

PROCEEDINGS OF THE LOCAL BRANCHES

"All papers presented to the Association and Branches shall become the property of the Association with the understanding that they are not to be published in any other publication prior to their publication in those of the Association, except with the consent of the Council." —Part of Chapter VI, Article VI of the By-Laws.

ARTICLE III of Chapter VII reads: "The objects and aims of local branches of this Association shall be the same as set forth in ARTICLE I of the Constitution of this body, and the acts of local branches shall in no way commit or bind this Association, and can only serve as recommendations to it. And no local branch shall enact any article of Constitution or By-Law to conflict with the Constitution or By-Laws of this Association."

ARTICLE IV of Chapter VII reads: "Each local branch having not less than 50 dues-paid members of the Association, holding not less than six meetings annually with an attendance of not less than 9 members at each meeting, and the proceedings of which shall have been submitted to the JOURNAL for publication, may elect one representative to the House of Delegates."

Reports of the meeting of the Local Branches shall be mailed to the Editor on the day following the meeting, if possible. Minutes should be typewritten with wide spaces between the lines. Care should be taken to give proper names correctly and manuscript should be signed by the reporter.

CHICAGO.

The 224th meeting of the Chicago Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION was held November 20th, at the University of Illinois College of Pharmacy. President G. L. Webster called the meeting to order and appointed the following nominating committee for officers of the Branch for the ensuing year: W. B. Day, *Chairman*, I. A. Becker and William Gray.

The speaker of the evening was Frank J. Zuck, a pharmacist of Rockford, Illinois, whose subject was "Pioneering in a New Field." Mr. Zuck at one time taught in the Pharmacy Department of the local college and after leaving engaged in the retail drug business in Rockford, specializing in prescription work and specialties pertaining to the medical profession.

Mr. Zuck stated that he believed the average strictly prescription shop could not hope to prosper greatly from prescription work alone and that there were possibly three main side-lines that could be used by the druggist in this specialized field to enhance the trade and profits, namely: (1) Surgical supplies, (2) Manufacturing for your store and others, (3) A laboratory fulfilling the needs of the doctors. Mr. Zuck elected to choose the first mentioned and gave figures to show the huge business he carries on in this line, mentioning instruments, etc., that would probably be foreign to the average druggist; he pointed out the necessity of being well versed in this particular field if success is to be expected.

The speaker stressed that work must be made a passion if returns are to be expected from the investment. Mr. Zuck's philosophy of success in the retail drug business may be summarized as follows: Be in love with the work, get a good basic knowledge while in college in preparation for future work, work toward a model and a goal, not to be restless and expect results to come too fast, by visualizing the project fewer mistakes will be made, not to be averse to criticism, start out with a small capital. He explained the last statement, which might be criticized by some, in that it was an advantage against initial overspending and that more careful and exacting surveys are made of every detail, large or small, if the capital is limited.

Mr. Zuck recommended that a prescription store be in the downtown area or near a group of physicians. He also suggested that at least fifteen or twenty physicians would be needed to foster a store of this type; not all of their patronage should be expected, but whatever comes should be merited and received with a smile.

The remainder of the discussion dealt mainly with the manner in which the store is being conducted, the high lights of which are: Direct buying from the manufacturer runs about 90% in the store. The clerks must know the doctors and their needs, must read the current journals and be informed on late trends in the pharmacy and medical world. New literature is kept on file for the use of the doctors.

Mr. Zuck's shop has all steel shelving, adjustable for any particular need. The prescription department is systematized for accuracy, efficiency and cleanliness. Separate desks are maintained for "will call packages," deliveries, bicycle hops and post-office mailing. The prescription counters are white enameled to give a clean appearance and to show dirt so that they will be kept clean. The prescription counter is of the glass enclosed "partial sight" type. This is expected to stimulate the interest of the customer and to advertise the profession of pharmacy.

A dental line has been added as an adjunct to the surgical line in the belief that there is a growing interest between the dentist and the pharmacist. Wheel chairs and crutches are rented. A full line of baby specialties is carried. Oxygen tents and infra-red lamps are rented. From a small beginning the rubber tubing business has grown to large proportions and a full line is carried.

There are complete facilities for the storing of biological and perishable materials. One compartment of the refrigerator is made up of individual lockers for the use of the doctors who have keys and sole access to their individual lockers.

A complete line of diabetic supplies is featured as this has grown in importance.

Salesmen are treated as friends as they are sources of much new and advance information.

Doctors are furnished with prescription blanks but the name of the drug store is purposely omitted so as not to tie the doctor down to the store. The idea is maintained that the faith and friendship of the doctor to the store is sufficient. A card index of the doctors is made with much information thereon, including their usual formulas and ingredients.

A free scale is placed in the store for those who care to weigh themselves, or packages. This has been found to bring in many customers.

A close alliance is kept with the hospitals and much business is obtained from this source.

At this point Mr. Zuck concluded his very interesting discussion with the suggestion that for a later meeting a speaker be obtained, for the benefit of the many senior pharmacy students present, who would deal with the financing and managing of a drug store with respect to buying, business records, inventories and the many other money problems, a good knowledge of which is essential to success.

LAWRENCE TEMPLETON, *Secretary*.

NEW YORK.

The November meeting of the New York Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION was held on the evening of November 12, 1934, in the College of Pharmacy, Columbia University. About fifty members and guests attended. The meeting was opened by President Ballard. The minutes of the previous meeting were read and approved. Treasurer Currens reported a balance of \$217.10 on hand. The application of Samuel C. Henry for membership in the New York Branch was presented and accepted.

Chairman Kidder, of Professional Relations Committee, reported that coöperation between physicians and pharmacists was progressing. He called attention to a Physicians and Pharmacists' meeting held in Westchester about a month ago, and also mentioned that Dr. Ballard would address physicians in the Hackensack Hospital on November 13th, on "Physician, Pharmacists and Patient."

Chairman Lehman, of the Committee on Legislation and Education, reported the following:

Proposed Budget of The Code Authority for the Retail Drug Trade, provides for the collection of the following sum to cover the period from November 1, 1934 to April 30, 1935. Total \$204,309.00, of which \$25,000.00 is to be allocated for the National Code Authority and \$179,309.00 to local and state authorities. Means of collection is \$1.00 per employee from each retail drug establishment in towns of more than 2500 inhabitants, those below that number being exempt; 50¢ for each establishment to go to the National Authority, the balance to state and local.

Establishments liable to the assessment are such in which over 50% of the business is done in drug items. This seems unjust, as some of the Department stores have drug departments that do more business than some of the Chain Stores; also, some retail establishments in cities of 2500 inhabitants do a larger business than many of the stores in large cities.

A hearing on the question of putting soaps under the drug instead of the grocery code was held in Washington on October 23rd. No decision has been made so far.

Commissioner Anslinger warns retail druggists that all exempt narcotics must be recorded by the seller, whether official, proprietary, prescription or otherwise.

There are prospects of a bill to be introduced in Congress requiring the Federal Registra-

tion of all persons who import, manufacture, produce, compound, sell, dispense or deal, in drugs or medicines. The annual fee is to be \$5.00 plus \$1.00 for every registered person employed in the establishment. This may tend to restrict the sale of medicines and drugs to registered pharmacies and drug stores.

The Capper-Kelly bill may be reintroduced, in somewhat changed form; also the Tugwell bill.

In reference to the prohibition of sale of Valerian, its compounds, derivatives and preparations, several pharmacists and others were arrested during the past week for having bought valerianates and valerianic acid; one was fined \$25.00 for having bought 4 ounces of valerianic acid, and making use of it without being able to show a prescription or having any record as to its disposition.

The strike of the Drug Clerks is still confined to the Bronx, where stores which have refused to sign up with the Union are being picketed. Wage demands are not exorbitant, from \$30.00 to \$35.00 a week, and the hours from 48 to 56. However, the employer who signs up is obliged to employ his clerks through the Union, cannot discharge anyone unless permitted by the Union, and must permit the Union officials to examine his books from time to time to determine whether he is in a position to increase the compensation of his employees.

A "Pharmaceutical-Employer-Employee Coördinating Committee" has been organized to combat this movement, and isolate it as much as possible.

An organization meeting of the Federation of Eastern State Pharmaceutical Associations was recently held. The purpose of this organization is to advance the cause of price stabilization, provide a code of ethics for the industry, promote Retail Code enforcement, and restrict sales of drug items to drug stores. It has many problems before it.

Due to the absence of the Committee members, Dr. Ballard read the report from the committee appointed to draw up suitable resolutions concerning Dr. Kassner. The report was as follows:

RESOLUTIONS, DEATH OF HERBERT C. KASSNER.

WHEREAS, in the death of Dr. Herbert C. Kassner, American pharmacy has sustained an irreparable loss, the New York Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION takes this occasion to express its sorrow and grief in the following resolutions:

Resolved, that we are deeply cognizant of his capabilities as an officer of this association; that by his loyal, diligent and efficient performance of duty he helped materially in building up the activities of this branch; that by his kind consideration of others and his eagerness to cooperate, he was an ideal associate to work with.

Resolved, that we join, with many others, in expressing our deepest regret that a career, so rich in possibilities of future contributions to our profession, should have been curtailed while he was barely in the prime of life.

Resolved, that these expressions of our esteem and sympathy be inscribed upon the minutes of our organization, and that a copy suitably engrossed, be transmitted to the family of the late Dr. Herbert C. Kassner.

(Signed) ABRAHAM TAUB, Resolutions Committee
SAMUEL S. LIBERMAN.

Following the reading, Dr. Army moved acceptance of the report, this was seconded and the report was approved.

Dr. Schaefer, Fischelis Dinner Chairman, now reported that the dinner had been postponed to January 10th, and would be held in the Pennsylvania Hotel at four dollars (\$4.00) per plate. Postponement was necessary because of the recent death of Dr. Fischelis' father.

President Ballard then introduced the speaker of the evening, Dr. William Crocker, managing director of the Boyce-Thompson Institute, who spoke on "Some Biochemical Researches at Boyce-Thompson Institute."

The speaker outlined the plan of work at the Institute, pointing out that work was conducted on a project basis rather than individual research. He emphasized that in his opinion there was no distinction between applied science and pure science when it came to research.

In explaining some of the work conducted at the Institute, Dr. Crocker discussed four subjects, namely, the effect of light upon plants; superstimulants which have been discovered that throw dormant plants into active growth; how sulphur acts as a fungicide; and the stimulative and anesthetic action of the simple unsaturated carbon gases, as ethylene, acetylene and carbon monoxide, upon plants.

The studies on the effect of light on plants were conducted with artificial light, and with ultraviolet, and with infra-red light. Special glass was used in some green houses.

Of exceedingly great interest were the lantern slides and the motion pictures used to illustrate the lecture. The stimulating action of certain substances and the anesthetic action of others was vividly illustrated by motion pictures. The films showing the growth of plants were unique.

Dr. Crocker was assisted by Mr. Floyd.

At the close of the speakers' address there was some discussion, after which a rising vote of thanks was accorded Dr. Crocker and the meeting adjourned.

RUDOLF O. HAUCK, *Secretary*.

COLONIAL LAWS PERTAINING TO PHARMACY.*

BY DAVID L. COWEN.¹

The medical historian seeking material descriptive of conditions in that profession in early America can find much of interest in the statute books of the thirteen colonies. True enough, the uncomplimentary may exceed the complimentary, but nevertheless there is an abundance of material with which to work.

The situation is not so happy with regard to pharmacy: a search through the records has yielded but two colonial laws specifically mentioning the apothecary. Moreover, but one of the two, a Virginia Act of 1736, was specifically intended to regulate the apothecary; the other, a South Carolina Act of 1751, placed restrictions on the apothecary as an adjunct to the regulation of slaves.² It would be flattering if this paucity of legislation were traceable to the fact that the apothecary did not abuse his profession as did the "Physitian and Chirurgion," and therefore was not subject to uncomplimentary legislative regulation. Less flattering would be the possibility that the apothecary had not attained the professional level of indispensable service to the community that was conducive of exploitation; or that the profession was not sufficiently significant numerically to exert any social pressure one way or the other. The most logical explanation is, of course, that the pharmaceutical and medical professions had not yet differentiated. The laws regulating the "practice of physic," probably regulated also what was then the practice of pharmacy. If this is not exactly so, the result is obtained if we consider the apothecaries as the "others" in the colonial laws that regulated "Physicians, Surgeons, Midwives and others."

There is ample evidence in colonial statutes supporting the fact that the physician was his own apothecary. To cite but one set of examples, Virginia in 1639, 1646, 1658, 1662 and 1692, enacted laws substantially to the effect that any "phisitian or chirurgion," whose fee seemed exorbitant, could be brought before a court where he had to "declare upon oath the true value, worth and quantity of his drugs and medicines administred."³

* Read before Northern New Jersey Branch, A. PH. A.

¹ Instructor in History, Rutgers University, New Jersey College of Pharmacy.

² Authorities have previously suggested two other laws: a Virginia Act of 1636 and a New Jersey Act of 1664. Neither is authentic. In regards to the former, see fu. 4, *infra*. The reference to the New Jersey Act is found in the chronological table in C. H. LaWall, "Four Thousand Years of Pharmacy" (Philadelphia, 1927), page 572: "1664. New Jersey passes earliest law regulating apothecaries in the new world." That there was no such law is evident from the fact that 1664 was the year in which New Jersey first became a political entity by virtue of the English conquest of New Netherlands, and that the "first Assembly ever convened in New Jersey . . . met . . . May 26-30, 1668." [F. B. Lee, "New Jersey as a Colony and a State" (New York, 1903), Vol. I, page 135.] If the reference (Cf. LaWall, page 331) is to one of the "Duke's Laws" of 1665 (which are more applicable to New York than to New Jersey), there was a law, not unique, admonishing no person as "Chirurgions, Midwives, Physicians," to "presume to Exercise or put forth any Acts contrary to the known approved Rules of Art in each mistery." ["Colonial Laws of New York" (Albany, 1894), Vol. I, page 27]. Absolutely no mention of apothecaries is made.

³ The years are given in new style. The titles of these Acts are similar to "An Act about Physicians and Chyrurgeons Accounts." The 1646, 1658, 1662 and 1692 Acts are in, W. W. Hening, "The Statutes at Large . . . of Virginia" (New York, etc., 1819, etc.) Vol. I, pages 316, 450; Vol. II, page 110; Vol. III, page 103. The 1639 Act is referred to in a footnote, *Ibid.*, Vol. I, page 450. The quotations are from the 1646 Act.

This item also serves to illustrate the reference above to "uncomplimentary" legislation. Actual arrest of the physician was, until the Act of 1692, involved in the procedure, and it devolved upon the court to determine the fee he was to receive. Similarly, the reasons given for this legislation exemplify what was meant by professional "abuses." The preamble to the 1646 act stated that medical attention, despite its uncertain and often detrimental effects, was so much more expensive than the replacement costs of slaves and servants, that the planters found it more humane and economical to let their slaves die!

It is not the intention here to discuss the laws regulating the practice of medicine; they bear a relation to pharmacy by inference alone. Only the two laws concretely mentioning the apothecary to which reference already has been made, and such few other laws as have a direct bearing on pharmacy will receive consideration.

Most important, both in point of time and in content, is the Virginia Act of 1736.¹ It is fitting that with the dearth of material this law should prove a veritable mine of information as to pharmacy in colonial America. This wealth of information warrants its complete reproduction here:

AN ACT, FOR REGULATING THE FEES AND ACCOUNTS OF THE PRACTICERS IN PHYSIC.

I. WHEREAS the Practice of Physic, in this Colony, is most commonly taken up and followed, by Surgeons, Apothecaries, or such as have only served Apprenticeships to those Trades, who often prove very unskilful in the Art of a Physician; and yet do demand excessive Fees and exact unreasonable Prices for the Medicines which they administer, and do too often, for the Sake of making up long and expensive Bills, load their Patients with greater Quantities thereof, than are necessary or useful, concealing all their Compositions, as well to prevent the Discovery of their Practice, as of the true Value of what they administer; which is become a Grievance, dangerous and intolerable, as well to the poorer Sort of People, as others, and doth require the most effectual Remedy that the Nature of the Thing will admit:

II. *Be It therefore Enacted, by the Lieutenant-Governor, Council, and Burgesses, of this present General Assembly, and it is hereby Enacted, by the Authority of the same,* That from and after the Passing of this Act, no Practicer in Physic, in any Action or Suit whatsoever, hereafter to be commenced in any Court of Record in this Colony, shall recover, for Visiting any sick Person, more than the Rates hereafter mentioned: That is to say,

	<i>l.</i>	<i>s.</i>	<i>d.</i>
Surgeons, and Apothecaries, who have served an Apprenticeship to those Trades, shall be allowed,			
For every Visit, and Prescription, in Town or within Five Miles,	00	5	00
For every Mile, above Five, and under Ten,	00	1	00
For a Visit of Ten Miles,	00	10	00
And, for every Mile above Ten,	00	00	06
With an Allowance for all Ferriages in their Journeys.			
To Surgeons, For a Simple Fracture, and the Cure thereof,	02	00	00
For a Compound Fracture, and the Cure thereof,	04	00	00

¹ Various authorities have erroneously dated this Act as 1636. See S. Wickes, "History of Medicine in New Jersey" (Newark, 1879), page 54; F. H. Garrison, "An Introduction to the History of Medicine" (Philadelphia, 1914), pages 233, 682; *Ibid.*, 1929 Ed., pages 304, 824; and LaWall, pages 331, 571. It is evident from the following that there was no such act in 1636:

1. There is no record of it. Only two acts of the 1635/6-1636/7 sessions of the Virginia Assembly have been preserved, and the titles to ten others are known [see the preface to the "Journals of the House of Burgesses of Virginia 1619-1658/59" (Richmond, 1915), page xxxv, and none of them refers to physicians, surgeons or apothecaries.

2. Wickes cites as his authority the "Half Yearly Compendium of Medical Science," Jan. 1878 (which see, page 66). This, however, gives the date correctly as 1736.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
But those Persons who have studied Physic in any University, and taken any Degree therein, shall be allowed,			
For every Visit, and Prescription, in any Town, or within Five Miles,	00	10	00
If above Five Miles, for every Mile more, under Ten,	00	1	00
For a Visit, if not above Ten Miles,	01	00	00
And, for every Mile above Ten,	00	01	00

With an Allowance of Ferriages, as before:

III. AND, to the End the true Value of the Medicines administred by any Practicer in Physic, may be better known, and judged of, *Be it further Enacted, by the Authority aforesaid*, That whenever any Pills, Bolus, Portion, Draught, Electuary, Decoction or any Medicines, in any Form whatsoever, shall be administred to any sick Person, the Person administring the same shall, at the same Time, deliver in his Bill, expressing every particular Thing made up therein; or if the Medicine administred, be a Simple, or Compound, directed in the *Dispensatories*, the true Name thereof shall be expressed in the same Bill, together with the Quantities and Prices, in both Cases. And in Failure thereof, such Practicer, or any Apothecary making up the Prescription of another, shall be nonsuited, in any Action or Suit hereafter commenced, which shall be grounded upon such Bill or Bills: Nor shall any Book, or Account, of any Practicer in Physic, or any Apothecary, be permitted to be given in Evidence, before a Court; unless the Articles therein contained, be charged according to the Directions of this Act.

IV. AND *be it further Enacted, by the Authority aforesaid*, That this Act shall continue and be in Force, for and during Two Years, next after the Passing thereof, and from thence to the End of the next Session of Assembly.¹

An analysis of this Act serves to corroborate many other evidences from a multitude of sources, and to alter some conceptions of certain facts in American pharmaceutical history.

Of primary importance is the close interrelation between colonial pharmacy and medicine that is so clearly demonstrated. The apothecary is definitely and legally stated to be a "Practicer in Physic," by his inclusion in the Act. Added to this is the description of services (Sec. I), and the list of fees (Sec. II) for services, obviously more medical than pharmaceutical in modern practice. Conversely, the Act illustrates that the surgeon and even the physician "who had taken any Degree," compounded their own medicines.

The indictments against the surgeons and apothecaries (Sec. I) are indeed as interesting a commentary on colonial pharmacy as could be desired. That they practiced "Physic" although "unskilful in the Art of a Physician" is reminiscent of the famous case of William Rose in England in the previous century, and is a precursor of disaffection to come. So also did the Act presage the victory of the physicians, as the difference in fees enumerated in Section III will bear witness.

That the surgeon and apothecary padded their bills, administered huge doses and concealed the contents of their concoctions, recalls not only conditions in England in the seventeenth century, but also the aspersions cast upon the physicians themselves in the Virginia laws of 1639 and after. Nor can the ethical implications of these indictments be passed over. Their inclusion in the Act along with the accusation of professional secrecy in order to "prevent the Discovery of their Practice," formed a challenge to the profession to clean house.

The final indictment of the surgeons and apothecaries was that they had learned their "Trade" only by serving apprenticeships. This seems almost unduly derisive in an age when apprenticeship was the accepted mode of learning in a country offering no other means. One can almost visualize the sneer of the graduate physician behind that indictment. Yet we have here one of the earliest, if not the first, concrete documentary evidences of pharmaceutical apprenticeship in America. Nor can the inference be passed over that only such apothecaries who had served apprenticeships were eligible to practice in Virginia. At least it seems that a self-constituted apothecary who had not served an apprenticeship, could not legally demand or

¹ The Act was first published as Chapter X of the Acts of 1736 in, *Anno Regni Georgii II, Regis... Decimo. At a General Assembly... continued... to the fifth day of August... 1736* (Williamsburg, 1736), pages 26-27.

recover fees equal to those apportioned by the Act to regularly apprenticed apothecaries. Only the fees of graduate physicians, and surgeons and apothecaries who had "served an Apprenticeship" are enumerated.

The differences between the fees granted the surgeons and apothecaries and those granted the physician with a degree (Sec. II), show that the worthy Burgesses had been convinced that the ministrations of a physician were worth just twice that of the others. One wonders at the efficacy of this mode of regulation. The Virginia planter might be tempted greatly by the saving in calling the cheaper practitioner, especially, in the light of the Virginia legislation in the seventeenth century, if a servant or slave were the afflicted. There is also the possibility that the cheaper rate for his medical advice tended to force the apothecary into a more truly specialized pharmaceutical practice; at least it is logical to attribute some such intention or hope to the instigators of the law. In this respect the Act can be considered the first legal attempt to separate the pharmaceutical and medical professions, for it antedated by twenty-four years the first colonial law anent the licensing of physicians which was passed by New York in 1760.¹

Section III of the Act was merely an improved substitute for the laws, cited above, passed in Virginia during the preceding century. The bill of particulars took the place of the practitioners' oaths of the earlier laws, and such particularization often became an integral part of later medical legislation throughout the country.

Two other important items remain to be emphasized. The mention of "Dispensatories" constitutes one of the few references to them in colonial records of any sort, and the first legal recognition of such compilations. The records reveal no other similar utilization of a dispensatory or pharmacopœia until over a century later when a federal statute of 1848 set standards of purity and strength by reference to American and European works.² It is significant to remember that in 1736 no dispensatory or pharmacopœia had yet been published in America.

The final item of importance is the reference in Section III to "any Apothecary, making up the Prescription of another." Here we have concrete proof that the apothecary was already assuming his specialized function in pharmaceutical practice as early as 1736. It demonstrates that the appointment of Jonathan Roberts as apothecary at the Pennsylvania Hospital in 1752 "to fill prescriptions other than his own,"³ was not an entirely unprecedented procedure. More important, however, is that the "introduction" of prescription writing in America can no longer be attributed to John Morgan in 1765.⁴ Unquestionably Morgan deserves much credit for championing and popularizing professional differentiation in the face of potent opposition, but the credit for the actual introduction of prescription writing must, until further evidence is found, devolve upon some unknown Virginia practitioner who preceded Morgan by at least thirty years.

Unlike the Virginia Act, the South Carolina Act of 1751, as has been intimated, was not an attempt to regulate the apothecary, but to control slaves. A good portion of this Act, however, is of interest:

An Additional and Explanatory Act to . . . 'An Act for the better Ordering and Governing Negroes and other Slaves in this Province. . . . [May 17, 1751]

VII. *And Whereas* the detestable Crime of Poisoning hath of late been frequently committed by many Slaves in this Province, and notwithstanding the Execution of several Criminals for that Offense, yet it has not been sufficient to deter others from being guilty the same. *Be it therefore Enacted*, by the Authority afore-

¹ Although the General Court of Connecticut (*i. e.*, the legislature) licensed physicians in the seventeenth century, there seems to have been no legislation covering the matter. Reputation apparently was the major criterion in granting the license.

² "An Act to prevent the Importation of adulterated and spurious Drugs and Medicines," *Statutes at Large and Treaties of the U. S. A., 1845-1851* (Boston, 1851), pages 237-239; known as Vol. IX of the *Statutes at Large*.

³ M. I. Wilbert, "The Beginnings of Pharmacy in America" in *American Journal of Pharmacy*, Sept., 1907, page 400.

⁴ J. W. England, Ed., "The First Century of the Philadelphia College of Pharmacy" (n. p., 1922), pages 21, 24; and LaWall, page 576.

said, That not only such Negroes, Mulattoes or Mestizoes (whether free or bond) as shall administer Poison to any Person or Persons (whether free or bond); but also all and every Negro, Mulatto and Mestizo (whether free or bond) who shall furnish, procure or convey any Poison to be administered to any Slave or Slaves, to any Person or Persons as aforesaid; and also all such Negroes, Mulattoes and Mestizoes (whether free or bond) as shall be privy (and not reveal the same) to the administering of any Poison to any Person or Persons as aforesaid, or be privy (and not reveal the same) to the furnishing, procuring or conveying any Poison to be administered to any Person or Persons as aforesaid, shall be deemed and adjudged, and all and everyone of them are hereby declared to be Felons; and shall suffer Death, in such Manner as the Persons appointed and empowered by the Act *for the better ordering and governing Negroes and other Slaves in this Province*, for Trial of Slaves, shall adjudge and determine.

X. *And be it further Enacted*, by the Authority aforesaid, That in Case any Slave shall teach or instruct another Slave, in the Knowledge of any poisonous Root, Plant, Herb or other sort of Poison whatever, he or she so offending, shall, upon Conviction thereof, suffer Death as a Felon. And the Slave or Slaves so taught or instructed, shall suffer such Punishment (not extending to Life or Limb) as shall be adjudged and determined by the Justices and Freeholders, or a Majority of them, before whom such Slave or Slaves shall be tried.

XI. *And*, to prevent as much as may be, all Slaves from attaining the Knowledge of any mineral or vegetable Poison, *Be it further Enacted*, by the Authority aforesaid, That it shall not be lawful for any Physician, Apothecary or Druggist, at any Time hereafter, to employ any Slave or Slaves in the Shops or Places where they keep their Medicines or Drugs, under Pain of forfeiting the Sum of *Twenty Pounds* Proclamation Money for every such Offense; to be recovered and applied as is herein after directed.

XII. *And be it further Enacted*, by the Authority aforesaid, That no Negroes or other Slaves (commonly called Doctors) shall hereafter be suffered or permitted to administer any Medicine or pretended Medicine, to any other Slave, but at the Instance or by the Direction of some white Person. And in Case any Negro or other Slave shall offend herein, he shall, upon Complaint and Proof thereof made to any Justice of the Peace for the County, suffer corporal Punishment, not exceeding *Fifty Stripes*.¹

The provisions of Sections VII, X and XII were not entirely new. In 1748 a Virginia Slave Act contained the severe provision that if "any negro, or other slave, shall prepare, exhibit or administer any medicines whatsoever, [except upon order of the master] he or she . . . shall be adjudged guilty of a felony and suffer death without benefit of clergy."² There was but one meager allowance: if it were proved that there was neither ill intent nor bad consequences, "such slave shall have benefit of clergy."³ Later, in 1770, Georgia added provisions to its slave laws⁴ closely resembling those of the South Carolina Act. The Virginia Act of 1748 by prohibiting "exhibition," only inferred a restriction on the transmission of a knowledge of drugs; the Georgia Act specifically banned it in almost the exact words of Section X of the South Carolina statute.

The relation of these three laws to pharmacy is evident. They can be classed readily as America's first definite anti-quack legislation, and formed the basis for similar enactments

¹ The Act was first published in *Acts Passed by the General Assembly of South Carolina . . . continued . . . to the 24th Day of April, 1751* (Charleston, 1751), pages 31-38.

² The term "benefit of clergy" is the Anglicization of the legal term *Privilegium Clericale* and should not be given its modern literal interpretation.

³ "An Act directing the Trial of Slaves committing capital Crimes . . .," Hening, "Statutes at Large," Vol. VI, page 105.

⁴ "An Act for ordering and governing slaves within this province . . ." R. Watkins and G. Watkins, "Digest of the Laws of the State of Georgia" (Philadelphia, 1800), pages 163-179.

in the South before the Civil War. The Virginia Act of 1748 definitely emphasized the preparation and exhibition of "any medicine whatsoever," and not merely the administration of poison as did the other two. The latter, however, were specific in prohibiting the transmission of a knowledge of drugs by slaves. All three, although such was not their purpose, present the earliest legal ban on unscientific and mystic accumulation of drug information. The lore of the African medicine man, in law at least, was no longer to be practiced or transmitted in those three colonies. Moreover, the actual presence of this lore in colonial America forms itself a most intriguing branch of early American pharmaceutical history. The history of American pharmacy begins, not with the migration of some European physician or apothecary to the New World, but with the magical manipulation of herbs by the Amerind, later to be augmented, and largely supplanted (in the South) by the lore of the African medicine man. There may be some objection to terming such legerdemain as pharmacy, but as the eminent anthropologist, Sir. James G. Frazer, has said, "The fallacy of differentiation a science or an art according to its application and the moral intention of the agent is obvious enough with regard to pharmacy."¹

The provisions of Section XI of the South Carolina Act are not found in either the Virginia Act of 1748 or the Georgia Act of 1770. Part of the interest in this section lies in the mere mention of "Apothecary or Druggist." As already stated, this is the second and last mention of the apothecary in colonial law. Not until 1786 does "apothecary" appear again in the laws, and then only incidentally when Virginia imposed a tax on "every practising physician, apothecary-or surgeon."² As a matter of fact, none of the terms "apothecary," "pharmacist," or "druggist" appears with any regularity in the state rolls until well into the nineteenth century, and the law digests do not give the profession the dignity of an individual title consistently, until the wave of regulation that commenced in the 1870's.

The use of the term "Druggist" in Section XI of the South Carolina Act is of course unique, for it did not appear in the Virginia Act of 1736. At first glance it would appear that "Apothecary" and "Druggist" were being used interchangeably, for there is no comma after the former in the phrase "Physician, Apothecary or Druggist." However, an examination of parallel phrases, *e. g.*, "Negroes, Mulatoes or Mestizoes" in Section VII, reveals a similar dropping of the comma. The most logical conclusion is therefore that a differentiation between the two terms was being made, especially since such a differentiation is definitely known to have been the practice in colonial America.

The final distinctive feature of Section XI is the prohibition of the employment of a slave by apothecaries in their "Shops." The Virginia Act of 1736 did not specifically mention the shop, and the only restriction on his running of a shop was that the apothecary particularize his bill. These two isolated restrictions were the only requirements placed upon the colonial apothecary, but they form the beginnings of what in the parlance of today might be termed loosely, the "regimentation" of the pharmacist.

There remains one other type of law bearing a direct relation to pharmacy. In 1773 Connecticut met the evil of itinerant medicine shows with a law prohibiting the sale of "any Physick, Drugs, or Medicines" by "any Mountebank" and all shows or exhibitions by them. The Act was passed not only because "the Practice of Mountebanks, in dealing out and administering Physick and Medicine, of unknown composition. . . has a practice to destroy the Health, Constitution, and Lives of those who receive such Medicines," but also because, amusingly enough, "Plays, Tricks, Jugling or unprofitable Feats of uncommon Dexterity and Agility of Body," which was part of the Mountebanks' stock in trade, had a tendency toward "Corruption of Manners, promoting of Idleness, and the detriment of good Order and Religion."³ New Jersey had included a similar, although less virulent, provision in its act regulating the practice of medi-

¹ In his preface to, B. Malinowski, "Argonauts of the Western Pacific" (London, 1922), page xiii.

² "An Act imposing new Taxes," Hening, "Statutes at Large," Vol. XII, pages 283-287. This was repealed in 1790: "An Act to Repeal Part of an Act imposing new Taxes," *Ibid.*, Vol. XIII, pages 114-115.

³ "An Act for suppressing of Mountebanks," "Acts and Laws of the State of Connecticut" (New London, 1784), pages 161-162.

cine a year before,¹ and again enacted it in 1783.² Similar laws occasionally make their appearance in the nineteenth century.

It must be pointed out in closing that the foregoing pertains only to the thirteen English colonies in America that later became the original United States. No general statements have been made that were intended to include Spanish, French or other English colonies in America. The writer feels that a search through the legal records of these three groups of colonies will uncover material of interest to pharmaceutical history. It is not amiss to mention that the start of such a search has already revealed one item of interest. On February 12, 1770, the Spanish Governor of Louisiana, Don Alexandre O Reilly, issued an edict intended to regulate the practice of surgery, which, printed in French as a broadside, included the following comment on medicine, surgery and pharmacy:

Medicine. . . embraces three parts, namely: medicine proper, which is the science of recognizing diseases, and the relation which they have with remedies, and of prescribing the latter together with the diet. The other two parts, which are surgery and pharmacy, are its attendants and have their special field. Surgery includes the use in general of the hands and of external remedies. Pharmacy is concerned, generally speaking, with the preparation of remedies.³

Thus, by gubernatorial edict, the distinct and separate existence of pharmacy as a branch of medicine received legal recognition in clear and concise form. The pharmaceutical profession had indeed made great progress when Don O Reilly was able to proclaim, "la Chirurgie, & la Pharmacie. . . ont leur district particuleur."

STUDENT BRANCH OF ST. JOHN'S UNIVERSITY, COLLEGE OF PHARMACY.

December 7th, Dr. Victor G. Fourman, Chief Chemist of Compagnie Parento, Importers of Essential Oils and Synthetics, Croton-on-the-Hudson, New York, delivered a lecture on Flower Oils and Perfumes to the Members of the Group at the regular meeting of the Student Branch, A. Ph. A., St. John's University, College of Pharmacy.

"The story of perfumes starts with the dawn of history," the lecturer pointed out. It was noted that natural products of plant and animal origin were used exclusively until the chemist Tiemann prepared vanillin by a synthetic process in 1874. This was the first perfume chemical to be prepared by a synthetic process and marks the beginning of modern perfume chemistry. It is to be noted in this connection that, while synthetic perfume materials are now largely employed, many of the natural products used by the ancients are still in use.

While essential oils can be obtained from practically any flower it is interesting to note the fact that the number of flower oils on the market can be counted on the fingers of both hands. Dr. Fourman pointed out as the reason for this the high cost necessary to produce the flower oil. Natural oil of gardenia, a product most often prepared synthetically, would cost about \$1000.00 per pound to produce from the flower.

After describing the various methods used to extract oils from flowers, the lecturer pointed out some interesting facts in connection with the oils so prepared. Very often the oil extracted from the flower possesses an odor different from the flower itself. In the case of otto of rose it was pointed out that some of the phenyl ethyl alcohol contained in the oil is removed by the water during the distillation with steam. This small amount of phenyl ethyl alcohol is responsible for the difference in odor and when it is replaced the odor again resembles that of the flower.

The lecturer in dealing with synthetic perfumes pointed out that the artificial product prepared from the approximate constituents of the true flower oil is at first harsh and disagreeable,

¹ "An Act to regulate the practice of physick and surgery. . .," S. Allinson, "Acts of the General Assembly of the Province of New Jersey" (Burlington, 1776), pages 376-377.

² "An Act to regulate the practice of physick and surgery. . .," W. Paterson, "Laws of the State of New Jersey" (Newark, 1800), pages 51-52.

³ A translation of the complete broadside is available. See D. C. McMurtie, "A Louisiana Decree of 1770," in *New Orleans Medical and Surgical Journal*, Vol. LXXXVI, No. 1, July 1933, pages 7-11.

miles away from the natural odor. It is here that the expert perfumer adds the subtle something that tones down, sweetens and brings the synthetic to the standard of the natural oil. In this connection, Dr. Fourman stated that perfume chemistry is largely empirical.

During the lecture Dr. Fourman exhibited the samples of perfume materials recently presented to the College by his firm. Among the samples shown were a natural musk pod and phials of civet and civetine.

In the discussion that followed, it was pointed out in regard to the kind and quality of alcohol used in perfumery that there was essentially little difference between wine or grain spirits and that an expert might produce an attractive perfume using ordinary "rubbing alcohol." In connection with the perfuming of cosmetics it was pointed out that it is quite important to realize that a perfume that is suitable for a soap might not be useful at all for a face powder.

At the conclusion of the lecture and discussion a vote of thanks was extended Dr. Fourman.

SCIENCE WRITERS FORM ASSOCIATION.

"Announcement was made September 14th of the formation of the National Association of Science Writers, made up of staff members of newspapers and press associations who devote their major efforts to the field of science. Mr. David Dietz, Cleveland, science editor for the Scripps-Howard newspapers, is president of the association, the purpose of which is to 'foster the dissemination of accurate scientific knowledge by the press of the nation in coöperation with scientific organizations and individual scientists.'

"The history of medicine is punctuated with accusations which have been brought against physicians and dealers in drugs from time to time. A little reflection soon satisfies one that it would be very strange if this were not the case. Disease and health are such intimate concerns of every human being; the treatment of sickness is, and always has been, so largely the outcome of trial and error; and the beliefs of the patient and doctor are so diverse that it is inevitable that great and virulent disagreements should arise."

INSTITUTE OF PHARMACY, UNIVERSITY OF LIEGE.

The fiftieth anniversary of the foundation of the Institute of Pharmacy of the University of Liege was held at Liege from November 16th to November 19th under the chairmanship of Professor F. Schoofs of the University. France was represented by Professors Herissey, Perrot and Goris, and M. Collard; Switzerland by Col. Thomann; Denmark by Dr. Faurholt; Norway by Prof. Jamstadt; Sweden by Prof. Ohlson; Great Britain by Secretary H. N. Linstead, and the four universities of Holland by their four professors of pharmacy—van Itallie of Leiden, van der Wielen of Amsterdam, van Os of Groningen and de Graff of Utrecht. Among others present were Dr. J. J. Hofman of The Hague, president of the International Pharmaceutical Federation, Prof. Polonovski of Lille and Prof. Castille of Louvain.

In his opening address Prof. Schoofs traced the history of the growth of the Institute. At the conclusion of his address he was presented by the Danish Pharmaceutical Society with a

gift of books and by the Swedish School of Pharmacy with a congratulatory address.

Part of the sessions were devoted to the reading of scientific papers; those attracting particular attention were papers by Prof. Herissey on "The use of diastase in the chemical in the laboratory," by Prof. van Itallie on "Norman Arsenic," and by Prof. Fournau of Paris on "The Antagonists of Adrenalin." Mr. Linstead read a paper on the method of pharmaceutical education in Great Britain. The paper dealt in particular with the emphasis now placed upon the need for the pharmacist to familiarize himself with biological methods and standards. In the discussion which followed Prof. Perrot, Mr. Breugelmann, Prof. Castille and Col. Thomann took part. M. Breugelmann outlined the scheme which had been considered by some members of the Nationale Pharmaceutique for establishing an institute for biological testing in Belgium.

An exhibit included old pharmacopoeias and pharmaceutical documents from the collection of Dr. O. van Schoor of Antwerp, and an exhibition of pharmaceutical apparatus and materials by manufacturers.