

4. Are the substances enumerated by Blyth, the only ones ashed by Redi? The answer is clearly no, but they probably served Blyth's purpose.

5. How do Redi's ash percentages agree with modern determinations? Blyth says: "These ash percentages as we know are accurate." It is well known that the ash content of the same part or parts of plants vary considerably, depending on a number of circumstances. Redi calls attention to several of them. The characters used in the article show that the author employed the apothecary system of weights in making his determinations, excepting the term "Stare" used in connection with the ashing of bran. This unit according to the "New English Dictionary" (Murray), appears to represent 220 pounds. The Doctor's data give the following percentages: Black hellebore 4%, black pepper 5.21% and ginger 5.27%. Modern determinations record the following: black hellebore 6.6%, black pepper 3.5-7% and ginger 5.25-7.5%. The latter percentages show that Redi's results agree well with the average of recent date. It may further be said, that his results, for some of the other plant substance ashed, are in good accord with the findings of modern investigators, in spite of the apparently crude method employed by him.

6. What was the purpose of lixiviating the ashes? The amounts of the water-soluble salts, are given in tabulated form, but it is quite evident that the chief purposes were, to ascertain the medicinal and crystalline natures of the salts extracted.

CONCLUDING OBSERVATIONS.

Redi's report on the study of ashes, stands by itself, in this field. It is one of the most interesting articles that it has been my privilege to study. To my mind it is a real classic. No important investigation, of any kind, on plant ashes, is reported for more than two centuries, following the studies of Redi in 1660. From this it must not be assumed that interest in plant ashes had ceased all this time. On the contrary it is reported that pot-ashes were made in Virginia and exported as early as 1608. In 1661, the exportation of potash, from the American Colonies, to any country, but England was prohibited by Parliament. The American forests continued to be burned, the ashes converted into pot and pearl ashes and exported for many years, thereafter.

It may be of interest to note that Samuel W. Johnson, professor of analytical and agricultural chemistry of Yale, compiled the trustworthy analytical data of the ashes of agricultural plants and products thereof, in print in 1867 and published the results in his book, entitled, "How Crops Grow," in 1868. The data are based largely on the work of Emil Wolff and his associates. Redi's work dealt largely with medicinal problems and was not referred to by any of the above workers.

GILES FIRMIN, SENIOR.¹

BY WILL T. BRADLEY.²

In the fall of 1633, hands were imposed upon Giles Firmin, Senior, newly come from Sudbury in England to the colony settled about Massachusetts Bay, and he was thus made a deacon of the Boston church. A very godly man, upwards of forty years old, with some experience of public life in his youth, he proved a valued member of the community, was soon made a selectman, and served conscientiously; but during the hot months of the following summer he sickened, and by the time it was fall again he was dead. Very little else up to now has been known about him.

¹ Section on Historical Pharmacy, A. Ph. A., Dallas meeting, 1936.

² Instructor in English and French, Massachusetts College of Pharmacy.

For us he would have no more interest than have most of the thousands who came to the New World speedily to perish were it not for the fact that in his history of the early colony Governor John Winthrop says that Deacon Giles Firmin was not only a godly man but also an apothecary.

I say very little else has been known about him. Some investigators have casually confused him with another Firmin, who came over in the fleet with Winthrop in 1630; but this Firmin was named John;¹ he settled at Watertown, lost his shack by fire on November 11, 1630,² and on May 18, 1631, took the oath of allegiance without which none were regarded as freemen, or members of the body politic;³ he may have been the same John who in 1638 was a selectman and deacon;⁴ he was no doubt a cousin or near relative of our Giles Firmin. Other investigators have been misled by the fact that our apothecary had a son by the same name,⁵ who came for a brief visit to Boston in 1632, returned here again to practice medicine, mostly in Ipswich, from 1637 to 1644, delivered the first anatomical lectures to students in this country, perhaps at Harvard College,⁶ and then went back to England, where he entered the ministry and enjoyed a life full of preaching, writing, and controversy until his death at a tardy age in 1697.

¹ James Savage, "A Genealogical Dictionary of the First Settlers of New England" (Boston: Little, Brown and Company, 1860).

² John Winthrop, "The History of New England from 1630 to 1649," edited by James Savage (Boston: Little, Brown and Company, 1853), page 38.

³ "New England Historical and Genealogical Register," Vol. 3 (1849), page 91.

⁴ Savage, "Gen. Dict." According to the "N. E. Hist. and Gen. Reg.," Vol. 14 (1860), page 329, a note of the names and ages of passengers sailing in the *Elizabeth* of Ipswich (England), Mr. William Andrews, Captain, bound for New England the last of April 1634, includes the name of John Firmin, aged 46. Savage thought that perhaps this was the same John who came first in 1630, but this is unlikely, for he would have had to return to England, and at least two John Firmings took the oath of a freeman in Boston. The first was probably the selectman in 1638, for according to the "N. E. Hist. and Gen. Reg.," Vol. 3 (1849), page 187, the second John Firmin did not take the oath until May 13, 1640.

⁵ For the best brief discussion of the son see John Ward Dean, "A Brief Memoir of Rev. Giles Firmin, one of the Ejected Ministers of 1662" (Boston: David Clapp and Sons, 1866), reprinted from the "N. E. Hist. and Gen. Reg." for January 1866, and some further remarks by the same author in the "Reg.," Vol. 25 (1871), page 52.

⁶ A letter written in 1647 by the Apostle Eliot, addressed to the minister of Cambridge, Massachusetts, contains an interesting remark: after pleading for a school for teaching medicine here, equipped with "anatomies," or skeletons, and imported "vegetables vertuous in the way of Physick," he adds, "We never had but one Anatomy in the countrey, which Mr. Giles Firman now in England, did make and read upon very well. . . ." Before the founding of Boston, a man named Lambert Wilson had been engaged by the New England Company not only to serve as a chirurgian in the colony but "to educate & instruct in his Art one or more youths." Eliot's letter apparently revived interest in the subject, for during a session of the General Court in 1647 it was decided that "we conceive it very necessary yt such as studies phisick, or chirurgery, may have the liberty to read anatomy & to anotomize once in foure yeares some malefactor in case there be such as the Courte shall allow of;" but nothing seems to have been done further, except the granting of limited permission to physicians and their students to dissect the bodies of criminals, and the Harvard Medical School was not established until after the Revolution. Where Giles Firmin got his bones and where he read upon them are not known: that these first medical lectures in America were delivered at Harvard is only a guess. See "Memorial History of Boston," edited by Justin Winsor (Boston: James R. Osgood and Company, 1881), Volume 4, Chapter 10 ("Medicine in Boston" by Samuel A. Green, M.D.), pages 529-530; also Oliver Wendell Holmes, "Medical Essays."

I have searched scores of available records that might tell us more about Giles, Senior, since if we grant the desirability of knowing as much as we can about the first pharmacist to settle and die in New England, every new fact we can learn, however slim or trivial, is precious. Though the definite facts still remain few indeed, our knowledge of contemporary events will allow us to deduce others not shown in the records, and the man will take shape and substance, much as a pre-historic creature emerges though we begin with nothing but an eager imagination and a broken tooth.

The earliest Firmin of whom we have any trace lived at Bury St. Edmund's, county Suffolk, in the reign of Henry VIII.¹ The will² of his widow, proved on December 18, 1540, left to her two sons and daughter houses and possessions that suggest something better than moderate means. Naturally the family at that time was Roman Catholic.³ During the next century a succession of baptisms, sales, marriages, and wills reveals the Firmin family spreading in a number of fairly well-defined branches through the counties of Suffolk and Essex, northward and eastward of London.

The will⁴ of "Giles Firmyn of Stoke Nayland" (born before 1570, died 1597) names a wife Katherine, sons Josias, John, *Giles*, Henry, and daughters Frances, Anne, and Sara. That this son Giles was our apothecary is quite possible, for there is no record of our man's birth in Sudbury,⁵ and he may have gone down in his youth to serve his apprenticeship in the larger town. These Firmyns of Stoke Nayland appear to have belonged to a humble branch of the family: several were tanners, others were farmers, and the daughter of one (a "Gyles" who died in 1584, the oldest Giles on record) married a blacksmith.⁶

But the will⁷ of "Richard Fyrmyn, Gentleman, of Sudbury," dated November 2, 1614, and proved January 9, 1615, is more promising. He had been an alderman,⁸ and his bequest of four acres of lease land in Windmill Field to the poor of the town (income to be distributed each Christmas, amounting to eight pounds in 1902) makes him still remembered there.⁹ Among liberal bequests that prove him for those times wealthy, he left to *sons Giles and Thomas and two daughters of his deceased brother Thomas* five pounds each, and to the boys and their heirs, after the

¹ Christian name unknown. Since his married daughter was probably born before 1517, he must have been born before 1496; he died before 1538, when his widow made out her will.

² Quoted in "Wills and Inventories from the Registers of the Commissary of Bury St. Edmund's and the Archdeacon of Sudbury," edited by Samuel Tymms (London: printed for the Camden Society, 1850), pages 135-137. Among her bequests were several pots and caldrons and "1 brazen mortar with the pestle."

³ She left "to the high alter of the said church, for my tithes and oblations negligently forgotten, in discharging of my conscience" six shillings eight pence, and to "Signior Wylliam Norman, priest, to pray for my soul, my friends' souls, and all Christian souls" eight marks sterling.

⁴ Quoted in James A. Emmerton and Henry F. Waters, "Gleanings from English Records about New England Families" (Salem: Salem Press, 1880), from "Hist. Coll. Essex Inst.," Vol. 17, No. 1, page 34.

⁵ "N. E. Hist. and Gen. Reg.," Vol. 25 (1871), page 52.

⁶ Emmerton and Waters, "Gleanings," page 36.

⁷ Quoted in Emmerton and Waters, *Ibid.*, pages 36-37.

⁸ Rev. Charles Badham, "The History and Antiquities of All Saints Church, Sudbury" (London: Hatchard and Son, Piccadilly, 1852), page 174.

⁹ "N. E. Hist. and Gen. Reg.," Vol. 56 (1902), page 183.

death of his wife, a "close or pasture next adjoining Brackets Bridge, said land to be sold by Giles and Thomas to John Firmin, Kinsman, for 40 pounds." The terms of these bequests seem to indicate that nephews Giles and Thomas had come of age in 1614, and they would therefore have been born before 1593.

Now, here is a Giles Firmin who may most plausibly be identified with our apothecary, who must have been born before 1593, since his son, Giles, Junior, was born in 1614 or 1615.¹ The evidence is not conclusive, but it is easy to understand how the nephew of Richard Firmin, gentleman and public benefactor, could have achieved the distinction of alderman or councilor in the town of Sudbury—a distinction that our Giles, as will be seen, almost certainly did achieve.

From what evidence we have, then, we may believe that our Giles was born in or near Sudbury of this more prosperous branch of the family; that his father, Thomas, and his mother were both dead in 1614; that he had a brother Thomas² and two sisters; that his near relatives (mentioned in Uncle Richard's will) were these: an uncle William Firmyn (deceased), who had three sons; an uncle Nicholas Firmyn, who had three daughters; an uncle John Firmyn (deceased), who had two daughters; an uncle Roger Firmyn, who had a son Benjamin; and an aunt Joan (Firmyn) Chaplyn (deceased), who had four daughters; and that other kinsmen included Josias Firmyn, tanner, of Nayland;³ John Firmyn, clerk, of Foxearth, and his son John, also a clerk; Richard Cooke of Great Henny, in Essex; Roger Cooke, of Brently; John Firmyn, shoemaker, of Hadley; Clemence (Firmyn) Cooke, sister of kinsman John Firmyn; and cousins Henry and John Cooke.

In the boyhood and youth of Giles, the lonely, aging Elizabeth, under the control of ministers who had put her there, was maintaining the glittering tyranny of her father's throne. The era held rare suspense for youngsters of that generation: economically, politically, philosophically, horizons were broadening—a polite way of saying that old standards were crumbling, disagreements were rising on matters of common sense; judgments based upon long and successful experience

¹ Dean, "A Brief Memoir," page 5.

² In 1635 a Thomas Firman went with his wife Sarah to settle in Ipswich, Massachusetts, where Giles, Junior, went to practice medicine in 1638. He was a successful merchant and much interested in acquiring real estate, for from 1638 to 1647 we find him buying many houses and lots. In 1639 he received a license to operate an ordinary, or inn, and by 1646 he was recognized as a leading citizen of the town. He was undoubtedly a relative and may have been the brother of our apothecary. He and Giles, Junior, took the oath of a freeman together on May 22, 1639. He died in 1648. See Rev. Thomas Franklin Waters, "Ipswich in the Massachusetts Bay Colony," Vol. 1, pages 13, 21, 351, 384, 389, 445, 491, and Vol. 2, pages 66, 721; also "N. E. Hist. and Gen. Reg.," Vol. 3 (1849), page 156 and Vol. 6 (1852), page 253; also Savage, "Biog. Dict."

³ Quite possibly the son Josias, mentioned in the will of "Giles Firmyn of Stoke Naland," whose brother Giles, we have seen, *may* have been our apothecary. His will, proved in November 1638, is quoted in Emmerton and Waters, "Gleanings," page 38. In it he names his eldest son Josias and his youngest son Gyles. The ship-money tax imposed by Charles I put heavy burdens upon England's coastal towns, and many people who were unable to pay fled the country. In 1637, the sheriff of the county of Suffolk reported Josias Firmin of Polstead, a village three miles northeast of Nayland, as a defaulter, having run away. This Josias is most likely the one who came to Boston to be servant of John Winthrop (who had come from Groton, five miles east of Sudbury), took the oath of a freeman on May 13, 1639, and was admitted to the church on June 6, 1640. If our Giles was of the Nayland branch of the family, this Josias may have been his nephew. See "N. E. Hist. and Gen. Reg.," Vol. 3 (1849), page 187, and Vol. 56 (1902), pages 182-183.

were yielding to wild experiment that bred both hope and despair in fools and demanded much tactful patience in the wise; and the yeast of unrest was fermenting the rush of poets who still startle the world with their genius. Geographically horizons were likewise broadening: gangsters and pirates like Drake and Hawkins were charting the seas and making them unsafe for foreign traders, especially the Spaniards; and certain British minds, for divers reasons, some motivated by an itching for wealth and power, others by nervousness and impatience, were already thinking about the extension of Britain's domains in the New World.

But ordinary daily life, as usual, went on about its business. In the midst of such excitement, young Giles elected to become an apothecary, even though the trade offered prospects that could not have seemed very bright. Perhaps his father had been in the profession before him; perhaps some practicing friend of the family was willing to take him on as apprentice. Whatever his reason, it is interesting to consider what were his prospects.

During the reign of Henry VIII (who, like his daughter Elizabeth, was fond of inventing compounds and plasters in the royal laboratory), a physician named Bulleyn had written: "The apothecary must first serve God, foresee the end, be cleanly, and pity the poor. His place of dwelling must be cleanly, to please the senses withal. His garden must be at hand with plenty of herbs, seeds, and roots. He must read Dioscorides. He must have his mortars, stills, pots, filters, glasses, boxes clean and sweet. He must have two places in his shop: one most clean for physic, and the base place for chirurgic stuff. He is neither to decrease nor diminish the physician's prescriptions. He is neither to buy nor sell rotten drugs. He must be able to open well a vein, for to help pleurisy. He is to meddle only in his own vocation, and to remember that his office is only to be the physician's cook."¹

We hear no protests by the apothecaries at this definition of their status. They were not organized into a separate, self-conscious body. Sixteenth-century legislation gave to members of the Faculty of Medicine the right to practice medicine, pharmacy and surgery; and the term "apothecary" was not applied to the member of a distinct profession, but to the assistant or apprentice who compounded his master's prescriptions, prepared stock remedies, and performed minor surgery.

This work somehow appealed to young Giles. Just about the time that he was learning to serve God and be neat and clean, planting herbs in his garden, studying Dioscorides, collecting mortars, stills, pots, filters, glasses, bottles, and boxes in his workshop, opening veins, earning enough soon to support a wife and family, his fellows in the trade, after having worked as "cooks" for a century or more, felt ready to assert some independence. In 1606 they formed a common guild with their hereditary rivals in the business of importing drugs and spices, the grocers; but they still had to show the ingredients of their compounds to any physician who insisted upon an inspection. Though they found little satisfaction in associating with the domineering grocers, they had cause for hope, since James I (who had come down from Scotland to be king in 1603) had as personal physician a foreigner of Paracelsian leanings who respected and pitied them. This doctor won for them the king's interest, and in 1617 James granted to the apothecaries a

¹ Quoted in Charles H. LaWall, "Four Thousand Years of Pharmacy" (Philadelphia, J. B. Lippincott Company, 1927), page 208.

charter for an independent and exclusive guild. Later, irked by the continued fuss raised by the jealous grocers, the King told them bluntly that no matter what medieval precedent they had for putting their noses into the drug business, they could do so no longer, for they were merely merchants, whereas the business of the apothecary was a mystery (which is to say, an art).¹

This marked improvement in his profession must have been agreeable to Giles Firmin. But in the meantime one thing in old Bulleyn's instructions to apothecaries he refused to obey: he meddled in more than his chosen vocation. He meddled with local politics, taking active part in managing the town of Sudbury, as councilor or alderman,² presumably through the favor of his distinguished uncle Richard. And—possibly moved by Bulleyn's advice to "foresee the end"—he meddled with religion, for he was a sincere and pious man, far more concerned with souls than with sales.

His home was within the metropolitan radius, strongly influenced by London opinion, that had been first willing to protest with Henry VIII against the ancient religious heritage of England; but the same district had been among the first to protest against what the new arbitrary state religion offered instead. Whether Giles turned Puritan (with all the enthusiasm of a new convert) or became strengthened in Puritanical views bequeathed him by his parents makes little difference: he was first a religious man and afterward a pharmacist; and though his profession held brighter and brighter prospects, in the face of corruption all round him he became more and more worried about the problem of how to lead a godly life.

His son, destined to go the father one better in the practice both of medicine and godly living, had been born in 1614 or 1615. (Who the mother was we do not know, nor when she died, though we may be sure that she did not live to accompany her husband to Boston.) As the boy grew old enough to heed, he must have heard his father discuss the settlement of New Plymouth by refugee members of the Puritan faith. And in addition to religious instruction, the boy undoubtedly received medical training from his father. In 1626 or 1627, being above twelve years old, he left home to attend school; and three years later, on December 15, 1629, he entered Emmanuel College, Cambridge University.³

From a sequence of known facts we may infer the conduct of father and son during the next four years.

When a Royal Charter for the establishment of a colony in New England made the Puritans believe that vague dreams of developing their dreary Utopia (dreams already encouraged by the quiet success of New Plymouth) had a fair chance of being realized, John Firmin, the presumed cousin of our man, decided to sail with the first wave of settlers in 1630. Two years later, prompted by we know not what curiosity, dissatisfaction, or ambition, the boy Giles, Junior, now about eighteen years old, decided to follow him, and on April 8, 1632, he embarked

¹ See LaWall, Chapters 6 and 7.

² The remark by Giles, Junior, quoted below, that his father had once been "a Gown-man in a corporation" may have had in mind the office of selectman in Boston, but the phrase is in the language of old England rather than new: according to the Oxford Dictionary a "corporation" could mean the "mayor, alderman, and councillors of a borough or incorporated town" and in one obsolete use "gownsmen" denoted "a member of a municipal corporation."

³ "N. E. Hist. and Gen. Reg.," Vol. 25 (1871), pages 52-53.

for Boston on the *Whale*, in company with the most influential Puritan minister in his native county, the Reverend John Wilson, arriving here on May 26th.¹ He joined the church promptly,² but did not take the oath of a freeman, not being yet of legal age.

We may guess that the boy was startled to discover settlers everywhere suffering from diseases brought from England and bewildering new organic ailments fostered by a change of diet, climate, and habits. There were few skilful physicians; anyone with even but a smattering of the art was welcome to share the continuous burden of trained practitioners like Governor Winthrop of Boston and Samuel Fuller of Plymouth, using remedies long standard in Europe, when available, or substitutes newly learned from the Indians, to combat what they recognized as fevers, colds, indigestion, rheumatism, scurvy, small-pox, and other persistent evils.

Young Giles quickly saw how he might be of most use to the colony. He may have written his father, urging him to come over and share in the good work. Whether he did or not, it was not long before Giles, Senior, closed his business in Sudbury, gathered his books, instruments, and store of drugs, and embarked for Boston. He was admitted to the Boston church some time between October 11, 1632, and September 8, 1633,³ and probably he and his son lived for a time and worked together here.

The wilderness of Massachusetts, of course, had offered no excuse at first for formal places of business. Farmers, builders, preachers, indeed, went right to work, and anyone who knew anything about medicine or nursing was kept busy. But it is not surprising that we hear nothing of Firmin's opening a shop in Boston.⁴ The town was rapidly taking shape, with good streets and fine dwellings, but Firmin could as likely have wielded axe and hoe as spatula and pestle. Still, we may be practically certain that his professional knowledge was respected and put to use by the desperate citizens, and we have every right to assume that Giles Firmin emerged from the obscurity of a pharmacist in Sudbury to the prominence of one of Boston's few trained physicians. A physician as well as an apothecary is what his son later became here.

Very likely it was the father who urged his son to pursue medical studies in England. Before October 10, 1633, the boy had gone, and the father carried on his work alone. He was not to see his son again. Late that winter, on March 4, 1634, he swore the oath of a freeman,⁵ and soon thereafter his value to the community was recognized by his being made a selectman, for a list of the ten selectmen present at a meeting held on July 1st includes his name.⁶ Then suddenly he knew his time was up. Perhaps like Doctor Fuller of Plymouth he took some fatal malady from a patient. To the grief of his friends but satisfied of his reward, he fell upon his bed and called to God for relief. On October 6, 1634, at a town meeting, Richard

¹ "N. E. Hist. and Gen. Reg.," page 53.

² Ms. records of the First Church in Boston.

³ Same.

⁴ The first drug store in Boston is generally supposed to have been that of William Davis, on Washington Street near State Street in 1646.

⁵ "N. E. Hist. and Gen. Reg.," Vol. 3 (1849), page 92.

⁶ Same, Vol. 4 (1850), page 124.

Bellingham, Esq., was chosen a selectman "in place of Giles Firmin, deceased."¹

The only other reference to him so far discovered lies near the end of a book written years afterward by Giles, Junior, in which he cites his father's character as proof that a man may be devoutly religious even though he may neglect some particular observance. The unspecified "duty" referred to in this passage perhaps means "religious meditation"—a subject much in the writer's thoughts:

"I called to mind that my own Father, during the time I lived with him (unless it were on the Lord's day) did not perform the duty; what he did after I cannot well tell; but yet he was a man who kept his secret communion with God, had a heart for God, and a tongue for God (as sometimes being a Gown-man in a corporation, he had occasion to appear for God); while he lived in the world, was above the world; when he came to leave the world, he would several times send up short prayers to his Father: When wilt thou send thy Servant to fetch me home? With a smiling countenance he entertained Death, having some fore-tastes of what he was going to possess, by that expression of his: I shall have as much glory as ever I can bear. When he was dead, his Minister, who wrote to us the news of his death, said this of him: *He lived much desired, he died much mourned for.* Yet this my godly Father would scarcely be esteemed for a serious Christian by some, for not performing that duty according to the question; though I suppose a year or two before his death he did take it up, but then I was far distant from him."²

Thus passed the first apothecary known to have set foot upon New England's soil: a man who left no lasting impression upon the world but who carried in his features a promise of glory in afterlife; who was much loved by all associated with him; and who gave to his more distinguished son an example and training in two careers, the one ministering to the flesh, the other to the soul.

KAPPA PSI-PHI DELTA CHI GRADUATE CHAPTERS MEET.

The Alumni Chapter of Phi Delta Chi Pharmaceutical Fraternity and the Boston Graduate Chapter of Kappa Psi Fraternity held their Second Annual Interfraternal Meeting at the Massachusetts College of Pharmacy in Boston, February 18th.

Dean Howard C. Newton presided as Chairman. R. D. Hetterick presented two interesting films, one on Cod Liver Oil, and the other, "The Standardization of Digitalis." Regent Charles MacCullom of Kappa Psi, Secretary Joseph H. Goodness of the Alumni Association and William Acheson of Phi Delta Chi carried the greetings of their organizations to the group. The guest speaker for the evening was Professor Edwin Wilson Hadley, noted member of the Massachusetts Bar and professor at Northeastern University Law School. His subject was "Law and Its Relationship to Society."

Herbert C. Packard was the recipient of a copy of Scoville's "Art of Compounding." Mr. Packard was the oldest fraternity man present, a brother of Kappa Psi and a member of the Class of 1892.

Among the invited guests were Augustine Lawlor, John Walsh, John R. Sawyer and Herbert Bowdoin.

The evening was concluded with a buffet luncheon.

ROBERT A. WALSH, *Secretary*, Alumni Chapter, Phi Delta Chi.

GEORGE F. ARCHAMBAULT, *Secretary*, Graduate Chapter, Kappa Psi.

¹ Winthrop, "History," foot-note, page 114.

² Giles Firmin, "The Real Christian, or a Treatise of Effectual Calling" (Boston: printed by Rogers & Fowle for J. Edwards in Cornhill and J. Blanchard at the Bible & Crown in Dock Square, 1742), pages 314-315.