

ascribed to whiskey and accentuated of late in some quarters but scientific investigators do not support these alleged clinical observations often based on the statements of consumers.

In order to arrive at a working basis, let us analyze the materials used in making the beverages. The alleged medicinal virtues cannot be said to reside in sucrose, molasses, or the various other saccharine solutions, although some may be slightly laxative. One would hardly venture to say that certain medicinal effects are peculiarly due to the alcohol or the carbonic acid or both, present in these beverages. Alcohol is contra-indicated in certain diseases of the kidney and is not enthusiastically recognized by modern medicine as therapeutically efficacious in rheumatic conditions. The alleged virtues must therefore be inherent in the biological agents or are developed in the process of fermentation. Bébées are composed of yeast plants and bacteria. It is well known that vitamins are produced by growing yeast plants. Very little is known of the corresponding products, if any, produced by bacteria. P. Portier and his co-workers have, however, made some observations along this line. A Ranc in a résumé,¹ including Portier's work, says, in substance, the conclusion is reached that certain microorganisms are the creators of vitamins and that *bacillus subtilis* may belong to this group. In an article² on the "Creation of Vitamins in the Intestines of Rabbits Fed on Sterilized Food" appears the following: As the result of these tests on mammals and birds it appears that the conclusion might be reached that there is a creation of vitamins in the intestines of animals receiving a devitaminized diet, due to the intestinal bacteria. Even though it should be ultimately established that certain bacteria produce vitamins, and even differing from the yeast vitamins, the character of the "California Bees" alcoholic beverage is hardly such as would justify medicinal claims of the character considered above.

QUARTER CENTURY IN PHARMACY AS A BOARD MEMBER.*

BY GEORGE C. DIEKMAN.

The primary object of this paper is to review briefly the most important and outstanding events that were responsible for the almost revolutionary changes that took place in the practice of the profession of pharmacy, during the writer's connection with boards of pharmacy of his native city and State, a period covering over a quarter century.

No cognizance will be taken of events that transpired prior to the year 1895, as it is not the intent to present a historical review of the activities of the various boards of pharmacy which at one time or other, beginning with the year of 1871, were operative in the State of New York, but advances made in pharmacy, after and inclusive of the year 1895, at which time the writer was privileged to serve as a Board member, and in which capacity he has served continuously until this time.

The writer hopes that at some future time the history of pharmacy, as far as this relates to the State of New York, will be written and presented to the Historical Section of the American Pharmaceutical Association. There are a number

¹ *V'Ind. Chim.*, 6, 136, 1919; *C. A.*, 13, 2059, 1919.

² *Compt. rend.*, 170, 478, 1920; *C. A.*, 14, 1703, 1920.

* Presented to Section on Historical Pharmacy, A. Ph. A., New Orleans meeting, 1921.

of pharmacists, both in New York City and State, still actively engaged in the practice of their profession, more competent than the writer to perform this service. Should, however, none of these feel inclined to undertake the task, the writer will endeavor to do this at some future time.

The writer will endeavor, in presenting what seems to him to be the more important events leading up to the present-day status of pharmacy in the State of New York, to keep himself in the background. If, however, in order to correctly portray the events, he is obliged to make personal allusion, he trusts and hopes that such will not be considered egotistical in the slightest degree.

At the same time of the writer's designation to membership to the New York City Board of Pharmacy, in the month of January 1895, no less than four duly authorized and legally created boards of pharmacy were in operation in the State of New York. They were the following:

- (a) The Erie County Board of Pharmacy,
- (b) The Kings County Board of Pharmacy,
- (c) The New York State Board of Pharmacy, and
- (d) The New York City Board of Pharmacy.

The names by means of which these various bodies were designated, give evidence of the locality or territory over which each was given jurisdiction. It must be remembered that New York City at that time occupied a much smaller area or territory than it does at present; in fact New York City and New York County were identical as far as extent of territory was concerned. The City of Brooklyn now constituting the Borough of Brooklyn of the Greater New York, was identical with Kings County in territory, and the City of Buffalo, at the extreme western end of the State, practically constituted Erie County. All other counties, many in number, were, as far as the practice of pharmacy was concerned, under the jurisdiction of the then so-called State Board of Pharmacy. Thus it was that the territory known as Staten Island (County of Richmond), and also now a part of the Greater New York, as the Borough of Richmond, whose pharmacists had interests identical with those of New York City, was a section over which the State Board of Pharmacy had sole jurisdiction. Likewise it was that Queens and Suffolk Counties, constituting together with the City of Brooklyn, the territory known as Long Island, were also placed under the jurisdiction of the State Board of Pharmacy, despite the fact that their interests, in a pharmaceutical sense, were identical with those of the then City of Brooklyn.

At the time of my election to membership on the Board of Pharmacy of New York City, Chapter 410 of the Laws of 1882 was operative. This chapter related to the regulation of the practice of pharmacy, in the City and County of New York, and was in reality a reënactment, with only slight verbal changes, of Chapter 817 of the Laws of 1872, the first year but one, in which any attempt to regulate the practice of pharmacy in New York City and County was made.

Among other sections this law provided for the creation of a Board of Pharmacy, consisting of five (5) members. All of these five members were required under the law to be competent pharmacists, three of whom in addition were required to be graduates of some legally constituted medical college. Those members who qualified as pharmacists only, were required to be graduates of some legally constituted college of pharmacy of the City of New York. From this it will be

seen that the early Board of Pharmacy was dominated completely by medical men. History informs us that the first legislation having for its object the regulation of the practice of pharmacy in New York City, was obtained with difficulty and only succeeded because of the assistance given by the medical profession. It was because of such assistance, we are told, that the medical profession preponderated in the membership of this Board.

While the law required all 5 members of the Board of Pharmacy to be competent pharmacists, it should be noted that it did not require the medical members of the Board to be graduates in pharmacy, but graduates of a medical school only.

The requirements of the law were however fully met, owing to a provision in the act permitting a graduate from some legally constituted medical college or society, to become registered as a pharmacist, upon producing proper evidence of such graduation and upon payment of the registration fee of \$2.00. It will thus be noted that a graduate of a legally constituted medical college or society became a competent pharmacist immediately after payment of the registration fee.

The body responsible, under the acts of 1872 and 1882, for the creation of the Board of Pharmacy, were the members of the College of Pharmacy of the City of New York. This body was authorized under these acts, and at a special meeting called for that purpose, to elect 5 competent pharmacists, who, after qualifying, were empowered to act as such Board of Pharmacy. In case of vacancy, the Board of Trustees of the College of Pharmacy of the City of New York was designated to act.

In conformity with this authorization the writer was honored by his election to membership to this Board on January 15, 1895. The following is an extract of the notification received relative to such election:

New York City, Feb. 7, 1895.

This is to certify that at a Special Meeting of the College of Pharmacy of the City of New York, held January 15, 1895—George C. Diekman, Ph.G., M.D., and — were nominated as candidates for the office of Member of the Board of Pharmacy of the City and County of New York, in place of — resigned, and that at a meeting of the Board of Trustees of the College of Pharmacy of the City of New York, held Tuesday, February 5, 1895, the said George C. Diekman, Ph.G., M.D., was duly elected—.

J. NIVEN HEGEMAN, (Signed)
Secretary of the College of
Pharmacy of the City of
New York.

The duties of such Board were outlined as follows:

It shall transact all business pertaining to the legal regulation of the practice of pharmacy in the City of New York, and examine and register pharmacists.

The fee for examination was fixed at the sum of \$5.00 and that for pharmacists' registration at \$2.00. Applicants for registration who did not intend to open and conduct a business on their own account, were registered as assistant pharmacists paying a fee of \$1.00.

Examination and registration fees constituted practically the entire income of the Board. Out of such moneys the salary of the secretary was directed to be paid. As the income from all sources was very limited, so was of necessity the sum allowed to the secretary. Members of the Board served without recompense.

Any surplus was directed to be paid over to the treasurer of the College of Pharmacy. It is unnecessary to say that the sum received by the treasurer from this source at no time became burdensome.

The personnel of this Board consisted of the following named:

Cyrus Edson, M.D., President,
 John Oehler, Ph.G.,
 Smith Ely Jelliffe, M.D.
 George C. Diekman, Ph.G., M.D., and
 William Balsler, M.D., Secretary.

Poisons were classified then as now, under Schedules "A" and "B." The articles listed under these schedules differed, however, from such as are listed at this time.

Penalties were provided for the following offenses:

- (a) Attempt to procure for self or another registration by making or causing to be made false representations.
- (b) Permitting the compounding and dispensing of prescriptions of medical practitioners by any person or persons not registered.
- (c) Fraudulently representing himself to be licensed.
- (d) Violation of any provision of the act.

Any person violating any provision of the pharmacy law was deemed guilty of a misdemeanor and upon conviction thereof liable to a penalty of \$50.00 for each and every offense.

Each and every penalty recovered under the act was directed to be paid (shall be paid) to the trustees of the college of pharmacy, to be used or expended in the purchase of books for use in the library of the college. The revenue of the Board was too meager to permit the employment of inspectors and the amount recovered in penalties was negligible. On this account the number of books obtained for the library from this source, never assumed even respectable proportions.

It is also to be noted that a license to practice pharmacy, granted after examination by any of the boards legally created under the laws of the State, entitled the holder to registration by any and all of the other boards of pharmacy of the State, upon presentation of the license and compliance with any other requirements of such boards. Under the laws governing the practice of pharmacy, in existence at that time, a person in order to practice the profession legally in all parts of the State, was obliged to seek registration by no less than four bodies, and to pay no less than four fees of registration, ranging from \$2.00 to \$5.00 in amount.

In these days the pharmacist was not surrounded and in a measure harassed by a multiplicity of laws and regulation, such as became the fashion in later times. However, even at such early period a number of sections of the Penal Code of the State of New York bore special reference to the practice of pharmacy. It will be impossible, as well as unnecessary, to enumerate or describe these sections in detail. One section, however, should receive notice, inasmuch as it bears evidence that even at that early date an attempt was made to regulate the sale and more especially the dispensing of narcotics, as follows:

Chapter 636 of the Laws of 1887 attempted to regulate the sale of morphine by druggists and apothecaries, reading as follows:

Section 1. No pharmacist, druggist or apothecary or other person shall re-fill more than once, prescriptions containing opium or morphine or preparations

of either, in which the dose of opium shall exceed one-fourth grain or morphine one-twentieth grain, except with the verbal or written order of a physician.

Section 2. Any person violating the provision of Section one of this act shall be deemed guilty of a misdemeanor, and shall upon conviction thereof, be fined not less than ten dollars nor more than twenty-five dollars, at the discretion of the Court, for each and every offense.

This section to be sure, somewhat resembled a funnel, or a sieve, as far as checking the distribution of narcotics was concerned. It is a matter of history that it failed signally to accomplish the desired result, still it was a beginning and a forerunner of the many subsequent attempts to curb the distribution of narcotics.

As might have been expected, a very considerable number of medical practitioners availed themselves of the privilege of registrations as pharmacists, granted under this law. Even at this late date, a number of such retain this privilege. A very limited number of physicians who profited in the way of registration as pharmacist opened and conducted pharmacies in conjunction with their medical practice. By far the greater number, however, obtained such registration, because it was obtainable at a slight expense, without in the least expecting to ever profit by the privilege conferred upon them.

With the consolidation of the territory now known as Greater New York in 1898, it became necessary to legislate the New York City and Kings County Boards of Pharmacy out of existence, and to proceed to the creation of a single Board to operate in their stead.

This was accomplished by legislation in 1897, which is known as Chapter 378 of the Laws of 1897. This newly created body consisted of 5 members and its jurisdiction extended over the territory governed (pharmaceutically speaking) by the two bodies it succeeded. In addition it was given jurisdiction over a part of the territory formerly included in that over which the State Board of Pharmacy had jurisdiction, namely, all of Richmond County (Staten Island) and that part of Queens County incorporated in the Greater New York.

Except for the manner in which the members of the newly created Board were elected and the distribution of any surplus funds which might accrue, the new law did not differ materially from that which it superseded. The registration privilege of physicians, without examination, was continued. That part of the law which required at least three members of the Board to be graduated of some legally constituted medical college or society, however was not reenacted.

All existing licenses were of course continued in full force and examinations conducted as heretofore. No less than 10 examinations were held yearly, that is, one each month, with exception of July and August.

The membership of this Board was selected in the following manner, quoting the law:

Section 1513. The members of the College of Pharmacy of the City of New York, which is situated in the borough of Manhattan, the members of the German Apothecaries' Society of New York, and the members of the Kings County Pharmaceutical Society shall, on the first Monday in January eighteen hundred and ninety-eight, and on the same day every third year thereafter, at a special meeting held by each for that purpose, elect five competent pharmacists, who shall form and be known as the Board of Pharmacy.

Of those five members, two shall be elected by the said New York College of Pharmacy, one by the German Apothecaries' Society and two by the Kings

County Pharmaceutical Society. The members of this Board shall within thirty days after their election as aforesaid individually take and subscribe before the clerk of the City of New York an oath faithfully and impartially to discharge the duties prescribed for them by this title.—They shall elect from their own number, a president and secretary, who shall serve for the whole term, namely three years.

As a result of such elections, the following named were chosen to constitute the new Board:

By the New York College of Pharmacy:

Clarence O. Bigelow, and
George C. Diekman, both of the Borough of Manhattan.

By the German Apothecaries' Society:

Sidney Faber, of the Borough of Manhattan.

By the Kings County Pharmaceutical Society:

William Muir, and
Albert H. Brundage, both of the Borough of Kings.

The Board organized by the election of Clarence O. Bigelow, of the Borough of Manhattan, as president, and Sidney Faber, of the Borough of Manhattan, as secretary.

Section 1514 of the same law dealt with matters pertaining to the finances of the Board, and in reference to a possible surplus, provided as follows, again quoting the law:

The secretary shall give receipts for all moneys received by him, which moneys shall be used for the purpose of defraying the expenses of the Board of Pharmacy, and three-fifths of any surplus shall be for the benefit of the College of Pharmacy of the City of New York, situated in the Borough of Manhattan, and two-fifths of such surplus shall be for the benefit of the Brooklyn College of Pharmacy, situated in the Borough of Brooklyn. The salary of the Secretary shall be fixed by the Board and shall be paid out of the registration fees.

While with the creation of the Board of Pharmacy having jurisdiction over the territory known as the Greater New York, the number of such boards operating in the State was reduced from four to three, it was felt by those who had the best interests of Pharmacy at heart, that a consolidation of the remaining boards would be advisable, and if accomplished would operate to the benefit of not only the pharmacists, but the public as well. No good reasons were advanced for retaining all three boards, and it was freely acknowledged that, excepting only for purely political reasons, a consolidation would be desirable.

After much agitation, discussing and consultation an atmosphere favorable to consolidation was finally created. To harmonize the various interests involved, or who at least believed they were involved, was a task of no small magnitude. No one desired to give way. Each section of the State felt itself obligated to at least preserve all privileges heretofore enjoyed, if not to seek and obtain additional ones. Those most interested in the task, however, persevered in their labors and finally succeeded in drafting a tentative outline of a new law, having for its chief object the consolidation of the three remaining boards of pharmacy, or, in other words, the creation of a single Board for the Empire State.

With the assistance of the State Association and its legislative committee a law consolidating the then existing Board of Pharmacy was enacted. This new Board consisted of no less than 15 members, who represented the eastern, middle

and western sections of the State, respectively. The officers of the General Board were a president, a vice-president and a secretary. Each section elected its own chairman and secretary, the secretary of the General Board acting in the same capacity in the section from which he was elected.

The personnel of this Board consisted of the following named:

Eastern Section:

Clarence O. Bigelow,
George C. Diekman,
Sidney Faber,
William Muir, and
Albert H. Brundage.

Middle Section:

Warren L. Bradt,
Charles B. Sears,

J. Clitherow Smith,
George Merritt, and
Byron M. Hyde.

Western Section:

R. K. Smither,
Willis G. Gregory,
George Reiman,
Alfred M. Palmer, and
E. M. Jewell.

The Eastern Branch of the State Board had jurisdiction over the territory embracing the Greater New York, with addition of Richmond, Nassau, Suffolk and Westchester Counties.

The Western Branch embraced the counties at the extreme western end of the State, consisting of Erie and Niagara Counties.

The Middle Branch embraced all territory not included in the Eastern and Middle Branches. While the Middle Branch of the Board had jurisdiction over the greater portion of the State, the larger number of pharmacies were located within the territory of the Eastern Branch.

The law provided for the election of the members of this Board, by the following named bodies:

Eastern Section: Two members elected by the Manhattan Pharmaceutical Association.

Two members elected by the Kings County Pharmaceutical Society.

One member elected by the German Apothecaries' Society.

Middle Section: Five members elected by the New York State Pharmaceutical Association.

Western Section: Five members elected by the Erie County Pharmaceutical Society.

Two grades of licenses were created, namely, those of Licensed Pharmacist and Licensed Druggist, and a re-registration of all pharmacists and assistant pharmacists was provided for.

Each pharmacy and drug store was also required to register annually, the fee for such registration being \$2.00.

It should be noted that the income from this source and from the re-registration source was considerable. Together with the other income of the Board it provided a sum annually of sufficient amount to permit the employment of inspectors and chemists for the proper enforcement of all provisions of the law.

Apprentice registration was made obligatory, a nominal fee of \$1.00 was paid by the registrant. This provision of the law has since proved of inestimable value, as the data it supplied permitted a more accurate checking up of experience claims of applicants for examination. The data obtained in connection with the obligatory annual store registration have likewise proven themselves of great value in

establishing or disproving experience claims of applicants for examination, and in many other ways, not only in this State, but in a number of others as well.

The disposition of any surplus as far as the Eastern Branch of the Board was concerned was left unchanged, the College of Pharmacy of the City of New York receiving three-fifths and the Brooklyn College of Pharmacy two-fifths. Any surplus accruing in the Middle and Western Branch Sections was to be paid into the State treasury.

It will no doubt prove of interest to know that this law, creating a single Board of Pharmacy for New York State, was approved by and received the signature of the then Governor and later President Theodore Roosevelt.

After this law was in operation for a short period, it was amended in several particulars. The principal change referred to the manner of electing new members and filling vacancies. While in the Middle Section the members were still selected by the membership of the State association, on occasion of the annual meeting, in the Eastern and Western Sections the franchise was opened to all licensed pharmacists and druggists, who held membership in a duly incorporated pharmaceutical society or association, within the territory in which they resided and did business.

Attention is drawn to the fact that until this time, the only requirements for admission to the licensing examination were the age and experience requirements. It is true that the schools and colleges of pharmacy were well attended; such attendance, however, was not obligatory. Even those who attended schools of pharmacy were not required to produce evidence of academic education, prior to their admission, except in cases where the school or college required such evidence to be produced. No legal supervision existed in this connection at that time.

At about the same time, and even before, that the agitation for a consolidation of the boards of pharmacy was at its height, another and much more important matter engaged the attention of pharmacists and pharmaceutical educators. This was what later became known as the prerequisite question, requiring that all applicants for admission to the licensing examination for pharmacist produce evidence of having received a diploma from a recognized college or school of pharmacy. As might have been expected and as history records, this matter caused no amount of discussion, both pro and con. It required long-continued and earnest work before the matter received favorable attention. The agitation, as may be seen from an examination of the Proceedings of the New York State Pharmaceutical Association, was spread out over a number of years.

Eventually, however, a law was enacted taking effect on January 1, 1905, which required all candidates who desired to gain admission to the licensing examination for pharmacist, to possess a diploma from a school or college of pharmacy registered by the Regents of the State of New York. At the same time applicants for admission to schools of pharmacy in this state were required to produce evidence of having successfully completed one year of high school work, or its equivalent.

Even after the enactment of this law, the most dire predictions were made concerning the effects it would have upon the number of applicants for admission to the schools, and therefore the number of graduates available to serve the public. The opponents of the law freely predicted that in the course of a few years

a repeal of its provisions would be found necessary and that now its friends would be obliged to change front completely. How fallacious these predictions were is now a matter of history. Not only in New York State but in others where like laws were enacted, the results proved most beneficial from every viewpoint.

As time passed on it developed that a board of pharmacy consisting of 15 members was a cumbersome body, and agitation to reduce this number soon became insistent. Except for reasons of expediency there was no good argument why this number might not be reduced, without in the least interfering with the efficiency of the work to be performed. It was conceded that the interests of the various sections of the State could be looked after by a smaller body. It is not intended here to criticize the enactment or the administration of this law. It represented the very best that could be accomplished at that time and certainly was a step in advance, a milestone in the history of pharmacy in New York State.

Again with the assistance of the State association and its legislative committee a law was drafted containing a provision reducing the membership of the Board of Pharmacy to nine and vesting the appointive power with the State Board of Regents, upon recommendation of the State association. The proposed new law met with no opposition and became an accomplished fact June 8, 1910. It is known as chapter 45 of the Public Health Law. As also of interest it should be reported that the new law received the signature of Charles E. Hughes, then Governor of New York State and now Secretary of State of the United States.

In accordance with Section 231 of this law, the State association, on occasion of its meeting in June 1910, nominated 25 licensed pharmacists by ballot, whose names were submitted to the Regents of the State. From the number so nominated the following appointments were made:

To serve for a period of *Three* years:

George C. Diekman, of New York City,
Clarence O. Bigelow, of New York City,
Byron M. Hyde, of Rochester, N. Y.

To serve for a period of *Two* years:

John Hurley, of Little Falls, N. Y.,
J. Leon Lascoff, of New York City,
Otto Raubenheimer, of New York City (Brooklyn).

To serve for a period of *One* year:

Alfred B. Huested, of Albany, N. Y.,
Judson B. Todd, of Ithaca, N. Y.,
George Reiman, of Buffalo, N. Y.

To serve as Secretary (not a Board Member):

Warren L. Bradt, of Albany, N. Y.

Upon organization, the Board elected the following:

President, George C. Diekman, of New York City,
Vice-President, Byron M. Hyde, of Rochester, N. Y.

It will be noted that in accordance with the provision of this law, four (4) members of the Board were residents of New York City, and five (5) residents of other sections of the State.

This law, with a few changes, is operative at this time. The principal changes are as follows:

- (a) An amendment requiring candidates for admission to the licensing examination for Pharmacist and Junior Pharmacist, to possess, after January 1,

1918, Thirty (30) academic counts, or their equivalent, instead of Fifteen (15) counts, or their equivalent.

- (b) An amendment creating a new grade of license, known as a Junior Pharmacist license.

The points of interest in the law of 1910 may be summarized as follows:

Section 231. The State Board of Pharmacy in office when this section takes effect shall remain in office until August 1, 1910. On and after that date such board shall consist of nine examiners, *four* of whom shall be residents of the city of New York. At the annual meeting of the association (State Pharmaceutical Association), held in 1910, there shall be 25 licensed pharmacists nominated by ballot, whose names shall be submitted to the Regents, immediately thereafter. From the number thus submitted or from the other licensed pharmacists of the State the Regents *may* appoint nine persons, who shall constitute the Board of Pharmacy, whose term of office shall begin on August 1, 1910, three of whom shall hold office for a term of one year, three for a term of two years and three for a term of three years.

The Secretary shall be a licensed pharmacist who has legally practiced as a pharmacist for at least 10 years in this State. He shall be appointed by the Regents, shall hold office during their pleasure and shall receive an annual salary of \$3000, payable from the moneys received from this article. Expenses: All fees, fines, penalties and other moneys derived from the operation of this article shall be paid into the State treasury and the Legislature shall annually appropriate for the Department an amount sufficient to pay all proper expenses incurred pursuant to this article.

Section 234. Except as prescribed in this article, it shall not be lawful for any person to practice as a pharmacist, druggist, apprentice or storekeeper, or to engage in, conduct, carry on, or be employed in the dispensing, compounding or retailing of drugs, chemicals, medicines, prescriptions or poisons within this State. Every place in which drugs, chemicals, medicines, prescriptions or poisons are retailed, or dispensed, or compounded, shall be a pharmacy, a drug store, or a store; shall be under the personal supervision of a pharmacist, a druggist, or a storekeeper and shall be annually registered in the month of January by the board as conducted in full compliance with law and the rules.

Temporary permits: In places and villages of 1000 inhabitants or less that do not have within three miles a pharmacy or drug store:

(a) Physicians may compound medicines, fill prescriptions and sell poisons labeled as required by this article.

(b) Storekeepers may in accord with the rules sell medicines and poisons for a period of not exceeding one year upon payment of a fee of \$3.00. The storekeeper's certificate is limited to the village or place where the storekeeper resides and may be limited to the sale of certain classes of poisons sold only in original packages and put up by a licensed pharmacist whose name and address (business) is displayed on the package.

Section 240. No license or certificate shall be granted to any applicant guilty of felony or gross immorality, or that is addicted to the use of alcoholic liquors or narcotic drugs to such an extent as to render him unfit to practice pharmacology. Any license or certificate obtained by misrepresentation or fraud or that is held by anyone unfit or incompetent from negligence, habits or other cause may be revoked after reasonable notice and an opportunity to be heard. The wilful and repeated violation of any of the provisions of this article or the rules is sufficient cause for the revocation of a license or certificate. The license or certificate revoked shall on formal notice be delivered immediately to the board.

The following represent extracts from the rules of the New York State Board of Pharmacy:

Rule 3. Examiners shall receive the sum of \$10 for each day's service in performance of their duties under the provisions of this article and shall be entitled to receive all necessary expenses.

Rule 4 (a). Violations committee: Three committees of three members each—for Albany, for Buffalo and for New York—shall be appointed to investigate alleged violations of the provisions of this article; to conduct hearings in respect thereto, and, when necessary, to bring the same to the attention of the Attorney General. Meetings of such committees shall be held as frequently as necessary and be called by the secretary.

Rule 7. Requirements for a Pharmacy, Drug Store and Store:

(a) Every pharmacy and drug store shall own and have on file at all times the latest decennial revision of the Pharmacopoeia and the latest edition of the National Formulary, and no registration certificate shall be issued a pharmacy or drug store until it complies with this rule.

(b) Minimum equipment of utensils: Every registered pharmacy and drug store is required to have the following minimum equipment of utensils: (1) One (1) base scale capable of weighing one grain or less; one (1) set of accurate apothecaries' weights from 1 grain to 2 drams; one (1) set of metric weights from 50 milligrams to 20 grams; a set of glass graduated measures two or more in number capable of measuring from 10 minims to 16 fluidounces; a set of glass graduated measures from 5 cubic centimeters to 500 cubic centimeters.

Rule 9. Signs upon stores. The surname is not sufficient; either the full name of the proprietor or the initials of the proprietor's given names prefacing his surname shall be placed upon the exterior of the premises where the pharmacy, drug store or store is located.

Rule 10. A relief clerk must deposit his license with the secretary while using a card license.

Rule 12. Suspensions. A license or certificate may be suspended under the same procedure as revocation.

Rule 16. Every person that shall enter a pharmacy or drug store with the intention of becoming a pharmacist or druggist shall report to the secretary within three months thereof such facts as the board may require for registration. Affidavits of experience to be accepted for admission to examination must show a minimum of 50 hours a week in a registered pharmacy or drug store. Less than 50 hours shall receive proportionate credit. A matriculant of any registered school of pharmacy of New York State must possess the "registered apprentice certificate" before matriculation is completed. Any student who has not had practical experience prior to entering the school or has had experience in a State other than New York shall be registered by the executive officer of such school. After January 1, 1918, a candidate for pharmacist license must attain a standing of at least 75 percent in each subject. A candidate who has standings below 75 percent in more than two written subjects must be reexamined in all subjects except practical pharmacy passed at 75 percent or above. A candidate who attains a standing of at least 75 percent in practical pharmacy need not be reexamined in that subject except for cause.

Rule 23. The names of candidates shall not appear on answer papers. Candidates shall be identified by numbers on file in the University.

Rule 24. School experience in lieu of store experience. A full pharmacy course in any school of pharmacy registered by the Regents shall be accepted as the equivalent of the same amount of store experience.

Rule 25. Licenses. The license of another State board of pharmacy registered by the Regents, that was issued prior to January 1, 1905, may be accepted in lieu of the pharmacy student certificate and diploma from a registered school of pharmacy for admission to the examination for licensed pharmacist when the applicant affords evidence of having had the experience and the other qualifications required under the present law and rules. State Boards of Pharmacy registered by the Regents as meeting the provisions of this rule: Arkansas, Colorado, Connecticut, Florida, Georgia, Illinois, Indiana, Kentucky, Louisiana, Massachusetts, Michigan, Minnesota, Mississippi, Nebraska, New Jersey, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Tennessee.

It will be impossible to dwell further upon the various provisions of the now operative Pharmacy Law and Rules in New York State without encroaching too much upon the patience of the audience present, or upon that of a possible later reader of the paper. A more extended review of the law and rules would also seem superfluous, as their provisions are generally known to those interested. Before closing I would however ask to be permitted to point out the chief provisions in which the law in effect when it was my privilege to become a member of the New York City Board of Pharmacy, in the year 1895, and that in operation to-day differ.

Creation of Board:

Elected by New York College of Pharmacy,
Appointed by State Board of Regents, upon recommendation of nomination of State pharmaceutical association. Others thus far have not been appointed.

Qualification for membership and number of members:

Three members were required to be graduates of a medical school or society. All were required to be competent pharmacists. Physicians were permitted to register upon payment of the fee.

All members are required to be competent pharmacists of at least 10 years' standing.

Medical practitioners cannot become registered except upon meeting all academic, professional and examination requirements.

Board consisted of five (5) members.

Board consists of nine (9) members, four from New York City and five from the rest of the State. Secretary is not a member of the Board.

Number of examinations held:

Ten annually. One each month, excepting July and August.

Four annually. One each in the months of May, June, September and January.

Secretary:

Elected by members of the Board.

Was a member of the Board.

Salary was fixed by the Board, and was dependent entirely upon income.

Appointed by the State Board of Regents.

Is not a member of the Board.

Salary is fixed by the State Board of Regents.

Requirements for admission to licensing examination:

None, excepting age and experience requirement.

College diploma and academic education, besides age and experience requirement.

Grade of licenses:

Licensed pharmacist. Only one authorized by law. An assistant's license was issued also, but the difference between the two was simply a matter of payment of the fee. Either \$1.00 or \$2.00. Same examination was given and same rating was required.

Licensed pharmacist. Licensed druggist and junior pharmacist.

Fees for examination:

\$ 5.00

\$10.00 Pharmacist

\$ 5.00 Druggist

Fees for registration:

\$2.00 and \$1.00

No registration fee

No registration fee

1895

1921

Inspection and enforcement of the law:

Practically none. Income did not warrant the employment of inspectors or chemists.

Most thorough. Five inspectors are regularly employed. They are civil service men, and their income does not depend upon the number of penalties collected.

Two chemists are at work. Three Violation Committees are created for the purpose of hearing cases and recommending the disposition to be made of such as come before them.

Remuneration of members:

None.

\$10.00 *per diem* and necessary expenses.

Disposition of surplus:

Library of the college.

State treasury.

It is hoped that means can be found or created which will permit the New York State Board of Pharmacy to enter into reciprocal relations with other boards of pharmacy, at least on the basis of individual exchange of license. Earnest endeavors to accomplish this result are being made and it is hoped to consummate the matter at an early date.

As stated in the beginning of this paper, I will undertake to portray, at some future time, the history of pharmacy, in New York State, as far as this is interwoven with legally established Public Health Laws, the first of which I believe was enacted in 1871, provided the work is not undertaken by another. In closing permit me to thank the Chairman of the Committee for the opportunity provided me to bring these facts before the Historical Section and also the audience for its patience in listening to a subject at best not calculated to stimulate attention.

THE PHARMACIST IN RECENT AMERICAN FICTION.*

BY ADELAIDE RUDOLPH.

It certainly must be of significance to the later history of pharmacy, if not to the present, that fiction writers are beginning to introduce pharmacists into their stories as important or chief characters. And it is of significance, too, that the pharmacist, when thus introduced, is pretty well divested of his conventional, or stock-figure attributes, which included such surroundings as "simples," queer-looking containers, dried alligators suspended from the ceiling, love philters, and musty odors. He has now become, in the hands of the American story-writer, a normal man possessed of the common faults and virtues of his neighbors, and is surrounded by no mystery whatever.

This we can see clearly enough if we take a look into the four principal works of fiction which have, during the last three years, contained pharmacists as characters. Perhaps we must make an exception in the case of one story, in which the author seems to think it necessary possibly for decorative purposes, to give his German apothecary character a whimsical nickname reminiscent of the older treatment of the subject. I refer to Christopher Morley's story, "Rhubarb," which is to be found in a collection which this journalist and popular author of "Parnassus on Wheels," published under the title of "Shandygaff" (1918). The apothecary was called Rhubarb from his red beard. His real name was Schulz, Friedrich Wilhelm Maximilian Schulz. He is described as having received a good education in the schools of Germany before coming to this country and as well read in both German and English literature. The story-writer thus delightfully and sympathetically draws his picture:

"I wish I could set him down in his rich human flavour. The first impression he gave was one of cleanness and good humor. He was always in shirt sleeves, with suspenders forming an X across his broad back, his shirt was fresh laundered, his glowing beard served as a cravat. He had a slow, rather ponderous speech, with deep gurgling gutturals, a decrescendo laugh slipping farther and farther down into his larynx. Once when we got to know each other fairly well, I ventured some harmless jest about Barbarossa. He chuckled; then his face grew grave. 'I wish Minna [his wife, who is represented in the story as a frail, little woman, always with a shawl around her shoulders] could have the beard. Her chest is not strong. It would be a fine breast-protector for her. But me, because I am strong like a horse, I have it all!' He thumped his chest ruefully with his broad, thick hand." * * *

* Read before Section on Historical Pharmacy, A. Ph. A., New Orleans meeting, 1921.