

## THE EARLIEST CONTRIBUTION TO MEDICAL LITERATURE IN THE UNITED STATES.

BY DR. H. E. HANDEKSON, Cleveland, Ohio, U. S.

The medical education of the vast majority of the early physicians of the United States was acquired in the method, common since the days of Hippocrates and not unfamiliar even now to the grayheaded seniors of our profession. The youth who aspired to the practice of medicine was formally apprenticed to some reputable physician in his vicinity, usually for the term of seven years. The physician, in consideration of a certain sum of money, either cash in hand or payable annually, engaged faithfully to instruct his pupil in the mysteries of his profession, and usually agreed further, at the expiration of the term of apprenticeship, to present him with certain books or instruments, to serve as the nucleus of his library or surgical armamentarium. A few of the pioneer physicians of the colonies had taken the university degree of M. D., either in England or on the continent, but such cases were rather exceptional. Indeed, it must be borne in mind that in the mother country itself the practice of medicine had been entirely unregulated until 1511—12, when an examination by, and license from the bishop of the diocese were demanded. On the foundation of the College of Physicians of London in 1518, this duty of examination and license was transferred to that body, without prejudice, however, to the rights of the universities. Comparatively few practitioners, however, aspired to the university degree of M. D., and of these few a not inconsiderable proportion preferred the degree of some of the continental universities (especially those of Italy and the Netherlands), in which medicine was taught with greater zeal and thoroughness than in England. Indeed, Huber tells us that, during the reign of Queen Elizabeth (1558—1603), medical study at the universities (Oxford and Cambridge) was almost abandoned, and that during the sixty years immediately following A. D. 1500 the degree of M. D. was conferred at Oxford only thirty-six times, and that of M. B. only eight times. Harvey took his M. D. at Padua in 1602; Sir Thomas Browne received his medical degree at Leyden in 1634; while Sydenham, who received his M. B. at Oxford in 1648, studied subsequently at Montpellier and postponed the

reception of his M. D. until 1676, when it was conferred upon him by the University of Cambridge.

Several facts of history show, however, that the early colonists of the United States were neither ignorant of, nor indifferent to the advantages of a special medical education. Thus Palfrey tells us <sup>1)</sup> that the first "quack" in the colony of Massachusetts was fined five pounds for pretending to cure the scurvy with a worthless water, for which he demanded an exorbitant price, and was warned to abstain from such practices in the future. *Tempora mutantur!* Such stern Puritan virtues are scarcely preserved in the blood of their modern descendants.

In 1647 the General Court of Massachusetts published the following recommendation:

"We conceive it very necessary yt such as studies physick or chirurgery may have liberty to reade anotomy and to anotomize once in four yeares some malefactor in case there be such as the Courte shall alow of:"

and in the same year the Indian apostle, John Eliot, writes to the minister at Cambridge, expressing the wish that:

"Our young students in Physick may be trained up better than yet they bee, who have onely theoreticall knowledge, and are forced to fall to practise before ever they saw an Anatomy made, or duely trained up in making experiments, for we never had but one Anatomy in the Countrey, which Mr. Giles Firman (now in England) did make and read upon very well."

This "Mr. Giles Firman" was a deacon in the church of Boston in 1633, and is said to have been a highly esteemed practitioner of medicine. His "reading upon Anatomy" was undoubtedly the first course of anatomical lectures delivered in this country.

From these extracts it will be seen that the early colonists of Massachusetts were not indifferent to the needs of medical education, and the foundation of Harvard College in 1638 opened the way for improvement in all departments of instruction. It is true that no special medical department was organized in Harvard College until 1783, but a number of the early presidents of this college had enjoyed a more or less complete medical education, and two of its first graduates in 1642, Samuel Bellingham and Henry Saltonstall, having received their degree in arts from Harvard, proceeded to Europe and gained the degree of M. D. from European universities. The precedent thus early established was followed with increasing

<sup>1)</sup> History of New England, vol. I, pp. 321 et seq.

frequency in later years, and thus Harvard College became a fruitful nursery for the medical profession of the colonies.

A marked characteristic of the New England colonies, in which the Puritan element strongly predominated, was the frequent combination of the offices of minister and physician, or even minister, physician and teacher, in one and the same person. Whether this arrangement was a survival of the customs of the Middle Ages (a supposition which, I doubt not, would make these grave Puritan divines turn indignantly in their moss-grown tombs), or whether the scarcity of professional men, combined with a scanty clientage and lack of money, suggested this method of eking out the inadequate salary of one profession with that of another, I am unable to say. Certain it is, however, that many of the Puritan divines, with wise prevision, acquired, before coming to the colonies, such elements of a medical education as their varying circumstances permitted.

In the colony of New Netherlands, which from the very outset was more cosmopolitan in population and character, such a combination of professions was less frequent, though not rare. But in Virginia, where the Church of England remained the established church, the customs of the mother country were long preserved, and such bicephalous professional men were only exceptional.

The author of the following tract, "Doctor" Thomas Thacher (though he himself honestly disclaims any medical title), was one of these Puritan medico-pastors, of whose life, history furnishes us with the following details. Born in England in 1620, the son of the Rev. Peter Thacher, a minister of Sarum (Salisbury), he enjoyed at home the advantages of a good school education and was designed by his father to enter one of the English universities. For some unknown reason the youth refused the proffered privilege, and at the early age of fifteen immigrated to the colony of Massachusetts. Soon after his arrival, apparently recognizing his folly in declining a university education, he placed himself under the instruction of Dr. Charles Chauncy, an M. D. of Cambridge, pastor of the church at Scituate and probably the most learned man at that time in the New England colonies, who in 1654 was chosen the second president of Harvard College. Young Thacher seems to have been a youth of unusual genius. Under the instruction of Dr. Chauncy he acquired not only the ordinary branches of a liberal education, but also a considerable knowledge of Hebrew and Arabic. According to Mather, he was also a great logician and possessed considerable

mechanical genius. Following the Puritan bent of his day and surroundings, Thomas Thacher was ordained a minister in 1644, and, after sojourning for some years at Weymouth, removed in 1669 to Boston and was chosen first pastor of the Old South Church. In this position he also devoted much of his time to the practice of medicine, and he is said to have been regarded by his fellow-colonists as one of the most eminent physicians of Boston. Indeed, he died in 1678 of a fever contracted during his medical attendance upon one of his patients.

It was toward the close of the good doctor's life that the first printing-press was established in Boston. As early as 1639 a press had been set up in Cambridge, the first fruits of which, the "Free-man's Oath" and "An Almanack", appeared in the same year. In 1640 the first book published in the colonies, "The Bay Psalms Book", published "for the comfort and edification of the saints", was issued. The innovation, however, seems to have been regarded by the authorities with considerable suspicion, for in 1662 two "Licensers of the Press" were appointed and two years later a law was passed prohibiting the establishment of any printing-press in the colony of Massachusetts, except in Cambridge. In 1774, however, this law was suspended and permission was given to John Foster to set up a press in Boston, then a town of perhaps five thousand inhabitants.

Thomas Thacher seems to have been intelligent enough, and sufficiently free from prejudice to appreciate the advantages of the innovation, and his "Guide in the Smallpox and Measles" was not only one of the early productions of Foster's press, but the first contribution of a colonial practitioner to medical literature. It was printed in double columns on one side only of the sheet, somewhat like our modern advertising "poster".<sup>1)</sup> The sheet itself measured fifteen and a half inches in length by ten and a half inches in width.

That the leaflet is only a compendious English translation of a portion of the writings of Sydenham, a translation in which the original is followed so closely as to enable one to determine even what edition of the author the translator had before him, is no reflection upon the motives of Dr. Thacher, who not only disclaims all originality, but takes pains to inform the reader that he is "no Physitian". That he selected a good model is rather to his credit.

<sup>1)</sup> An epidemic of smallpox prevailed in Boston during the years 1676—78, and I suspect the leaflet of Dr. Thacher was designed either for actual posting, or as a circular for public instruction, similar to those of our modern health-boards in seasons of epidemic disease.

## BRIEF RULE.

## TO GUIDE THE COMMON PEOPLE OF NEW-ENGLAND.

*How to order themselves and theirs in the Small Pocks, or Measels.*

The *Small Pox* (whose nature and cure the *Measels* follow) is a disease in the blood, endeavouring to recover a new form and state.

2. This nature attempts. 1. By Separation of the impure from the pure, thrusting it out from the Veins to the Flesh. 2. By driving out the impure from the Flesh to the Skin.

3. The first Separation is done in the first four dayes by a Feaverish boyling (Ebullition) of the Blood, laying down the impurities in the Fleшы parts which kindly effected the Feaverish tumult is calmed.

4. The second Separation from the Flesh to the Skin, or *Superficies* is done through the rest of the time of the disease.

5. There are several Errors in ordering these sick ones in both these Operations of Nature which prove very dangerous and commonly deadly either by overmuch hastening Nature beyond its own pace, or in hindering of it from its own vigorous operation.

6. The Separation by Ebullition in the Feaverish heat is over heightened by too much *Clothes*, too hot a room, hot *Cordials*, as *Diascordium*, *Gascons powder* <sup>1)</sup> and such like, for hence come *Phrenzies*, dangerous excessive sweats, or the flowing of the Pocks into one overspreading sore, vulgarly called the *Flox*.

7. The same separation is overmuch hindred by preposterous cooling that Feaverish boyling heat, by *blood letting*, *Clysters*, *Vomits*, *purges*, or *cooling medicines*. For though these many times hasten the coming forth of the *Pox*, yet they take away that supply which should keep them out till they are ripe, wherefore they sink in again to the deadly danger of the sick.

8. If a *Phrensie* happen, or through a *Plethorie* (that is fulness of blood) the Circulation of the blood be hindred, and therefore the whole mass of blood choaked up, then either let blood, or see that their diet, or medicines be not altogether cooling, but let them in no wise be heating, therefore let him lye no otherwise covered in his bed than he was wont in health: His Chamber not made hot with fire if the weather be temperate, let him drink small Beer only warmed with a Tost, let him sup up thin *water-gruel*, or *water-pottage* made only of Indian Flour and water, instead of *Oatmeal*: Let him eat *boild Apples*: But I would not advise at this time any medicine besides. By this means that excessive *Ebullition* (or boyling of his blood) will by degrees

<sup>1)</sup> In the "Observationes Medicæ", editions of 1666 and 1668, occurs the following passage: "Ausim dicere ex hoc fonte, malorum Iliada profluxisse, nempe ex aucta nimis ebullitione in principio morbi, dum mulierculæ oblati cardiacis (ut pulvere Gasconis, diascordio, et id genus aliis), nihil non satagunt, ut (si Displacet), expellantur statim Variolæ, ac venenum a corde removeatur. Imo famigerato illo tutissimoque (ut existimant), remedio (zythogala intelligo, cui cornu cervi cum calendulæ floribus incoctum fuerit), non minus imprudenter utuntur: certe enim calido hujusmodi regimine plus mali quotannis accersitur, quam ulla Medicorum praxi, quantumcunque periculosam illæ arbitrentur, atque a ratione (sua scilicet), abhorrentem." This was omitted in the later editions, and the omission furnishes a clue to the edition used by Dr. Thacher. The passage also shows us incidentally that human nature in the 17th century was substantially the same as in the present day.

abate, and the Symptoms cease: If not, but the blood be so iraged that it will admit no delay, then either let blood (if Age will bear it) or else give some notably cooling medicine, or refresh him with more free Air.

9. But is the boiling of the blood be weak and dull that there is cause to fear it is not able to work a Separation, as it's wont to be in such as have been let blood, or ar fat, or Flegmatick, or brought low by some other sickness, or labour of the (Gonorrhœa) running of the Reins, or some other Evacuation: In such Cases, *Cordials* must drive them out, or they must dy.

10. In time of driving out the *Pocks* from the Flesh, here care must be had that the *Pustules* keep out in a right measure till they have attained their end without going in again, for that is deadly.

11. In this time take heed when the *Pustules* appear whilst not yet ripe, leas't by too much heat there arise a new *Ebullition* (or Feaverish boyling) for this troubles the driving out, or brings back the separated parts into the blood, or the Fleshy parts over-heated are disabled from a right suppuration, or lastly the temper of the blood and tone of the Flesh is so perverted that it cannot overcome and digest the matter driven out.

12. Yet on the other hand the breaking out must not be hindred, by exposing the sick unto the cold. The degree of heat must be such as is natural agrees with the temper of the fleshy parts: That which exceeds or falls short is dangerous: Therefore the season of the year, Age of the sick, and their manner of life here require a discreet and different Consideration, requiring the Counsel of an expert Physitian.

13. But if by any error a new *Ebullition* ariseth, the same art must be used to allay it as is before exprest.

14. If the *Pustules* go in and a flux of the belly follows (for else there is no such danger) then *Cordials* are to be used, yet moderate and not too often for fear of new *Ebullition*.

15. If much spitting (Ptyalismus) follow, you may hope all will go well, therefore by no means hinder it: Only with warm small Beer let their mouths be washed.

16. When the *Pustules* are dryed and fallen, purge well, especially if it be in *Autumn*.

17. As soon as this disease therefore appears by its signs, let the sick abstein from Flesh and Wine, and open Air, let him use small Beer warmed with a Tost for his ordinary drink, and moderately when he desires it. For food use *water-gruel*, *water-pottage* and other things having no manifest hot quality, easy of digestion, boild Apples, and milk sometimes for change, but the coldness taken off. Let the use of his bed be according to the season of the year, and the multitude of the *Pocks*, or as sound persons are wont. In Summer let him rise according to custome, yet so as to be defended both from heat and cold in Excess, the disease will be the sooner over and less troublesome for being kept in bed nourisheth the Feaverish heat and makes the *Pocks* break out with painful inflamation.

19. In a colder season, and breakforth of a multitude of *Pustules*, forcing the sick to keep his bed, let him be covered according to his

custome in health, a moderate fire in the winter being kindled in his Chamber, morning and Evening: neither need he keep his Arms alwayes in bed or ly still in the same place, for fear least he should sweat which is very dangerous especially to youth.

20. Before the fourth day use no medicines to drive out, nor be too strict with the sick; for by how much the more gently the *Pustules* do grow, by so much the fuller and perfecter will the Separation be.

21. On the fourth day a gentle *Cordial* may help once given.

22. From that time a small draught of warm milk (not hot) a little dyed with *Saffron* may be given morning and evening till the *Pustules* are come to their due greatness and ripeness.

23. When the *Pustules* begin to dry and crust, least the rotten vapours strike inward, which sometimes causeth sudden death; Take morning and evening some temperate *Cordial* as four or five spoonfuls of *Malago Wine* tinged with a little *Saffron*.

24. When the *Pustules* are dryd and fallen off, purge once and again, especially in the *Autumn Pocks*.

25. Beware of anointing with *Oils, Fatts, Ointments*, and such defensives, for keeping the corrupted matter in the *Pustules* from drying up; by the moisture they fret deeper into the *Flesh*, and so make the more deep *Scarrs*.

26. The young and lively men that are brought to a plentiful sweat in this sickness, about the eighth day the sweat stops of itself, by no means afterwards to be drawn out again; the sick thereupon feels the most troublesome disrest and anguish, and then makes abundance of water and so dyes. Few young men and strong thus handled escape, except they fell into abundance of spitting or plentiful bleeding at the nose.

27. Signs discovering the Assault at first are beating pain in the head, Forehead, and temples, pain in the back, great sleepiness, glistening of the eyes, shining glimmerings seem before them, itching of them also, with tears flowing of themselves, itching of the Nose, short breath, dry Cough, oft neezing, hoarseness, heat, redness, and sense of pricking over the whole body, terrors in the sleep, sorrow and restlessness, beating of the heart, *Urine* sometimes as in health, sometimes filthy from great *Ebullition*, and all this or many of these with a Feaverish distemper.

28. Signs warning of the probable Event. If they break forth easily, quickly, and soon come to ripening, if the Symptomes be gentle, the Feaver mild, and after the breaking forth it abate; If the voice be free and the breathing easie; especially if the Pox be red, white, distinct, soft, few, round, sharp topped, only without and not in the inward parts; if there be large bleedings at the nose. These signs are hopeful.

29. But such signs are doubtful, when they difficultly appear, when they sink in again, when they are black, blewish, green, hard, all in one, if the Feaver abate not with their breaking forth, if there be Swooning, difficulty of breathing, great thirst, quinsey, great unquietness, and it is very dangerous, if there be joynd with it some other malignant Feaver, called by some the pestilential Pox: the *Spotted Feaver* is oft joynd with it.

30. Deadly signs if the Flux of the Belly happen, when they are

broke forth, if the Urine be bloody, or black, or the *Ordure* of that Colour; Or if pure blood be cast out by the Belly or Gumms: These signs are for the most part deadly.

*These things have I written Candid Reader not to inform the Learned Physitian that hath much more cause to understand what pertains to this disease than I, but to give some light to those that have not such advantages, leaving the difficulty of this disease to the Physitians Art, wisdom, and Faithfulness: for the right managing of them in the whole Course of the disease tends both to the Patients safety, and the Physitians desired success in his Administrations: For in vain is the Physitians Art employed if they are not under a Regular Regiment. I am, though no Physitian, yet a well wisher to the sick: And therefore intreating the Lord to turn our hearts and stay his hand, I am*

A Friend, Reader to thy Welfare,

2. 11. 1677/8.

THOMAS THACHER.

Boston, Printed and sold by *John Foster*, 1677.