel, Harry Woodall, Sp. '20  
 \*Wetzel, Samuel, '97  
 Wevill, George Edward, '82  
 Wexlar, Benjamin Joseph, '16  
 Weyand, William Jacob, '88  
 Weymer, Harry B., '69  
 Whaland, Berta, '06  
 Whalen, Margaret R., Sp. '19  
 \*Whartenby, John A., '46  
 Wheaton, Theodore Corson, '76  
 Wheeler, Charles Edmund Richardson, '08  
 Wheeler, Elwyn J., '14  
 Whelan, Walter P., '16  
 Whilden, Charles Bennett, '85  
 Whipple, Ernest Herbert, '13  
 Whipple, Oscar Kellogg, '91  
 Whipple, Oscar Kellogg, Jr., '14  
 Whitacre, Henry Woolman, '06  
 Whitacre, Lewis Reese, '96  
 Whitaker, George Nixon, '91  
 Whitcomb, William Higbee, '94  
 \*White, Andrew Allison, '78  
 White, Charles Albert, Jr., '13  
 White, Charles Henry, '92  
 White, Edward R., Jr., '21  
 White, Edward Riall, '89  
 White, Frank Willett, '91  
 White, Hobart Pryde, '16  
 White, Hugh, '76  
 White, Ishmael James, '94  
 \*White, James Addison, '80  
 White, James T., '65  
 White, Preston Barnes, '92  
 White, Ray Ellsworth, '17  
 \*White, Robert Walter, '89  
 White, Walter Williams, '20  
 White, William Clements, Sp. '97  
 \*White, William G., '73  
 Whitehead, Russell Edward, Sp. '18  
 Whitehill, George William, '78  
 Whiteley, Edward Albert, '95  
 Whitely, John Campbell, '95  
 Whitesell, Elwood E., '16  
 \*Whitman, Fred Ellison, '93  
 Whitmire, Harry Randolph, '15  
 Whitney, Harry Nason, '05  
 \*Whitney, Henry Clay, '79  
 Whitney, Heston, '87  
 Whittam, William Henry, '95  
 Wible, Hollis McCarrell, '20  
 Wickham, Anthony Smith, '84  
 Widman, Lester Francis, '20  
 Wiedemayer, Fred William, '87  
 \*Wiegand, Thomas S., '44  
 \*Wiegner, J. Adam, '73  
 Wien, Stuart Eugene, '20  
 Wier, Thomas J., Jr., '92  
 Wieser, John William, '16  
 Wiesner, Joseph Franklin, '10  
 \*Wiggan, George F., '48  
 \*Wike, Albert D., '67  
 \*Wilbert, Martin Inventius, '90  
 Wilcox, William, '83  
 Wilcox, William B., '94  
 Wild, Charles Ferdinand, '86  
 \*Wild, George Frederick, '96  
 Wilder, Joseph Livingston, '15  
 Wilderman, Hirsch, '12  
 \*Wiley, Joseph, '72  
 \*Wilgus, John Franklin, '75  
 Wilhelm, J. Alexander, '70  
 \*Wilkins, Charles M., '48  
 Wilkins, Edwin Elmer, '06  
 Wilkinson, George Henry, '87  
 Wilkinson, Harry, '01  
 Wilkinson, Harry Darnell, '06  
 \*Wilkinson, Howard Marion, '92  
 Wilkinson, Richard Powers, '93  
 Wilkinson, William John, '86  
 Willard, Elizabeth May (Mrs. Levis), '16  
 \*Willard, Rowland, Jr., '73  
 \*Willard, Theophilus Newton, '83  
 \*Willver, Stephen Arnold Douglas, '81  
 Williams, Charles Morgan, '92  
 Williams, Daniel Albert, '90  
 Williams, Daniel Thomas, '19  
 Williams, Edyth Wynn (Mrs. Fitzgerald), '07  
 \*Williams, Fred. Tyacke, '79  
 Williams, George Eli, '80  
 Williams, George Thomas, '84  
 Williams, Herbert Forrest, '93  
 \*Williams, John Henry, '91  
 \*Williams, John Levy, '74  
 Williams, Joseph Pearson, '86  
 Williams, Morrison Patton, '02  
 Williams, Neri Barndt, '85  
 Williams, Richard J. C., '73  
 Williams, Solomon Cohen, '92  
 Williams, Thomas David, '77  
 Williams, Waldo J., Sp. '07  
 Williams, Will Clark, '81  
 \*Williams, William John, '88  
 Williamson, J. L., '70  
 Williamson, James, '83  
 Williamson, Thomas McGill, '96  
 Willingmyre, Philip Shuster, '10  
 Willmers, Horace William, '14  
 \*Wills, Clayton H., '62  
 \*Wilson, Adam H., '56  
 \*Wilson, Alexander, '77  
 Wilson, Charles, '68  
 Wilson, Elmer Ellsworth, '84  
 Wilson, Edwin K., '69  
 Wilson, James, '60  
 Wilson, John Herbert, '10  
 Wilson, John Swain, '95  
 Wilson, Lewis Elmer, '10  
 Wilson, Lewis Henry, '75  
 Wilson, Matthew James, '81  
 Wilson, Morris Faust, '20  
 \*Wilson, Oliver Fawcett, '97  
 Wilson, Oscar Hermon, '02  
 Wilson, Pierce B., '58  
 Wilson, Robert James, '10  
 Wilson, Thomas Winfield, '78  
 Wilson, Willetts, '96  
 Wilson, William, '68

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- Wilson, William Rufus, '79  
 Wilt, George Washington, Jr., '98  
 Wilt, Harry Ellsworth, '07  
 Winand, Frederick Ehrhart, '07  
 Winch, Howard George, '95  
 Windolph, J. Frederick, '85  
 \*Winebrenner, George Byron, '80  
 Wingender, Wendell Phillips, '86  
 Winger, David Zwingle, '95  
 Winger, John Bowman, '97  
 \*Wingard, Joseph Vincent, '78  
 \*Wingert, Wm. Harry Kitzmiller, '92  
 Winkler, Max Erwin, '02  
 Winkler, Oscar Charles, '98  
 Winslow, Frank Theodore, '21  
 Winslow, John Hayes, '98  
 Winter, John Coleman, '11  
 Winter, Jonas, '60  
 Winters, Olas Earl, Sp. '01  
 Wipf, Eugene James, '05  
 \*Wirgman, Charles, '69  
 Wirgman, John M., '72  
 Wirth, Adam, Sp. '99  
 Wischman, Joseph Washington, '89  
 Wisegarver, Oscar Kline, '02  
 \*Wishart, John Elmer, '90  
 Wishnefsky, Harry (now Neff), '17  
 Wisman, Maynard Glenn, '21  
 Wisman, Robert Maphis, '08  
 Wissler, Arthur John, '94  
 Wissler, Benjamin A., '87  
 Wissler, Raymond B. Abbott, '09  
 \*Wissman, Herman Bayard, '96  
 \*Witherow, John Howard, '89  
 \*Witkowski, Leon Francis, '13  
 Witman, Charles Daniel, '00  
 Witman, David Boyer, '15  
 Witman, Theodore David, '18  
 Witmer, Albert Elam Ferree, '90  
 \*Witmer, David L., '62  
 \*Witmer, John Alfred, '76  
 Witmer, Paul DeLancey, '05  
 Witmeyer, Samuel David, '00  
 \*Witsil, George Edward, '79  
 Wittel, John Kaler, '92  
 Wittig, Charles, '83  
 Wiza, Joseph Louis, '99  
 Woehle, Paul Philip, '17  
 \*Wohlgemuth, Julius, '93  
 Wolever, J. Archibald, Sp. '15  
 Wolf, Clarence Melvin, '16  
 Wolf, Francis Xavier, '78  
 Wolf, Frederick Joseph, '90  
 Wolf, Lawrence Keenportz, '13  
 Wolf, Raymond John, '06  
 \*Wolf, Simon E., '82  
 Wolf, Sylvia Julia, '21  
 Wolfe, Claude Senft, '10  
 Wolfe, Gaile Edgar, '15  
 Wolfe, Isaac G., '69  
 Wolfe, Joseph Albert, '08  
 Wolfe, William Holmes, '95  
 Wolfenden, Benjamin Franklin, '93  
 Wolfel, William Conrad, '01  
 \*Wolfersberger, George Washington, '87  
 \*Wolf, Oliver Brown, '92  
 Wolfinger, John Philip, '01  
 Wolford, James Scott, '11  
 Wolford, James Walter, '03  
 Wollaston, Byron Parker, '03  
 \*Wollmuth, Richard Julius, '92  
 Woltman, Enos Frederick, '96  
 Wolverton, Fred Cleveland, '14  
 Wood, Alfred Conard, '85  
 Wood, George Young, '94  
 \*Wood, Harry Sudduth, '89  
 Wood, James P., '73  
 Wood, John W., '71  
 \*Woodall, Junius Pascal, '90  
 Wood, Otis Hunter, '94  
 Woodill, Robert Franklin, '02  
 \*Woodill, Robert Wellesley, '85  
 Woodland, Edward Elias, '05  
 Woodman, Charles David, '08  
 Woodnut, William Warren, '79  
 Woodring, William Henry, Sp. '15  
 \*Woodruff, A. Dickinson, '38  
 Woodruff, John Stewart, '89  
 Woods, Charles, '61  
 Woods, Samuel Ross, '95  
 Woodside, John Montgomery, '03  
 Woodward, Charles E., '67  
 Woolley, Stephen Disbrow, '82  
 \*Woolley, Washington Irving, '95  
 Woolsey, Howard Jones, '12  
 Woolston, Clifford Monroe, '82  
 Woolston, William Norton Shinn, '77  
 Workman, Edward Benjamin, '10  
 Worley, George Rufus, '13  
 Worrall, Harry, '90  
 Worrall, Wesley, '20  
 \*Worthington, Isaac Wilson, '82  
 Worthington, J. Warren Wolf, '02  
 \*Worthington, J. Willits, '71  
 \*Worthington, Henry W., '38  
 Wotring, Roland Jacob, '09  
 Wright, Edward Stanley, '07  
 Wright, George Shoemaker Roberts, '77  
 \*Wright, James Edward, '85  
 Wright, Joseph Edward, '09  
 \*Wright, Peter T., '46  
 Wright, Samuel P., '70  
 Wrigley, John Thomas, '88  
 Wurster, Eugene John, '12  
 Wyatt, John Congle, '95  
 Wyckoff, Elmer E., Sp. '04  
 Wyckoff, Elmer LeRoy, '99  
 \*Wyeth, John, '54  
 Wyeth, Maxwell, '88  
 Wyman, Abraham, '14  
 Wyss, Walter Aultman, '08  
 Yates, John Julius, Jr., '98  
 \*Yaple, Florence, '95  
 \*Yeager, Tilghman Wesley, '92  
 Yeakel, Nelson Lewis, '05  
 Yeakle, Atwood, '72  
 Yeakle, Samuel Newton, '95  
 Yeakle, Walter Atwood, '09  
 Yealy, James Frank, '86  
 \*Yergin, Frank E., '73  
 Yerkes, Charles Markley, '94  
 Yob, John Thomas, '18  
 Yohe, Harold Reon, '21  
 \*Yohn, Charles Ragan, '92  
 Yohn, Frank Gerald, '90  
 Yost, Frederick Randolph, '06  
 \*Yost, James L., '73  
 Yost, William Oscar, '85  
 Young, Alexander, Jr., '00  
 Young, Annie Hawkins, '99  
 Young, Benjamin Franklin, '94  
 Young, Ben Lee, '96  
 Young, Charles, '89  
 Young, Edgar Joseph, '08  
 Young, Edwin Henry, '00  
 Young, Elvin Chester, '21  
 Young, Frank Aloysius, '11  
 Young, Frank John, '86  
 \*Young, George E., '95  
 Young, Harry Blake, '20  
 Young, Howard Eakle, '09  
 Young, John K., '73  
 Young, Joseph, '57  
 Young, Joseph Bartholomew, Jr., '08  
 \*Young, Joseph Evans, '55  
 Young, Joseph Roy, '17  
 Young, Preston Reuben, '80  
 Young, Robert Taylor, '87  
 Young, Warren Ray, '95  
 Young, Wayland Philips, '88  
 \*Young, William Schrack, '86  
 Zacharias, Christian Boyd, '18  
 Zacharias, Dixon Scott, '21  
 Zacharias, Isidore, '77  
 \*Zacherle, Otto Frank, '83  
 Zaegel, Max Robert, '79  
 Zahn, Herman Stanley, '08  
 Zahn, Joseph Emerson, '21  
 Zajkowski, Anthony, Sp. '19  
 \*Zane, James Stewart, '88  
 Zapp, Mathias Augustus, '20  
 \*Zaun, Henry, '81  
 Zeamer, Harry Wisler, '91  
 Zeisig, Harry Charles, '07  
 \*Zeitler, Edward, '58  
 Zeledon, Jose Antonio, '04  
 Zeller, Albert Theodore, '87  
 Zeller, Charles Adam, '93  
 Zeller, Charles Bruce Boyle, '08  
 \*Zeller, Charles Frederick, '80  
 Zeller, Earl Emanuel, '99  
 Zeller, John Paul, '91  
 Zelmanoff, David Solomon, '10  
 Zelt, John William, '08  
 Zercher, Charles Stanley, '17  
 Ziebach, Edward Robert, '78  
 Zieber, Jacob B., '57  
 Zieber, Paul, '86  
 Ziegler, Albert Lewis, '92  
 \*Ziegler, Charles Henry, '01  
 Ziegler, Charles Norman, '02  
 Ziegler, Chester Winsor, '99  
 Ziegler, Frank Loomis, '10  
 Ziegler, Howard Philip, '94  
 Ziegler, John Clayton, '96  
 Ziegler, John Edwin, '10  
 Ziegler, Paul Fleager, '17



# First Century of the Philadelphia College of Pharmacy 715

Ziegler, Robert William, '90	Zimmerman, Mason Woodward, '80	Zonies, Nathan, '13
Ziegler, William Lodge, '02	Zimskind, Joshua Norman, '21	Zook, Carl Elliott, '20
Zimmerman, Charles Sumner, '03	*Zinn, Oscar, '77	Zook, John Noab, '95
*Zimmerman, G. A., '73	Zinnel, William Carson, '89	Zucker, William M., '21
Zimmerman, Herbert James, '94	Zipp, Charles James, '96	Zulick, Albert Augustus, '91
Zimmerman, Howard Milton, '93	Zoeller, Joseph Philip, '83	Zullinger, Aaron Henry, '96

## GRADUATES OF THE DEPARTMENT OF PHARMACY AND CHEMISTRY OF THE MEDICO-CHIRURGICAL COLLEGE

Aarons, Horace R., '16	Borgos, William, '10	Coplín, Max, '13
Abrahamson, Joseph, H., '07	Boston, Frank E., '11	Corbett, Norvin A., '00
*Adams, Harry G., '04	Bower, John O., '05	Cosgrove, Francis F., '12
Adams, John Howard, '04	Bowers, H. L., '00	Cournos, Gerson W., '12
Adams, Oliver F., '07	Bowers, Henry W., '05	Cowpertonwaite, Milton H., '09
Albert, Joseph Anselm, '08	Boyer, Edwin C., '07	Cox, Walter D., '07
Aliberti-M. Aristides, '16	Boyer, Walter E., '01	Cramer, Benjamin A., '11
Allen, Harold Bayard, '02	Brahin, Samuel J., '11	Crawford, Arthur W., '04
Amoroso, Gennaro, '13	Bram, Herman H., '09	Crowl, Hatten LeRoy, '13
Anderson, George C., '00	Brennan, E. V., '00	Culver, Claude, '06
Andes, Harry J., '16	Brenner, Morris W., '10	
Andrade, Cesar D., '11	Brewer, J. Edward, '10	Darling, Glen W., '07
Angstadt, Harry Franklin, '15	Brong, Earl O., '12	Darraha, Daniel W., '08
Apple, Elmer M., '07	Bronde, Jacob H., '12	Davidheiser, Harry J., '07
*Apple, Frank M., '12	Bronse, Malcolm Boyd, '13	*Davies, S. Guy, '11
Arbogast, A. H., '16	Brown, Arthur F., '12	Davis, Claude, '08
Armstrong, Albert B., '00	Brown, Donald James, '14	Davis, Cyrus W., '03
Armstrong, Joseph Massey, '02	Brown, George Lance, '07	Davis, John H., '02
*Arnold, Merle E., '04	Brown, Maurice, '12	Davis, William Allison, '03
Arnold, Walter William, '08	Brubaker, Maurice S., '03	Deitcher, Robert J., '09
Arrow, Abraham, '16	Brunhouse, Harry F., '02	Deitz, George W., '04
Aston, E. Arthur, '09	Buchanan, David B. B., '16	DeLaney, William F., '11
Aston, Howard E., '11	Bunin, Albert, '16	Detrick, Oscar Eugene, '13
Atkinson, Ivin DeWitt, '13	Burnett, Baker J., '11	Dippre, John Philip, '09
Augenblick, Morris Lewis, '15	Burnite, Earl A., '12	Dix, Robert C., '07
	Burt, William A., '11	Dobson, L. Stanley, '00
		Donn, Frederick Y., '08
Bacon, Gilbert C., '14	Caballero, Ferdinand E., '08	Dorfman, Rudolph K., '15
Bader, John B., '12	Callen, Robert C., '10	Dorszewski, Victor, '12
Baer, William S., '01	Calvert, William L., '06	Dotts, Marcus Harrison, '14
Bailen, Harry Joseph, '16	Campbell, Edward J., '12	Doud, Thomas B., '06
Baker, John Elmer, '15	Campbell, Thomas J., '07	Drake, Roscoe C., '13
Baker, Samuel W., '08	Cannon, John M., '07	Drapiewski, B. B., '10
*Baker, William L., '09	Cantor, Leo, '13	Dreibelbis, George W., '03
Baker, William Neil, '14	Carlucci, Lorenzo, '08	Dreibelbis, Joseph C., '09
Ball, Harrison George, '15	Carroll, Harry J., '07	Duffy, John J., '07
Ballentine, John L., '11	Carter, Robert Francis, '14	Dunfee, Lew R., '09
Barron, Charles A., '09	Cassimer, Francis Craig, '14	
Bartholomew, William T., '07	Casserson, James S., '06	Eaton, Melvin Carr, '14
Baum, Gny Z., '08	Cavenas, Anthony, '11	Eby, John G., '07
Baum, Max, '10	Charles, Jacob E., '09	Edwards, Arthur Henry, '09
Baylinson, Samuel D., '12	Cherashore, Harry, '08	Egendorf, Frank, '09
Beamer, William Earl, '03	Ciccone, George V., '00	Egloff, William, '08
Becker, Joseph H., '11	Clewell, John A., '09	Eidelson, William, '14
Bellenghi, Robert Lewis, '14	Cohen, Harry Arthur, '15	Eisenstein, Edward, (now Stone), '12
Bellitz, Henry, '13	Cohen, Hyman W., '13	
*Beltz, George A., '03	Cohen, Samuel A., '16	Eitnier, Francia E., '10
Bentz, Charles S., '03	Cole, Earl Montgomery, '15	Elcock, Herbert M., '13
Bentz, William A., '10	Conlen, William J., '16	*Elder, George W., '10
Berger, Merritt Clay, '05	Conrad, I. Allen, '04	Elikofsky, Morria, '12
Bickert, Joseph, H., '10	Conrad, Lloyd W., '02	Elkins, Frank, '13
Bille, Henry, G., '02	Connor, Edward B., '01	Elsby, Nelson M., '11
Blair, Edwin B., '10	*Cook, Thomas M., '05	Enderlein, Harry E., '08
Blitz, Edwin M., '16	Cooke, Harry, '13	Ensminger, John T., '03
Bloomfield, Isaac Benjamin, '15	Cooley, Albert Dager, '16	Entine, Louis, '07
Bloomfield, Myer B., '11	Cooper, Carl S., '09	Entine, Saul, '16
Bordner, T. B., '05		



# 716 First Century of the Philadelphia College of Pharmacy

- Ernest, Frank J., '11  
 Eshelman, Orville C., '08  
 Estin, Edward Karl, '12  
 Evans, Alfred M., '09  
 Evans, James M., '16  
 Evans, William T., '07  
 \*Ewing, Samuel R., '04  
 Eyster, George W., '02
- \*Fabiani, Joseph Urciuoli, '14  
 Farber, Harry, '10  
 Farr, Alonzo Boyer, '01  
 Feather, Howard A., '02  
 Feicht, Charles M., '00  
 Feldman, Meyer L., '09  
 Fertick, James J., '06  
 Feuerstein, Herman Maurice, '15  
 Fiedler, Aloysius Augustus, '13  
 Fiedler, James Theodore, '13  
 Fiedler, William F. J., '08  
 Field, Charles Devere, '13  
 Filar, Louis L., '12  
 Finkel, William, '08  
 Finkelstein, Simon E., '16  
 Fischelis, Robert P., '11  
 Fisher, D. Franklin, '09  
 Fisher, George A., '11  
 Fisher, Joseph T., '02  
 Fisher, Ralph Andrew, '13  
 Flanigan, Albert R., '07  
 Flinkman, Abraham, '14  
 Follmer, Malcolm Murray, '11  
 Folstein, Abe, '14  
 Foote, Benjamin F., '08  
 Fox, James Emmet, '08  
 Francis, Rozier L., '03  
 Frank, I. Edward, '07  
 Freedman, Louis, '10  
 Freedman, Samuel, '10  
 Fregoe, Edgar L., '03  
 Fretz, William R., '01  
 Friedman, Samuel B., '13  
 Fugate, Chester W., '04  
 Furman, Samuel Louis, '14
- Gadol, Isaac Samuel, '14  
 Gadol, Nathan S., '16  
 Gallagher, John C., '08  
 Gamble, J. Clark, '04  
 \*Gamble, Samuel, '04  
 Gardner, Howard W., '10  
 Gartrell, Waters, '08  
 Gates, Chester, A., '16  
 Gebhardtshauer, Carl J. (now Chas. J. Bower), '16  
 Geddis, Elmer H., '09  
 Gehres, Harry R., '12  
 \*Genth, Fred A., '09  
 Germann, Jean Leon, '15  
 Gertz, Harry, '16  
 Getz, Clarence R., '07  
 Gibble, William Ross, '05  
 Gibbony, Albert George, '15  
 Gibbs, Jacob C., '09  
 \*Gibbs, William E., Jr., '03  
 Gilbert, Ralph H., '08  
 \*Gildroy, Elmer C., '08  
 Giles, Edward W., '01  
 Ginder, B. Forrest, '04
- Gingrich, Harry M., '04  
 Ginsburg, Matthew J., '10  
 Glauser, Meyer Samuel, '13  
 Gledhill, Roy Samuel, '08  
 Glick, Samuel, '10  
 Glover, James Pursley, '15  
 Godfrey, Earl V., '09  
 Goldberg, Harry L., '09  
 Goldberg, Joseph, '08  
 Goldberg, Samuel J., '09  
 Goodfriend, A. G., '16  
 Goodfriend, Joseph Harry, '13  
 Goodhart, Brua C., '07  
 Goodman, Benjamin, '14  
 Goodman, Samuel Sidney, '15  
 Gordsuch, Albert F., '12  
 Gray, Hugh, '07  
 Gray, Ralph, E., '11  
 Green, Abraham N., '16  
 Greenawalt, S. Miller, '07  
 Greenberg, Lewis Sigmund, '15  
 Greenlees, Albert, '15  
 Greenstone, Charles A., '16  
 Griggs, Alfred, '02  
 Groff, John Milton, '15  
 Gross, Warren B., '13  
 Grove, John C., '09  
 Grupe, Herman Louis, '15  
 Guthrie, Chester P., '11  
 Gwinner, Harry J., '04
- Hagan, Charles H., '12  
 Hagenbuch, J. B., '99  
 Hagenbuch, Joseph Seligman, '14  
 Hain, Clarence S., '02  
 Halin, Edward Israel, '15  
 Hall, A. Stuart, '10  
 Hall, William Daniel, '14  
 Handforth, Robert W., '16  
 Hanopolsky, Philip, '10  
 Hardy, Thomas W., '11  
 Hargreaves, Charles Henry, '02  
 Harper, John, '09  
 \*Harper, Robert Fields, '09  
 Harriman, Guy R., '12  
 Harrison, John T., '09  
 Hart, Wilson Bregy, '11  
 Harvey, Ellery H., '16  
 Harvey, John I., '05  
 Hassenplng, Ralph, '11  
 Heginbotham, Thomas D., '12  
 Heine, Edward Joseph, '15  
 Helfand, Leopold E., '16  
 Heller, Max, '10  
 Helm, Harry C., '05  
 Hendricks, Grover C., '10  
 Hennings, William F., '01  
 Herley, Clarence J., '12  
 Hess, John Lloyd, '13  
 Hicks, Bruce M., '11  
 Hinkley, George B., '01  
 Hinkson, George W., '13  
 Hoch, Charles T., '10  
 Hoffman, John Irvin, '13  
 Holland, Edson B. C., '09  
 Hollenback, W. Wallace, '12  
 Holmes, Ralph C., '10  
 Horen, Benjamin H., '16
- Hornby, Charles William, '16  
 Horner, Glenn C., '07  
 \*Householder, John C., '11  
 Houser, Jacob W., '12  
 Houser, Paul, F., '15  
 Howard, William S., '08  
 Huber, Edward, '15  
 Hughes, Calvin L., '04  
 Hunsberger, Ambrose, '08  
 Hunt, Robert J., '04  
 Hurley, Ralph A., '13  
 Hutchison, Corbin C., '07  
 Hutchison, Fulton C., '08  
 Huyett, Amos W., '13  
 Hyres, Lee Ellsworth, '05
- Ikan, Albert L. (now Aiken), '16  
 Isles, Frank W., '12  
 Israelvitz, Elias, '10
- Jackson, Edmund Griffith, '15  
 Jackson, Percy H., '12  
 Jenkins, Lee David, '07  
 Johnson, C. Roy, '10  
 Johnson, Edward T., '04  
 Johnson, Harry H., '11  
 Jones, Amos, '09  
 Jones, Benjamin Ivor, '15  
 Jones, Charles A., '09  
 Jonkus, Solomon I., '10  
 Jorczak, John Szymon, '13  
 Joyce, Thomas F., '12
- Kabacoff, Morris, '15  
 \*Kampe, Herbert Albert, '13  
 Karsh, Abraham P., '10  
 Kaschedin, Boris, '01  
 Keefe, John Daniel, '14  
 Keen, Earl, '16  
 Keiser, Harrison A., '04  
 Kelly, William F., '03  
 Kendig, Harvey E., '01  
 \*Kennelly, Joseph Francis, '15  
 Kenney, Thomas L., '08  
 Kessler, William C., '09  
 Kijanski, Leo Edward, '14  
 Killian, Caleb L., '16  
 Kimmelman, Harry, '06  
 \*King, Charles Tomlinson, '01  
 Kintner, Herbert W., '10  
 Kintner, John H., '12  
 Klapp, Curtis B., '12  
 \*Kleckner, Stewart L., '10  
 Kline, Charles H., Jr., '09  
 Kline, Lurayne E., '13  
 Klingaman, Harry E., '06  
 Klingaman, Joseph P., '07  
 Kloman, E. H., '04  
 Knight, George, '00  
 Knobel, Joseph W. (now Noble), '07  
 Knowles, Richard, '11  
 Koch, Harry J., '03  
 Koche, William Groves, '14  
 Koerber, Charles Jacob, '15  
 Kolb, George C., '11  
 Koons, Charles E., '03  
 Kramer, Albert L., '16  
 Kratz, J. Franklin, '11

- Kratzer, Claude H., '06  
 Krogh, Karl Nunge, '14  
 Kron, Louis, '14
- Langner, Paul H., '05  
 \*Lank, William Smithers, '05  
 Lauther, Edward M., '03  
 Lawrence, Paul K., '13  
 Lebo, Charles S., '04  
 Lee, Gerald A., '11  
 Leedom, Walter H., '08  
 Leidy, J. Buren, '09  
 Leingang, J. A. N., '10  
 Leister, George L., '08  
 LeKarz, Edward J., '16  
 Levan, George K., '03  
 Levering, William R., '04  
 Levey, Nathan M., '09  
 Levin, John, '12  
 Lewis, Arthur, '09  
 Lewis, Maurice L., '05  
 Lewis, Walter David, '13  
 Lilly, George L., '02  
 Lilly, Herbert G., '00  
 Linsay, Walter L., '13  
 Lipschutz, Aaron, '13  
 \*Lithgow, Freeman Guy, '03  
 Littleton, L. O., '16  
 Livingstone, Alexander, '08  
 Longendyke, William F., '09  
 Lonsdorf, John P., '06  
 Lopoten, Morris I., '12  
 Loutfian, John, '01  
 Lowman, George P., '07  
 Lucas, William E., '04  
 Lukens, Levi Hoffman, '09  
 Lum, Benjamin M., '05  
 Lum, William Alvin, '99
- McAleer, James J., '09  
 McCawley, Eugene V., '11  
 McClarren, Walter R., '16  
 McCormick, E. J., '10  
 \*McMurtrie, Robert W., '02  
 McNeary, W. Wilson, '07  
 McNerney, A. Francis, '03  
 MacDonald, John T., '05  
 MacHale, J. S., '09  
 MacLay, Charles T., '02  
 MacPhee, Alexander P., '12  
 Maines, Eugene L., '10  
 Malloy, Charles M. J., '01  
 Mandarino, N. J., '12  
 Mann, Hudson O., '09  
 Marsden, Joshua E., '09  
 Marshall, Leon S., '03  
 Martin, Arthur H., '08  
 Mathieu, Herman Wischman, '15  
 Matriek, Myer, '12  
 Mayer, Christian, '08  
 Mayer, Conrad C., '10  
 Mebane, Robert Ramsey, '14  
 Medde, Carl E., '12  
 Meese, William O., '16  
 Megaro, Francesco, '11  
 Menger, Edward F., '03  
 Meshkov, Levy, '15  
 Metcalf, H. K., '01  
 Meunier, Jose, '08
- Meyers, Daniel S., '07  
 Miles, John, '10  
 Miller, Charles E., '06  
 Miller, Mortimer H., '07  
 Milliken, Joseph P., '12  
 Mills, R. E., '07  
 Minehart, John R., '00  
 Misorech, John Jacob, '13  
 Mitchell, Harry G., '12  
 \*Mitchell, Joseph B., '02  
 Mockaitis, John B., '11  
 Moon, Harry A., '10  
 Mooney, Frank Mills, '99  
 Morgan, Harrison R., '13  
 Morgan, Theodore L., '02  
 \*Morgan, Tudor A., '10  
 Morgan, William J., '10  
 Morse, Isaiah William, '13  
 Moss, James E., '15  
 Moss, R. W., '06  
 Mott, Basil Justin Fontenoy, '15  
 Murray, Joseph L., '10  
 Mylrea, C. Stanley, '03
- Nagle, Daniel B., '16  
 Nealon, Andrew L., '11  
 Nealon, Frank M., '08  
 Nepling, Clarence E., '07  
 Netsky, George Nathan, '14  
 Neukirch, John Andrew, '13  
 Nichols, Allen V., '16  
 Niehols, John J., '08  
 Nidecker, Arnold W., '09  
 Noaker, Lafayette P., '11  
 Nurkin, James J., '06
- O'Brien, John Francis, '15  
 O'Brien, Justus, '10  
 Oburchay, Frank B., '12  
 \*O'Connor, Thomas Patrick, '13  
 O'Donnell, John M., '11  
 O'Kane, Francis, '04  
 Olmstead, David M., '10  
 Ornstein, Abraham M., '13  
 Ort, William H., '03  
 \*Ortzman, Morris, '16  
 Ost, Morris R., '10  
 Ostrow, Frank Paul, '13  
 Ostrum, Herman W., '13  
 Ostrum, Samuel B., '15  
 Ott, Howard C. M., '02  
 Overbeck, Bernard, '15
- Page, Eugene B., '13  
 Pappadopoulos, Asterios, '15  
 Parish, Harold C., '10  
 Parmalee, Harold Leslie, '14  
 \*Parrish, Frank J., '00  
 Patterson, Royston Hoffman, '08  
 Paul, Israel, '11  
 Perez, Angelo, '16  
 Peters, Fred Jacob, '13  
 \*Peters, Thomas Henry, '15  
 Pinker, Elmer T., '04  
 Pintzow, Michael W., '16  
 Pittenger, Paul S., '09  
 Portner, H. G., '01  
 Post, Arthur W., '02  
 Powell, Chester John, '15
- Pratt, William L., '08  
 Promisloff, Harry, '12  
 Prosser, Elmer O., '02  
 Prout, Haydn P., '07  
 Prowell, Tolbert, '02  
 Prum, John A. H., '07  
 \*Purcell, John W., '10
- Quickel David L., '16  
 Quickel, Elmer D., '04  
 Quickel, Herbert L., '02  
 Quinn, John J., '10
- Raabe, Lester F., '16  
 Rabinowitz, Abraham, '08  
 \*Raker, Alvin J., '07  
 Redner, Alfred P., '16  
 Reed, Morgan Charles, '15  
 Reese, George Lewis, '14  
 \*Reifsnnyder, Karl P., '04  
 Reitz, G. A., '16  
 \*Rentschler, E. M., '09  
 Reynolds, Leo N., '10  
 Reynolds, Vincent G., '00  
 Rhone, D. Samuel, '03  
 Ricca, Antonio, '08  
 Rice, George Nelson, '14  
 \*Riegel, Robert, '10  
 Riegel, William B., '03  
 Riegner, Roscoe Ellsworth, '12  
 Rife, Charles Norman, '01  
 Rife, Elmer E., '02  
 Ritter, Joseph William, Sp. '07  
 \*Rodawig, Martin W., '04  
 Rogers, John W., '06  
 Rogers, Richard H., '16  
 Roney, C. S., '09  
 Rosenberger, D. Elvin, '16  
 Rosencoff, Max, '12  
 Rosensweet, Nahman, '06  
 Roshon, Harry B., '08  
 Rosin, Frederick, '14  
 Rotberg, Samuel, '16  
 Rothberg, L. E., '12  
 Rothermel, Daniel J., '04  
 Rudman, I. M., '12  
 Ruff, J. Irvin, '03  
 Ruff, Ulysses G., '09  
 Ruhl, John Louis, '08  
 Russock, Harry, '15  
 \*Ruth, Leo A., '10  
 Ryan, William T., '00
- \*Sagorsky, Harry Meyer, '14  
 Salinsky, Isador P., (now Salin), '11  
 Scallella, William, '04  
 Scargle, Elmer W., '09  
 Schafer, Edward, '14  
 Schaffer, Stuart Clarence, '13  
 Schaubacher, Herman H., '16  
 Scheetz, Reginald, '14  
 Scheibley, Charles L., '10  
 Schellenger, Henry E., '12  
 Schewing, Robert W., '04  
 Schlichtman, Philip Jacob, '13  
 Schlotterer, Joseph F., '01  
 Schmitt, Carl N., Jr., '10  
 Schreffler, J. H., '11

## 718 First Century of the Philadelphia College of Pharmacy

- Schultz, Merritt B., '04  
 Schultz, Percy H., '09  
 Schwartz, Milton B., '09  
 Scott, William H., '09  
 Searl, Harry H., '05  
 \*Seid, Howard Ely, '15  
 Seiss, Earl D., '10  
 Selb, Frank, '08  
 Seldes, Edward, '11  
 Semmell, P. Leon, '09  
 Seybert, William A., '08  
 Shaw, Percy H., '06  
 Shelley, Norman Alvin, '13  
 Shenk, Charles M., '07  
 Shepherd, Samuel G., '00  
 Shimer, Floyd A., '02  
 Shoemaker, Ross Franklin, '14  
 Shovlin, John J., '10  
 Shull, Samuel D., '03  
 Shuman, Calvin D., '09  
 Signor, Ray, '09  
 Silverman, James, '07  
 Silverman, William, '09  
 Simkin, Aaron, '16  
 \*Simmons, M. Joseph A., '02  
 Simpson, Jay A. S., '10  
 Simpson, Nathan Alexander, '14  
 Sipler, Horace T., '16  
 Slataper, E. L., '06  
 \*Slattery, Thomas R., '09  
 Smiler, Benjamin, '14  
 Smith, Adam, I., '10  
 Smith, August A., '12  
 Smith, Crosby L., '06  
 Smith, Frank G., '08  
 Smith, Herbert Allaman, '15  
 Smith, Jay A., '16  
 Smith, Leopold L., '04  
 Smith, Mortimer Mann, '13  
 Smith, Paul R., '10  
 Smith, W. Pearce, '04  
 Smith, Walter E., '06  
 \*Smith, William M., '16  
 Smithgall, George, '15  
 Smulyan, Martin Yalen, '15  
 Snyder, Charles A., '10  
 Snyder, John P., '11  
 Snyderman, M. L., '12  
 Soifer, Morris, '14  
 Somers, Henry Luffberry, '14  
 Sonsan, Henry, '13  
 \*Sotoloff, Moe B., '08  
 Span, John S., '10  
 Spencer, John Brown, '03  
 Sphar, Robert A., '03  
 Spiers, Israel, '10  
 \*Springer, Harvey Whitney, '05  
 \*Sprissler, Bernard S., '07  
 Stanavage, John Albert, '13  
 Stanton, James H., '04  
 Stapleton, Thomas Leo, '13  
 Stauffenberg, Henry A., '12  
 Stedem, Anthony F. A., '10  
 Steele, Charles Leroy, '06  
 Steffin, Frank, '16  
 Steinle, Edmund C. H., '09  
 Stellwagon, Alfred B., '15  
 Stephenson, Edward E., '16  
 Sterner, J. Richard, '11  
 Sternthal, William H., '11  
 \*Stevens, Daniel, '10  
 Stewart, Graff S., '16  
 Stidham, William A., '00  
 Stiteler, John H., '02  
 Stoloff, Michael, '15  
 Stone, Carl E., '11  
 Stoner, William H., '10  
 Storm, Albert J., '10  
 Stover, Clarence Eli, '07  
 Strine, Henry C., '08  
 Stutzman, Christian Albert, '14  
 Stutzman, Raymond H., '07  
 Subin, Barrish Benjamin, '13  
 Subin, Israel, '08  
 Swambach, Arthur Jeremiah, '13  
 Syphax, Ernest F., '07  
 Taine, Louis Nathaniel, '13  
 Taylor, R. Francis, '07  
 Thayer, Edwin Quinn, '05  
 Thomas, Raymond W., '07  
 Thomas, William N., '12  
 Thoumsin, Thomas J., '04  
 Thrash, Lester Charles, '15  
 Thrush, Charles E., '05  
 Toplan, Israel, '13  
 Truax, Benjamin B., '01  
 Truitt, Ernest A., '08  
 Tunnell, S. Wilmer, '04  
 Turner, Edward O., '13  
 Tyson, Jesse Scholl, '12  
 Udell, William, '14  
 Umlauf, Claude H., '16  
 \*Unangst, Stewart L., '00  
 \*Van Leer, Edward M., '08  
 \*Vernick, Aaron, '15  
 Villamil, Pascual Di-Bella, '13  
 Vincenty, J. A., '16  
 Voorhees, Charles S., '03  
 Voorhees, Harry, '01  
 Wagner, Benjamin, '10  
 Wagner, Ernest C., '13  
 Wales, J. Allen, '03  
 Walker, Harry Eberly, '14  
 Wall, Charles Leroy, '16  
 Wall, Truman J., '14  
 Wallfield, Jacob, '08  
 Walsh, Cornelius A., '11  
 Warner, Clayton S., '07  
 Waschko, Michael G., '10  
 Watkins, Ralph J., '13  
 Weaver, Arthur F., '11  
 Weber, John H., '08  
 \*Weiner, Ahraham, '14  
 Weisbard, Charles, '08  
 Weisgerher, E. Leonard, '11  
 Weiss, Saul S., '07  
 Wenck, Walter L., '01  
 Wenner, Harvey Eugene, '99  
 Wenner, Thomas Jefferson, '14  
 Wenzelberger, E. P., '10  
 Wertley, Harvey L., '00  
 Wheeler, Robert W., '11  
 Whetstone, David Franklin, '14  
 Whitaker, C. Irvin, '09  
 Whitehead, Lewis B., '10  
 Whitman, Charles Brandt, '14  
 Wickham, Otto W., '12  
 Widmann, Joseph J., '03  
 Williams, Beddoe J., '10  
 Williams, Edwin Leslie, '16  
 Williams, Fred J., '16  
 Williams, John Robert, '15  
 Williams, Raymond, '16  
 \*Williams, William H., '07  
 Willmann, Albert B., '10  
 Willmann, Harry, '08  
 Wilson, George Cookman, Jr., '99  
 Wirth, Willis W., '07  
 Wittmer, William Welsh, '07  
 Woelke, Henry C., '01  
 Wolchek, Leon M., (now Wolfe), '11  
 Wolfe, Gilbert T., '07  
 Worrell, Robert Kerr, '14  
 Yeagley, Edwin H., '05  
 Yellin, Harry, '07  
 Youngken, Dell Wallace, '14  
 Youngken, Eugene W., '08  
 Youngken, Heber W., '05  
 Zehner, Guy O., '11  
 Zemaitis, Vladislav Xavier, '14  
 \*De Zengotita, Felix, '13  
 Zepp, W. Clarence W., '04  
 Zipin, Benjamin S., '16



The following received Certificate of Attendance at U. S. Naval Hospital Corps Train-in School of P. C. P., 1919:

FIRST UNIT

Apsey, John Fletcher  
 Balasa, Ladislaus Joseph  
 Barrett, Joseph Homer  
 Bearman, William Jacob  
 Beattis, Willard Gould  
 Belk, Harvey Clifford  
 Bickersdt, Clarence Oscar  
 Bordner, Meivin Joseph  
 Boucher, Pierre Ange  
 Boyd, Lardner Clark  
 Brown, James Anthony  
 Brown, John Albert  
 Buddin, Ardrah Lorenz  
 Clark, Frank Lazells  
 Cohan, Albert Mortimer  
 Cohn, Joseph Meyer  
 Coles, William Oscar, Jr.  
 DeWitt, Reginald Moore  
 Estes, Bishop Merrill  
 Farnum, Jack Francis  
 Ferguson, James Milne  
 Fiotti, Frederick George  
 Fronczak, Joseph Eustace  
 Garrity, William Vincent  
 George, George Edward  
 Gordinier, Frank LeRoy  
 Graham, Frank Shipley  
 Grant, Harry William  
 Gross, Clifford Dehell  
 Gruenwald, Arthur Frank  
 Harris, Dale Walter  
 Harris, Earl Francis  
 Hawkins, Ernest Lloyd  
 Hinkle, LeRoy Cohee  
 Hunt, Lewis Salisbury  
 Irving, Albert Francis  
 Jackson, Richard Land  
 Jaffa, Joseph Alexander  
 Jaffe, Hyman  
 Jennings, William Thomas  
 Johnson, Archibald Leonard  
 Johnson, Glenn Walter  
 Jones, Chsries Thurston

Kahn, Abe  
 Kantor, Charles  
 Kaufman, Russell Henry  
 Kilkelly, Edward John  
 Kline, John Milton  
 Kline, Samuel  
 Larson, Vernon Forest  
 Leary, John Gilbert  
 Les, Clyde Gordon  
 Leonard, Allyn Aaron  
 Lockhart, Clarence Claughton  
 Maas, Thomas Yarnali  
 Magee, Ernest Condon  
 Martin, Robert Carter  
 Mattoon, Fred Charles  
 McBraerty, Thomas J.  
 McCall, Dougald Hugh  
 McCurley, Hugh Siiven  
 McGrath, James Sylvester  
 McHale, Thomas Joseph  
 Merchant, Earl Frank  
 Merrill, Charles Harold  
 Mixon, Andrew Hamilton  
 Morris, Earl Fay  
 Mudie, Louis Clifford  
 Myers, Claire Edgar  
 Naus, Julius Edward  
 Neff, Lloyd Leon  
 Newton, Charles Chester  
 O'Neil, Thomms Raiph  
 Owens, John Wesley  
 Parsons, Andrew Jackson  
 Parsons, Mark Miller  
 Pitkin, Roy  
 Piath, Charles Edward  
 Ramsy, William Orville  
 Rauch, Elvan Sylvester  
 Reber, Nevin William  
 Regan, Harold James  
 Reimers, Adolph W.  
 Rinderer, Carl Frank  
 Roach, Samuel Adam  
 Rosenberg, Louis  
 Ross, Thomas Robert

Sanderson, Sydney Charles  
 Scottsn, Clyde Foster  
 Sears, Ernst Russel  
 Show, Clifford Ray  
 Shepard, Roy Solomon  
 Smith, Herschel Hunter  
 Smith, Winfield Frederick  
 Speckart, Herbert Roman  
 Spencer, Clyde Alvin  
 St. Antoine, Arthur Joseph  
 Stone, Joel Fay  
 Syracuse, Charles McKinley  
 Traphagan, Earle Parker  
 Uglow, Elmo Hains  
 Wahmuth, William Henry  
 Weld, Paul Ashworth  
 Westlake, Richard E.  
 Winn, Louis Mike

SECOND UNIT

Barker, Ernest Milton  
 Brandt, Frederick Eugene  
 Carlisle, John Edward  
 Dsuhs, Charles F. W.,  
 Gilson, Howard Burbank  
 Hals, Will Norris  
 Hunt, Jesse Hambler  
 Jones, John Edmund  
 Kyner, John Harvey  
 Lee, Vernon  
 Morris, Herbert Reed  
 Nevans, David Harold  
 O'Neill, Charles Henry  
 Rathks, Arnold Leander  
 Ryan, Charles Augusta  
 Sheppard, Alien Charles  
 Shytles, Harrie Marcellus  
 Stovsll, George Reynolds  
 Sturgill, Virgle Leon  
 Taylor, Alfred Vernon  
 Treader, Will Melrose  
 Waltman, Bryan Jennings  
 Wersan, Harold Edward





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