

## CHAPTER 1

*"One true Doctor of Medicine could do more than all the empirics yet in America." (1685)*

In 1685, some eighty years before the organization of The Medical Society of New Jersey—the first of its kind in the nation—settlers thought the colony was too healthy to provide a livelihood for a doctor of medicine. Even then, however, it was recognized that one properly trained physician would be of more value to the people than all the quacks and empirics already practicing in America.

Dr. John Gordon, waiting in Scotland in 1685 for encouragement to join his relatives in New Jersey, was advised by his brother Charles, "If you design to come hither yourself, you may come as a Planter, or a Merchant, but as a *Doctor of Medicine* I cannot advise you; for I can hear of no diseases here to cure but some Agues; and some cutted legs and fingers, and there are no want of Empiriks for these already; I confess you could doe more than any yet in America, being versed both in Chirurgery and Pharmacie; for here are abundance of curious Herbs, Shrubs, and Trees, and no doubt Medicinall ones for making of drugs, but there is little or no Employment this way."<sup>1</sup>

A year after this cheerful health report, however, a brother, George Gordon, was dead; and less than three years later, the wife of another brother, Thomas Gordon, and four of their six children were buried near Amboy Point. The cause is not known. No epidemic appears in the records of the time.

There was almost unanimous enthusiasm for the healthful conditions in the land called New Jersey. In 1671, John Ogilby's *America*, published in London, mentioned the meadows and woodlands on both sides of the Raritan River, the multitudes of wild fowl, the numerous wild animals and the cattle in the southern part of West Jersey. It concluded with a quotation from a "late Writer" referring to New Jersey as a "terrestrial Canaan, where the Land floweth with Milk and Honey."<sup>2</sup>

A letter to Henry Stacy in London, written by John Crips from Burlington in 1677, reported, "The Country, and Air are very agreeable to our Bodies."<sup>3</sup>

It was the belief of J. Scott, writing in 1685 from his own observations and those of other travelers to New Jersey, that thousands of English lives would have been spared had Lord Delaware lived to carry out his intention of leading the Virginia Company to New Jersey. The air of the latter, Scott added, "is very Serene, Sweet and Wholesome which renders the Clime much more agreeable to European Bodies than the severe Colds of New-England, or the sulphurous Heat in Virginia."<sup>4</sup>

### **A mite of caution**

Despite the enthusiastic reports about the province, a prospective immigrant might have detected some leavening in a few letters. These advised those coming to America that they would have winter as well as summer . . .

and must expect, as in all countries, "musketos," flies and gnats. In hot and fair weather, these might give some disturbance, one writer conceded, but added that the insects became less troublesome after the land was cleared.<sup>5</sup>

Such information may have seemed merely proof of the writer's honesty, for settlers began to arrive in great numbers. There were Huguenots fleeing France, where the revocation of the Edict of Nantes in 1685 had made Protestantism illegal. The ascension of Roman Catholic King James II to the throne of England, in the same year, provoked the immigration of Quakers, Scottish Covenanters, and Scotch-Irish Presbyterians of North Ireland to the New World.

Persecution in Germany, Holland and Switzerland accounted for the migration of Lutherans, Dutch Reformed and Moravians. They established congregations in Pennsylvania and in Somerset and Hunterdon Counties and at several sites along rivers in southern New Jersey.<sup>6</sup>

Transportation along the waterways and land trails helped unite the settlers. By 1700, clusters of population had developed at such places as Bergen, Elizabethtown, Woodbridge, Perth Amboy, Middletown, Shrewsbury, Newark, Paulus Hook, Trenton, Camden, and farther south, at Burlington, Raccoon (later Swedesboro), Salem, and Cape May. There were about 61,000 settlers in New Jersey in 1745, 32,000 of them in West Jersey.<sup>7</sup>

Despite the danger of the waterways, which might be rapid and swollen in the rainy season, and the roads where one might encounter wild animals, bandits, or marauding Indians, people were on the move. They spread news — and diseases, too.<sup>8</sup>

A smallpox epidemic prompted the first medical article printed in the colonies, on November 21, 1677/8. Written by Thomas Thacher of Boston, physician and minister, and prepared as a broadside, it bore the title, "A Brief Rule to guide the Common People of New-England How to order themselves and theirs in the Small Pocks, or Measels."<sup>9</sup>

Smallpox was the most dreaded, but some of the other ills suffered by colonists in the period before the Revolutionary War included malarial fever (ague), diarrhea, dysentery and cholera, throat distemper, venereal infections, tubercular disease (including the King's evil, a form affecting the glands of the neck and supposedly cured by the touch of the king), insanity and yellow fever.<sup>10</sup>

Infant mortality was high. In the churchyard of Old Christ Church, Shrewsbury, ten small white markers in a row indicate the graves of "The Ten Little Joneses," all of whom died within ten days of their birth. Their mother, not surprisingly, lost touch with reality after some years and wandered in search of her babies. It was not unusual for a woman to bear ten or twelve offspring, have only two or three survive, and herself be invalidated by age forty. In some years, every third mother died of childbed fever.<sup>11</sup>

### **Pox scars common**

Inoculation for the prevention of smallpox (*variola*) was carried out in Boston as early as 1721, employing a technique used in Europe. The Reverend Mr. Cotton Mather read about it and introduced the procedure in America.<sup>12</sup> The inoculation was accomplished by making a small scratch on the skin, putting purulent matter into the incision, then binding the wound.

The matter was gathered from a pustule on a smallpox victim. Occasionally it failed to "take" because it had been kept too long and dried out, or become contaminated between the gathering and the inoculating.

Another method in use in the colonies was to moisten a piece of thread in a ripe pustule, dry the thread in the air, and store it in a clean container for later use. The thread was placed in the inoculation incision and held with a bandage.<sup>13</sup>

Dr. Stephen Wickes, in his *History of Medicine and Medical Men in New Jersey*, said the early treatment for those inoculated was to be put in bed, warmly clothed and given heating and stimulating medicines to hasten the eruption of pustules and promote profuse perspiration. Occasionally, a secluded building was used as a temporary pest house for the inoculated. Cross-infection was a disadvantage in either method.

Opposition on religious and other grounds was offered to inoculation, although mortality from the disease ranged from 15 to 50 per cent of the cases taken in the natural way. Those who survived were noticeably scarred. Only 1 to 2 per cent of those inoculated died. Usually these suffered no more than a few days of fever, or, at worst, a very light case of smallpox. A notable exception was the Reverend Mr. Jonathan Edwards, president of Princeton College, who died in 1758 following inoculation.

Doctors in the colonies urged inoculation, and the first public hospitals for the treatment were opened in Boston in 1764. One was in the charge of Dr. William Barnet of Elizabethtown, who five years earlier had been invited to Philadelphia to inoculate for smallpox.<sup>14</sup>

### "Marsh miasmas"

Other ailments: measles, chickenpox, diphtheria and whooping cough, came and went with the seasons. Many adults, especially women, lost their teeth early, and Peter Kalm, traveling through New Jersey in 1748, noted cases of fever and ague.

Kalm was a Swedish botanist, sent by his government to make scientific and general observations, but his perceptive eye saw far more than botany. He reported that some people blamed fever and ague on "the peculiar qualities of the air," although most thought these ills were generated by putrid and standing water. Those suffering every year, he was told, lived near stagnant water, morasses and swamps. The disease was most prevalent, he found, when the sun caused evaporation and filled the air with noxious vapors.

For a century and a half after Kalm, observers were to continue to attribute fevers to marsh miasmas, poisons in newly-turned sod, putrefying vegetation, and open sewers.

For the bone-shuddering paroxysms and agues, Kalm listed such remedies as Jesuit's bark, bark of the *Siriodendron Tulipifera*, root of the *Cornus Florida*, and frequent doses of brimstone and vinegar washed down with warm liquid.<sup>15</sup>

Others confirmed Kalm's observations. A Jerseyan, Philip Vickers Fithian, tutoring in Virginia in 1774, wrote that he hoped that the agues, fall fever and dysentery would not strike again since "we in Cohansey every autumn [are] enfeebled and wasted with fever and ague. Our children grow pale, puny and lifeless."<sup>16</sup>

Kalm said a throat distemper or pleurisy (now diagnosed as a "strep" throat or diphtheria) had swept away almost all the Swedes at Penns Neck in 1728. It recurred in 1748 and killed most of the elderly residents in two or three days. He described it as a peculiar kind of pleurisy that began with a great swelling in the throat and neck.

A few years earlier, in 1738, physician and minister Jonathan Dickinson of Elizabethtown had observed "that terrible disease vulgarly called the throat distemper." He recorded acute fever, a rapid, full pulse, florid countenance, and the tonsils and entire throat "covered with a whitish crustula, the tongue furr'd and the breath fetid."

Dr. Dickinson suggested that when the patient was covered with a miliary eruption, it might resemble measles, scarlet fever or smallpox. It also might appear in the form of erysipelas or in external ulcers, in the form of quinsy or in "Bubos [swellings] under the Ears, Jaws or Chin, or in the Arm-Pits, or Groin."

Comparatively few victims recovered if their lungs became affected. They died by "a perfect suffocation, or stoppage of breath," Dr. Dickinson wrote. He named six types of the disease with suggestions for handling each. He recommended that the first effort should be to bring out eruptions as quickly as possible. Among the possibilities which "seldom fail of Success," he suggested, "A tea made with Virginian Snake Root and English Saffron, with a few Grains of Cochineal; A Posset made with *Carduum Mariae* boil'd in Milk and turn'd with Wine, the *Lapis contryerva*, or Gascoign-Powder."

In a postscript, Dr. Dickinson offered as a drink and gargle a recipe from a "Gentleman of the Profession" which called for a "decoction of the root of the dart weed or (as it is here called) the squaw root . . . boiled in a quart of water, to which he adds when strained, a jill of rum and two ounces of loaf-sugar," further boiled down.<sup>17</sup>

### Women tended the sick

With the scarcity of physicians, home care of the sick often fell on women, especially in remote areas. Their treatments usually depended on what was at hand. Indians introduced the settlers to the simple herbs of the countryside. As late as 1796, when there was sickness in the whaling settlements of Cape May, boneset, goose grease, or bread poultice were common treatments.

The Quakers brought considerable medical knowledge with them. One of the most distinguished of the Quaker women practitioners was Elizabeth Haddon who came to New Jersey from England in 1701 ostensibly to supervise her father's land holdings, but also because of her unrequited love for John Estaugh, an itinerant preacher whom she had met when she was fourteen. In that year he had visited her father before departing for the New World. Henry Wadsworth Longfellow in "The Theologian's Tale," immortalized the Haddon-Estaugh romance and Elizabeth's conviction that she had a "charge to love" John Estaugh.<sup>18</sup>

In time he responded to her forthright declaration, and they married. The community where they lived was named "Haddonfield" in her honor, partly because of her medical and spiritual ministrations throughout the settlement. She probably employed the botanical "simples" common in the colony: camomile to increase perspiration; burdock leaves or the young

shoots of sassafras for cuts and sores, and, of course, nourishing stew or broth, probably prepared with dill seeds, for the relief of colic and gas pains.<sup>19</sup>

### Quacks and pretenders

Those who sought medical help from a stranger often discovered too late that they had fallen into the hands of a charlatan. "Quacks abound like locusts in Egypt," a New York writer reported shortly before the Revolutionary War. "Few physicians among us are eminent for their skill . . . the profession is under no regulation . . . we have no law to protect the lives of the King's subjects from the malpractice of pretenders. Any man at his pleasure sets up for physician, apothecary, and chirurgeon. No candidates are either examined or licensed, or even sworn to fair practice."<sup>20</sup>

### Duke of York's law

The first medical law affecting New Jersey was contained in the rules and regulations in the Duke of York's Charter (1665). This charter specified that Chirurgeons, Midwives, Physicians "employed about the bodys of men, women or children for the preservation of life or health . . . [must not] act contrary to the known approved rule of art in each mystery or occupation, nor exercise any force, violence or cruelty even in the most difficult or desperate case," without the advice and consent of those skilled in the same art.

If a skilled practitioner was not available for such advice, the Charter provided for consultation with the wisest and gravest *then present*, and the consent of the patient, if he was "mentis compotes." Those who disregarded this procedure were threatened with "such severe punishment as the nature of the fact may deserve." They were assured, however, that the law "is not intended to discourage any from all lawful use of their skill, but rather to encourage and direct them in the right use thereof."<sup>21</sup>

A local law for the City of Newark in 1679 establishing a Quarantine Committee, and a small number of ordinances in Massachusetts and elsewhere were among the few statutes in the colonies pertaining to the practice of medicine and protection of health.<sup>22</sup>

At least eighteen men in New Jersey in the late seventeenth century had adopted titles indicating a medical practice of some sort. These included a "barber surgeon," a "practitioner in chymistry," a "Doctor of Physick," several surgeons, and an apothecary.<sup>23</sup>

There were pretenders who had set one bone straight, by luck or coincidence. A man of enterprise but little education or conscience, after such an experience, was inclined to answer to the sobriquet "doctor" and to use it thereafter.

John Johnstone left Edinburgh, Scotland, an apothecary but enroute to New Jersey became "Dr. Johnstone."<sup>24</sup> Unlike some who appropriated the title, however, Johnstone worked with such skill, goodness, and charity that an early biographer called him "knowing and useful," and the *Philadelphia Weekly Mercury*, announcing his death at Perth Amboy in 1732, remarked that he was "very much lamented by all who knew him, and to the inexpressible loss of the *poor*, who were always his particular care."<sup>25</sup>

Richard Ingoldesby Esq. Lieut. Governor of the Province of New Jersey  
 York St. To Richard Smith Gentleman Greeting

BEING well Informed of your Knowledg Skill and Judgment in the practice of Chirurgery & Phisig  
 I do hereby License and Authorise You to practice the Said Business of Chirurgery and Phisig within  
 this her Majestys Province of New Jersey for and Dureing Pleasure Given in my hand and Seale  
 at Burlington this 5th of March Anno Reg. Reg. Annae M<sup>o</sup> Ang<sup>o</sup> 1705

By his Honours Command J. Deff. Secy. Rich: Ingoldesby

### The first license to practice

There was a desire to regulate medical care, and on March 5, 1705, the first New Jersey license to practice medicine was granted in Burlington by Lieutenant Governor Richard Ingoldesby to applicant Richard Smith. It read:

To Richard Smith Gentleman Greeting  
 Being well informed of your Knowledg, skill and Judgment in the practice of Chirurgery & Phisig, I do hereby License and Authorise You to practice the Said Sciences of Chirurgery and Phisig within this her Majestys Province of New Jersey for and Dureing Pleasure. . . .

Rich: Ingoldesby<sup>26</sup>

With or without a license and proper training, treatments were often harsh, drastic and imaginative. Bleeding, sweating, purging and puking were employed. Surgery was limited to unavoidable conditions such as tracheotomy to prevent suffocation, or amputation when a limb had turned gangrenous. Lacking anesthetic, the "saw bones" justified his nickname. Cauterizing the stump was often effected by heated iron or hot oil. Linen, cotton, or buckskin strands served as sutures.

Bloodletting was used widely to realign the "humors," according to the traditional Galenical concept of health and disease. Roots and barks, including the Spaniards' holy "cascara sagrada," were used for purging. Senna and rhubarb also were prescribed in generous doses.

Slippery elm bark was efficacious as a vermifuge; blackberry root was an antidote for diarrhea, and tansy served to promote menstrual discharge. Vomiting was accomplished by using teas brewed from various roots or leaves, such as ipecac or mustard, plus medicaments ranging from the internal organs of an animal to a whole viper, beetle, or worm.<sup>27</sup>

### Medical books

John Wesley's *Primitive* (sic) *Physic or an easy and natural Method of curing most Diseases*, first compiled in 1747, was widely known in the colonies. Prescriptions from the book were quoted in Andrew D. Mellick's *Story of an Old Farm* (Somerset, N.J. 1889). A copy of the sixteenth edition of *Primitive Physic*, printed at Trenton in 1788, is in the possession of Mercer Hospital. It was a gift from the late Dr. David B. Ackley of Trenton.

Wesley — the English clergyman who founded Methodism — offered such recommendations as: For violent nose bleed, a piece of white paper under the tongue; For cancer in the breast: swallow, in a pint of warm ale, an infusion distilled from warts taken from a horse's leg; goose dung to be applied externally; For cancer of the mouth, blow the ashes of a scarlet cloth in the mouth or throat. "This also cures the thrush." (*Thrush*, or moniliasis, is a disease causing white crusts in the mouth.) For consumption, breathe for fifteen minutes each morning in a hole cut in fresh turf; For easy delivery, peel, slice and fry a large onion in the best oil until tender, boil this with half a glass of water, strain and drink for breakfast daily for two or three weeks before childbirth; For cuts, poultices of toasted cheese; For a broken shin, "a dry oak leaf bound around it."<sup>28</sup>

A little north of the Andrew Mellick farm in Warren County, Dr. Jabez Gwinnup, practicing before 1800, treated a drunkard's red nose, recommending for it frequent washing and rubbing with soap and water, followed by mercuric ointment. For a toothache, Dr. Gwinnup prescribed "for immediate and perfect ease," a lady bug, mashed between the fingers and rubbed on the gum and around the tooth.<sup>29</sup>

Popular tonics for general malaise included calamus, gentian, old-man-in-the-ground, and a host of field and garden herbs.

If the patient did not improve rapidly after taking these "simples," blistering was in order. Mustard plasters or Cantharides (Spanish fly or other species of dried insects) were applied. The counter-irritant might be a seton made of threads or hair, drawn through a fold of skin and left to fester and discharge pus for weeks or even months.

When the pain was too great, the sufferer would be given laudanum as an anodyne. Lacking that, a tot of whiskey, rum or applejack was indicated.

Faith and prayer as accompaniments to treatment were pressed upon the patient if the practitioner was a minister, as was often the case. As part of their training, especially for service in the New World, ministers read medicine and sometimes law as well. Such educated men were important in the community and were looked to for help in all circumstances.

The minister's dual and triple role was not entirely satisfactory to the congregation, however, since an unpaid medical bill owed the parson became involved — if only in the patient's mind — with the minister's prayers for the riddance of sin.<sup>30</sup>

There were few medical books available, and a young practitioner would have found it difficult to raise the required English money for one of the best known: William Salmon's 1300-page *Herbal*. Sometimes, however, the master's old copy was presented to the apprentice when he completed his term of training.

Salmon's *Herbal* was first published in England in 1696 and used through the 1700's in the colonies. It was packed with astounding information about plants and their virtues. A typical item: "Piper Aquaticum or *Arsmart*, *Virtues*, the Herb. It is hot and dry, used chiefly in wounds, Hard Tumours and inveterate Ulcers. Some use it in the transplantation of Disease and removing of Enchantments. The green herb strewed in a chamber is said to kill all fleas, and a good handful, put under a Horse's Saddle, will make him go briskly, altho half tyred before. It is a specifick against Stone and

Gravel in both the reins and bladder and has cured to admiration when all other things in the World have failed. The juice given in Port Wine provokes the Terms, facilitates the Birth, and brings away the Afterbirth. It provokes Urine, and opens obstructions of the Urinary passages. The *Essence* comforts the Head, Nerves, Stomach, Lungs, Womb and Reins, and is admirable against all cold and moist diseases of the Brain, Nerves, and Womb, as Falling Sickness, Vertigo, Lethargy, Apoplexy, Palsie, Megrin, Barrenness & and made into a Syrup with honey, it is a good Pectoral." <sup>31</sup>

Other medical authors consulted in the colonies before the Revolution included Thomas Sydenham, Thomas Willis, Hermann Boerhaave, Richard Wiseman, William Cheselden, Nicholas Culpeper, and William Smellie.<sup>32</sup>

While there were no medical colleges in the colonies before 1765, men from well-to-do families had opportunities for higher education. Harvard was chartered in 1636; William and Mary in 1693; Yale in 1701; the College of New Jersey (now Princeton) in 1746; King's College (Columbia) in 1754; the College of Philadelphia (University of Pennsylvania) in 1755; Rhode Island College (Brown University) in 1764; Queen's College (Rutgers, the State University of New Jersey) in 1766; and Dartmouth College in 1769.

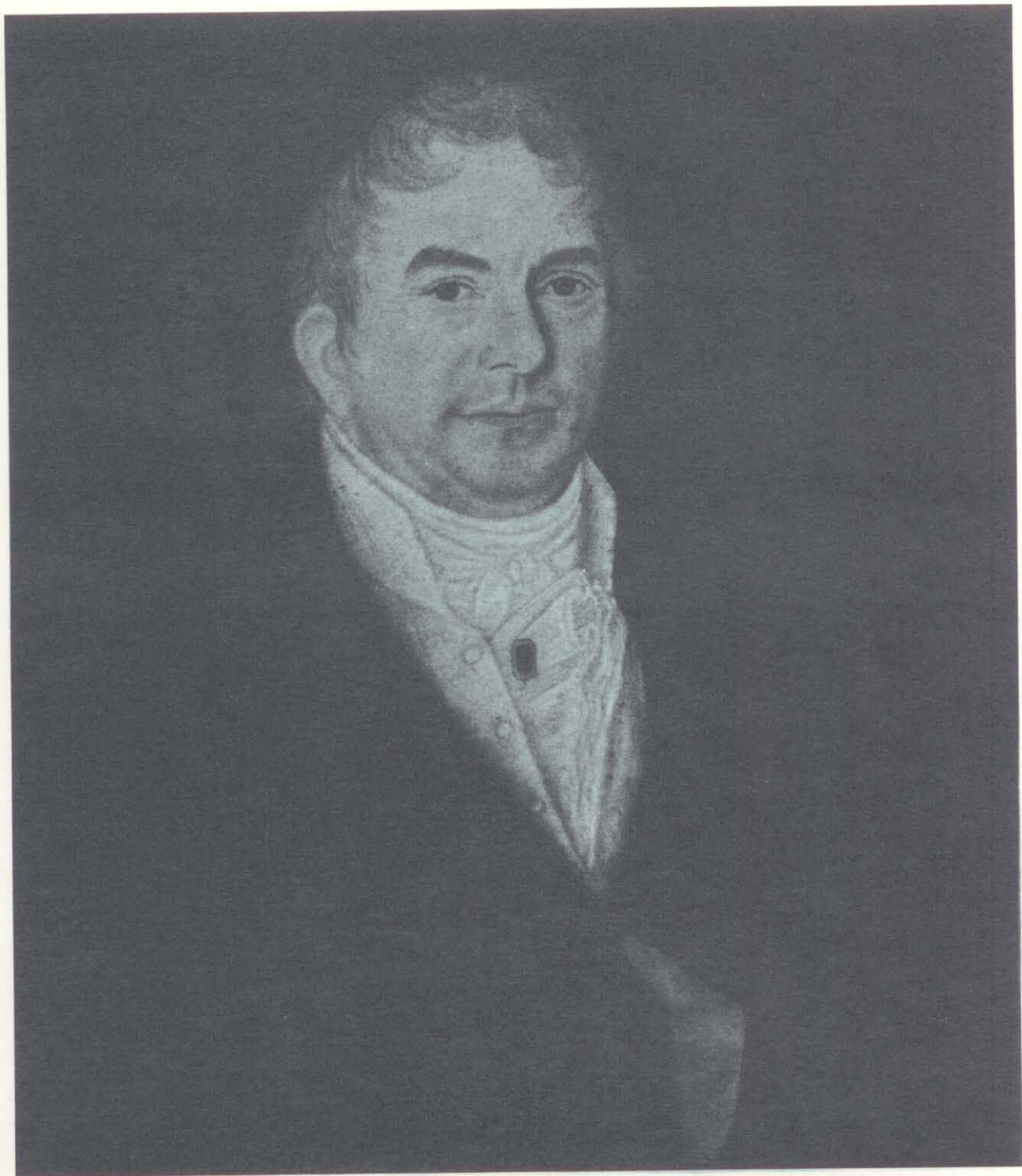
*A Cure for the Gravel, &c.*  
 Take every Nite Going to the Quantity of a large Nutmeg of this Pleasant Medsin; to Make the Jelly Take Black Berries Before they be Quite Ripe When Turned Red Pick them ~~When Turned~~ And Put them in a Pot tie them up Close and Put them in a Cittel of Water Let them Stand Over a fire til they are Reduced to a Pulp then Strain them and to a Pint of Juice Put a Pound of Powdered Sugar Boil it to a Jilly and Put it Up for Use

Among the papers of Dr. Peter LeConte now in the possession of the Monmouth County Historical Society was one entitled "A Cure for the Gravel." It prescribes:

"Take every nite going to the qantity of a large Nutmeg of this Plesant Medsin; to Make the Jelly Take Black Berries Before they be Quite Ripe When Turned Red Pick them and Put them in a Pot, tie them Close and Put them in Cittel of Water. Let them Stand Over a fire til they are Reduced to a Pulp, then Strain them and to a Pint of Jam Put a Pound of Powdered Sugar. Boil it to a Jilly and Put it Up for Use."

Dr. LeConte's burial was in the Presbyterian cemetery near Matawan where a marker records his death Jan. 29, 1768, in the sixty-sixth year of his age. He served as both a preacher and physician.





Jacobus Hubbard (1744-1807) came from Long Island in 1760 to begin his apprenticeship with Dr. William Clark of Freehold. He remained to become one of the eminent physicians of Monmouth County, with succeeding generations continuing the practice of medicine. This portrait hangs in the main hallway of the Monmouth County Historical Society in Freehold. It was a gift from Robert M. Hubbard in memory of Dr. Charles Cook Hubbard.

### The Dual Role

Most of these institutions were intended to train the clergy, and a part of the minister's responsibility was caring for the sick.

New Jersey's first formally trained physician was the Reverend Abraham Pierson, M.D., who left England in 1665, settling first in Connecticut and two years later in this state. Jonathan Dickinson, a graduate of Yale College and first president of Princeton, was both a minister and a practicing physician from 1708 to 1747. From 1750 until after the Revolution, the Reverend John Darby of Parsippany, who had studied both theology and medicine, preached on Sunday and treated the sick during the week. Jacob Green of Hanover and Samuel Kennedy of Basking Ridge were among several other New Jersey clerical physicians.<sup>33</sup>

### Master-apprentice

The common form of medical instruction was that of master and apprentice, although the latter sometimes was little better than a servant. Besides sweeping, running errands, currying horses, grinding powders and rolling pills, the apprentice might accompany the doctor on his rounds, holding the cup as a patient was bled, or standing by during a dental extraction, fracture reduction or wound suture. In addition to cleaning the office, carrying the bag and tending the night bell, the apprentice might, if the doctor's wife insisted, act as a butler for a social affair.<sup>34</sup>

The common physician-apprentice relationship was spelled out in 1760 when Jacobus Hubbard of Gravesend, N. Y., was indentured to William Clark, doctor and surgeon of Freehold.

The provisions included ". . . that Jacobus Hubbard . . . doth voluntarily and of his own free will and accord and by and with the consent of his Father and Mother put himself as an Apprentice unto William Clark of Freehold in Monmouth Co. . . . Doctor and Surgeon, to be taught in the said practice of a Doctor and Surgeon, and in all the several branches of Physic which the said William Clark practices . . . and with him to live . . . Four Years and Eight months . . . During all which Term the said Apprentice his said Master well and faithfully shall serve, his secrets keep, his lawful commands gladly every where obey. He shall do no damage to his said Master, nor see it to be done by others without letting or giving notice to his said Master. He shall not contract matrimony within the said term. At cards, dice or any other unlawful game he shall not play, whereby his said Master may have Damage. He shall not absent himself day or night from his said Master's Service without his leave, nor hant Ale Houses, taverns or play houses.

". . . the said Master during the Said term shall by the best of his Means, or Methods, Arts and Mysterys of a Physician and Surgeon as he now professes, Teach or cause the said Apprentice to be Taught to perfection in consideration of the sum of One Hundred Pounds Lawful money. . . . Thirty Pounds in hand down, and the remainder in Four Equal payments.

". . . said Master is to provide his said Apprentice with sufficient Meat, Drink, Washing and Lodging, and Mending his said clothes within the Said term. . . . At the end of Said term the Said Master shall and will give unto the Said Apprentice a new set of surgeon's pocket instruments — Salmon's *Dispensatory*, Quincy's *Dispensatory* and Fuller on Fevers."<sup>35</sup>

WHEREAS ANATOMY is allowed on all Hands, to be the Foundation both of PHYSICK and SURGERY, and consequently, without SOME Knowledge of it, no Person can be duly qualified to practice either: This is therefore to inform the Publick, That a COURSE of OSTEOLGY and MYOLOGY is intended to be begun, some Time in February next, in the City of New-Brunswick, (of which Notice will be given in this Paper, as soon as a proper Number have subscribed towards it.) In which Course, all the human BONES will be separately examined, and their Connexions and Dependencies on each other demonstrated; and all the MUSCLES of a human BODY dissected; the Origin, Insertion, and Use of each, plainly shewn. &c. This Course is propos'd to be finished in the Space of a Month. By THOMAS WOOD, Surgeon.

Such Gentlemen who are willing to attend this COURSE, are desired to subscribe their Names as soon as possible, with Mr. Richard Ayscough, Surgeon, at New York, or said Thomas Wood, at New-Brunswick, paying at the same Time, THREE POUNDS. Proc. and engaging to pay the said Sum of Three Pounds more, when the Course is half finished.

N. B. If proper Encouragement is given in this Course, he proposes soon after, to go thro' a Course of ANGIOLOGY and NEUROLOGY; and conclude, with performing all the OPERATIONS of SURGERY, on a dead Body: The Use of which will appear to every Person, who considers the Necessity of having (at least) SEEN them perform'd, before he presumes to perform them himself on any living Fellow-Creature.

Surgeon Thomas Wood is credited with offering the first course of anatomical lectures given in British North America. The notice appeared in the *New York Weekly Postboy*, Jan. 17, 1752. The courses were to begin the following month in New Brunswick, N. J., but there is no evidence that they were conducted.

By observing and serving a competent physician, the apprentice might learn considerable practical medicine, but an accurate study of anatomy was seldom possible.

In *Medicine and Health in New Jersey: A History*, David L. Cowen records that a New Jersey colonist, George Gordon, brother of a physician in Scotland, may have made possible the first dissection for anatomical study in New Jersey, by providing in his will, dated 1685/6, that "Dr. Robieson may dissect me."<sup>36</sup>

Bodies of criminals were sometimes available for study, but the frequent stories of "grave snatchers" indicate the demand for cadavers was often greater than the supply.

There was recognition of the need for more formal training in this field as early as 1752 when Dr. Thomas Wood of New Brunswick advertised in the *New York Weekly Post-Boy* that he would teach a month-long course on Osteology and Myology, to be succeeded by a course in Angiology and Neurology if warranted by subscription. His announcement began: "Whereas Anatomy is allowed on all Hands to be the Foundation both of Physick and Surgery and consequently without Some knowledge of it, no Person can be duly qualified to practice either; . . ." The fee for the course was £6. It is not known that it was ever taught.<sup>37</sup>

For most prospective physicians, learning came from watching and helping the master. When the apprentice period was over, a young man might expect to receive a diploma such as that given John Kaighin of Haddonfield on February 20, 1758, when he completed his studies under Christopher Witt of Germantown, Penna.

Simply to have studied under Witt would have been a strong recommendation in that day. He had come from England in 1704 and established himself in Pennsylvania, where he became famous as a naturalist, physician and surgeon, metaphysician and astronomer. He also was a skilled mechanic, personally constructing the first clocks made in the colony and perhaps in America. He was noted, too, as an artist and musician, and he built a large pipe organ on which he played.<sup>38</sup>

For his departing student, Dr. Witt prepared a diploma, a copy of which may be seen, with other medical memorabilia, in the Cherry Hill office of the Camden County Medical Society.

THESE May Inform all Whom it might  
Concern That Mr. John Kaighin of Hatnfield  
in the Province of West New Jersey, hath Lived  
with Me (here under named) a Considerable time, as  
a Disciple, to Learn the Arts & Mysteries of Chymis-  
try, Physick, & the Astral Sciences, whereby to make  
a more perfect Discovery of the Hidden causes of  
More Occult & uncommon Diseases, not so easily to  
be discovered by the Vulgar Practice. In all which  
he has been very Dilligent & Studious, as well as  
in the Administration of the Medecines, & in the  
Various Cases wherein his Judgment may be safely  
depended upon, all things. so far as he follows my  
Instructions. And Hope he may in all things answer  
the Confidence that may be reposed in him.  
Germantown Febr: 20. 1758. C. Witt.

The earliest known medical diploma in America was granted to John Kaighin of Haddonfield, N. J. by Dr. Christopher Witt of Germantown, Penna. It read: "THESE May Inform all Whom it Might concern That Mr. John Kaighin of Hatnfield in the Province of New Jersey hath Lived with Me (here under named) a Considerable time, as a Disciple to Learn the Arts & Mysteries of Chemistry, Physick & the Astral Sciences whereby to make a more perfect Discovery of the Hidden causes of more Occult & uncommon Disease, not so easily to be discovered by the vulgar Practice. In all which he has been Very Dilligent & Studious, as well as in the Administration of the Medicines & in the various cases wherein his Judgment may be surely depended upon in all things: —so far as he follows my Instructions. And Hope he may in all things answer the Confidence that may be reposed in him."<sup>39</sup>

### Mountebanks and pretenders

The abundance of self-proclaimed "doctors" in the first half of the eighteenth century must have been apparent to any educated person and a particular gall to those few physicians in the colonies with thorough medical training.

One of the latter was Dr. Alexander Hamilton, educated in medicine before leaving his Scottish homeland. He traveled from Maryland into the northern colonies in 1744, observing and recording in his diary as he went. At Trenton, he put up at Elijah Bond's "Sign of the Wheat Sheaf" and visited with the town doctor, Thomas Cadwalader. At another inn, Dr. Hamilton observed "a fellow with a worsted cap and great black fists who was styled doctor." He had been a shoemaker, but two years earlier had cured an old woman of a "pestilent mortal disease, and thereby acquired the character of a physician . . . laying aside his awls and leather, he got himself some gallipots and instead of cobbling soles, fell to cobbling human bodies."

At still another inn, Dr. Hamilton met a "greasy-thumbed fellow who professed physick and particularly surgery in the drawing of teeth." The man practiced on the housemaid, who made a "murderous screaming and squawking until the fellow finally got the tooth out, with a great clumsy pair of blacksmith's forceps."<sup>40</sup>

In Dr. Thomas Cadwalader of Trenton, Dr. Hamilton made the acquaintance of one of the outstanding physicians of the period. Three years of medical study in London had given Dr. Cadwalader an uncommonly fine education for the time, particularly in the New World.

In 1736-7, he was one of the few Philadelphia physicians who inoculated for smallpox. From 1738 to 1751, while helping administer the Trenton (Lamberton) estate inherited by his wife, he practiced both in Philadelphia and Trenton. He became the first mayor of Trenton, and when he resigned from the office in 1750, he donated £500 to establish a public library. He gave a series of lectures on anatomy to physicians in Philadelphia in 1730-31, the first such formal instruction on the subject in America. Dr. Cadwalader died at Trenton in 1779 and was buried in the Hanover Street Quaker cemetery where his gravestone can be seen today.<sup>41</sup>

There were other physicians like Dr. Cadwalader with good European training — Peter Dessigny of Woodbridge in the seventeenth century; John Neilson and William Mercer of New Brunswick, Ichabod Burnet of Elizabethtown and Henry Greenland of Piscataway, in the eighteenth. But such educated men of medicine were rare.

Even in this early period of America's medical history, however, there were sincere practitioners, using the powers of observation and deduction to do their best with the little education and training then available to them. Some increased their knowledge by associating with medical officers attached to the troops guarding the British colonial territories.

The French and Indian Wars in the mid-eighteenth century were chiefly a conflict between France and England for possession of seaboard strongholds and frontier forts, and sorties against the Indians, in the eastern part of North America. Like other British colonies, New Jersey raised a complement of at least 1,000 men between 1758 and 1763. Military barracks to

A doctor's saddle bags and pill box, as much as his fleet horse, identified the practitioner of the early nineteenth century. These items are part of the collection displayed at the headquarters office of the Camden County Medical Society.



accommodate them were constructed at Burlington, Trenton, New Brunswick, Amboy and Elizabethtown. The colonial physicians who were commissioned to serve with the militia units had an opportunity to associate with medical practitioners educated abroad and to improve by observation and consultation. The need for better medical education in the colonies was apparent, and a Pennsylvania man took practical action.<sup>42</sup>

Dr. John Morgan, after four years as surgeon to the Pennsylvania troops, followed by medical training in Europe, returned to Philadelphia in the spring of 1765 to launch the first medical school in America, now the University of Pennsylvania School of Medicine. Dr. William Shippen, Jr., whose father was a founder of the College of New Jersey and who won his own A.B. degree there, in 1762 had begun lectures in Philadelphia on both anatomy and obstetrics. He continued these classes as a faculty colleague of Dr. Morgan.<sup>43</sup>

In 1767, a school of medicine was inaugurated at King's College (now Columbia University) in New York City. Dr. Samuel Bard was a prime mover in its establishment. He had been born in Burlington, N. J., and educated in medicine at Edinburgh, Scotland.

In New Jersey the desire for further association with colleagues in the medical profession prompted the formation of The Medical Society of New Jersey — the first of its kind in the nation.



James Mott D<sup>r</sup> to Stephen Tallman

		L. S. S.
Jan 20	To Cortix peru & Sall absentra 10/6	0..10..0
March 25	To Volatiles 2/6	0..2..6
June 24	To powders for Gusham 1/4	0..11..0
July 8	To a vomit & Drops	0..6..6
Aug 2	To pills purgis 10/ Volatiles 4/	0..12..0
	To pills 6/6 to Drops	0..10..0
Sept 18	To 2 Sweats 4/	0..4..0
20	To visit 6/ To vomit 1/9 Powders 4/ Drops 4/	0..13..9
23	To a visit 10/ Cortix 8/ powders 4/ to 2	
	To 2 Sweats 8/ plasters 4/ nitro Sp <sup>t</sup> 4/6	1..10..0
27	To a visit 10/ to powders 4/ to a Sweat 4/6	
	Drops 4/ Cortix 3/6 Sweat 2/6 powders 2/6	
	Drops 4/6	1..8..6
28	To a visit 10/ to Cortix 4/ Drops 4/6 powders 3/	
	Powders 4/6	1..2..6
October 5	To powders 3/ to a Sweat 2/	0..5..0
9	To a visit 5/6 Cortix 7/ to Drops powders purg <sup>e</sup> 2/6	0..17..0
10	To a vomit 1/9	0..1..9
12	To a Cortix 4/ a Sweat 2/	0..6..0
14	To a visit 7/ pills anodines 2/ Cortix 6/ volatiles 7/6	0..17..0
20	To a visit 10/ anodines 4/ Cortix 6/ Drops 2/6	1..0..6
23	To Oil of juniper 3/ Balsum Sulph <sup>r</sup> 4/6	0..8..6
29	To a visit 8/ Cortix 7/ to pefibugus 2/ Apsits 4/3/	1..0..0
Nov 8	to Cortix 4/	0..4..0
10	To a visit 10/ Sp <sup>t</sup> vitrol 4/6 Cortix 4/	0..16..6
Dec 3	To a visit 10/6 Lintus 3/ Cortix 10/6 Apsits 4/6	
	pectoral Drops 2/6	1..10..0
30	To Drops 4/	0..4..0
Feb 18	To a visit 10/ to Bitters 7/ and Elicuary 7/6	0..4..6
March 7	To Clinis vitrol 4/6	0..5..6
2	To visit 10/ Cortix peru 7/	0..17..0
May 2	To a vomit 3/6	0..3..6
		17..16..6

The original of this bill, rendered by Dr. Stephen Tallman, is in the library of the Monmouth County Historical Society, Freehold, N. J. Dr. Tallman lived near Shrewsbury and was in practice prior to the Revolutionary War.