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THE MEDICAL PROFESSION  
IN MASSACHUSETTS.

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BY OLIVER WENDELL HOLMES.



THE

MEDICAL PROFESSION IN MASSACHUSETTS.

A LECTURE

OF A

COURSE BY MEMBERS OF THE MASSACHUSETTS  
HISTORICAL SOCIETY,

Delivered before the Lowell Institute,

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BY

OLIVER WENDELL HOLMES.

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# THE MEDICAL PROFESSION

## IN MASSACHUSETTS.

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THE medical history of eight generations, told in an hour, must be in many parts a mere outline. The details I shall give will relate chiefly to the first century. I shall only indicate the leading occurrences, with the more prominent names of the two centuries which follow, and add some considerations suggested by the facts which have been passed in review.

A geographer who was asked to describe the tides of Massachusetts Bay, would have to recognize the circumstance that they are a limited manifestation of a great oceanic movement. To consider them apart from this, would be to localize a planetary phenomenon, and to provincialize a law of the universe. The art of healing in Massachusetts has shared more or less fully and readily the movement which, with its periods of ebb and flow, has been raising its level from age to age throughout the better part of Christendom. Its practitioners brought with them much of the knowledge and many of the errors of the Old World; they have always been in communication with its wisdom and its folly; it is not without interest to see how far the new conditions in which they found themselves have been favorable or unfavorable to the growth of sound medical knowledge and practice.

The state of medicine is an index of the civilization of an age and country, — one of the best, perhaps, by which it can be judged. Surgery invokes the aid of all the mechanical arts. From the rude violences of the age of stone, — a relic of which we may find in the practice of Zipporah, the wife of Moses,<sup>1</sup> —

<sup>1</sup> Exodus iv. 25.

to the delicate operations of to-day upon patients lulled into temporary insensibility, is a progress which presupposes a skill in metallurgy and in the labors of the workshop and the laboratory it has taken uncounted generations to accumulate. Before the morphia which deadens the pain of neuralgia, or the quinine which arrests the fit of an ague, can find their place in our pharmacies, commerce must have perfected its machinery, and science must have refined its processes, through periods only to be counted by the life of nations. Before the means which nature and art have put in the hands of the medical practitioner can be fairly brought into use, the prejudices of the vulgar must be overcome, the intrusions of false philosophy must be fenced out, and the partnership with the priesthood dissolved. All this implies that freedom and activity of thought which belong only to the most advanced conditions of society; and the progress towards this is by gradations as significant of wide-spread changes, as are the varying states of the barometer of far-extended conditions of the atmosphere.

Apart, then, from its special and technical interest, my subject has a meaning which gives a certain importance, and even dignity, to details in themselves trivial and almost unworthy of record. A medical entry in Governor Winthrop's journal may seem at first sight a mere curiosity; but, rightly interpreted, it is a key to his whole system of belief as to the order of the universe and the relations between man and his Maker. Nothing sheds such light on the superstitions of an age as the prevailing interpretation and treatment of disease. When the touch of a profligate monarch was a cure for one of the most inveterate of maladies, when the common symptoms of hysteria were prayed over as marks of demoniacal possession, we might well expect the spiritual realms of thought to be peopled with still stranger delusions.

Let us go before the Pilgrims of the "Mayflower," and look at the shores on which they were soon to land. A wasting pestilence had so thinned the savage tribes, that it was sometimes piously interpreted as having providentially prepared the way for the feeble band of exiles. Cotton Mather, who, next to the witches, hated the "tawnies," "wild beasts," "blood-hounds,"

"rattlesnakes," "infidels," as in different places he calls the unhappy Aborigines, describes the condition of things in his lively way, thus:—

"The *Indians* in these Parts had newly, even about a Year or Two before, been visited with such a prodigious Pestilence; as carried away not a *Tenth*, but *Nine Parts of Ten* (yea 'tis said *Nineteen of Twenty*) among them: so that the *Woods* were almost cleared of those pernicious Creatures to make Room for a *better Growth*."<sup>1</sup>

What this pestilence was has been much discussed. It is variously mentioned by different early writers as "the plague," "a great and grievous plague," "a sore consumption," as attended with spots which left unhealed places on those who recovered, as making the whole surface yellow as with a garment.<sup>2</sup> Perhaps no disease answers all these conditions so well as small-pox. We know from different sources what frightful havoc it made among the Indians in after years,—in 1631, for instance, when it swept away the aboriginal inhabitants of whole towns,<sup>3</sup> and in 1633.<sup>4</sup> We have seen a whole tribe, the Mandans, extirpated by it in our own day. The word "plague" was used very vaguely, as in the description of the "great sickness" found among the Indians by the expedition of 1622.<sup>5</sup> This same great sickness could hardly have been yellow fever, as it occurred in the month of November. I cannot think, therefore, that either the scourge of the East or our Southern malarial pestilence was the disease that wasted the Indians. As for the yellowness like a garment, that is too familiar to the eyes of all who have ever looked on the hideous mask of confluent variola.

Without the presence or the fear of these exotic maladies, the forlorn voyagers of the "Mayflower" had sickness enough to contend with. At their first landing at Cape Cod, gaunt and hungry and longing for fresh food, they found upon the sandy shore "great muscles, and very fat and full of sea-pearl." Sailors

<sup>1</sup> Magnalia, book i. chap. 2.

<sup>2</sup> Young, Chron. of the Pilgrims, p. 183, note.

<sup>3</sup> Holmes's Annals, vol. i. p. 211, note.

<sup>4</sup> Young, Chronicles of Massachusetts, p. 386.

<sup>5</sup> Chronicles of the Pilgrims, p. 302.

and passengers indulged in the treacherous delicacy, which seems to have been the sea-clam; and found that these mollusks, like the shell the poet tells of, remembered their august abode, and treated the way-worn adventurers to a gastric reminiscence of the heaving billows. In the mean time, it blew and snowed and froze.<sup>1</sup> The water turned to ice on their clothes, and made them many times like coats of iron. Edward Tilley had like to have "sounded" with cold. The gunner, too, was sick unto death, but "hope of trucking" kept him on his feet, — a Yankee, it should seem, when he first touched the shore of New England. Most, if not all, got colds and coughs, which afterwards turned to scurvy, whereof many died.<sup>2</sup>

How can we wonder that the crowded and tempest-tossed voyagers, many of them already suffering, should have fallen before the trials of the first winter in Plymouth? Their imperfect shelter, their insufficient supply of bread, their salted food, now in unwholesome condition, account too well for the diseases and the mortality that marked this first dreadful season; weakness, swelling of the limbs, and other signs of scurvy, betrayed the want of proper nourishment and protection from the elements. In December six of their number died, in January eight, in February seventeen, in March thirteen. With the advance of spring the mortality diminished, the sick and lame began to recover, and the colonists, saddened but not disheartened, applied themselves to the labors of the opening year.<sup>3</sup>

One of the most pressing needs of the early colonists must have been that of physicians and surgeons. In Mr. Savage's remarkable Genealogical Dictionary of the first settlers who came over before 1692 and their descendants to the third generation, I find scattered through the four crowded volumes the names of one hundred and thirty-four medical practitioners. Of these, twelve, and probably many more, practised surgery; three were barber-surgeons. A little incident throws a glimmer from the dark lantern of memory upon William Dinely, one of these practitioners with the razor and the lancet. He was lost between Boston and Roxbury in a violent tempest of wind and snow; ten days afterwards a son was born to his widow, and with a

<sup>1</sup> Chronicles of the Pilgrims, p. 119.    <sup>2</sup> *Ib.*, pp. 138, 151.    <sup>3</sup> *Ib.*, p. 198.

touch of homely sentiment, I had almost said poetry, they called the little creature "Fathergone" Dinely. Six or seven, probably a larger number, were ministers as well as physicians, one of whom, I am sorry to say, took to drink and tumbled into the Connecticut River, and so ended. One was not only doctor, but also school-master and poet. One practised medicine and kept a tavern. One was a butcher, but calls himself a surgeon in his will, a union of callings which suggests an obvious pleasantry. One female practitioner, employed by her own sex, — Ann Moore, — was the precursor of that intrepid sisterhood whose cause it has long been my pleasure and privilege to advocate on all fitting occasions.

Outside of this list I must place the name of Thomas Wilkin-son, who was complained of, in 1676, for practising contrary to law.

Many names in the catalogue of these early physicians have been associated, in later periods, with the practice of the profession, — among them, Boylston, Clark, Danforth, Homan, Jeffrey, Kittredge, Oliver, Peaslee, Randall, Shattuck, Thacher, Wellington, Williams, Woodward. Touton was a Huguenot, Burchsted a German from Silesia, Lunerus a German or a Pole; "Pighogg Churrurgeon," I hope, for the honor of the profession, was only Peacock disguised under this *alias*, which would not, I fear, prove very attractive to patients.

What doctrines and practice were these colonists likely to bring with them?

Two principal schools of medical practice prevailed in the Old World, during the greater part of the seventeenth century. The first held to the old methods of Galen: its theory was that the body, the microcosm, like the macrocosm, was made up of the four elements — fire, air, water, earth; having respectively the qualities hot, dry, moist, cold. The body was to be preserved in health by keeping each of these qualities in its natural proportion; heat, by the proper temperature; moisture, by the due amount of fluid; and so as to the rest. Diseases which arose from excess of heat were to be attacked by cooling remedies; those from excess of cold, by heating ones; and so of the other derangements of balance. This was truly the principle of *con-*

*traria contrariis*, which ill-informed persons have attempted to make out to be the general doctrine of medicine, whereas there is no general dogma other than this: disease is to be treated by any thing that is proved to cure it. The means the Galenist employed were chiefly diet and vegetable remedies, with the use of the lancet and other depleting agents. He attributed the four fundamental qualities to different vegetables, in four different degrees; thus chicory was cold in the fourth degree, pepper was hot in the fourth, endive was cold and dry in the second, and bitter almonds were hot in the first and dry in the second degree. When we say "cool as a cucumber," we are talking Galenism. The seeds of that vegetable ranked as one of "the four greater cold seeds" of this system. Galenism prevailed mostly in the south of Europe and France. The readers of Molière will have no difficulty in recalling some of its favorite modes of treatment, and the abundant mirth he extracted from them.

These Galenists were what we should call "herb-doctors" to-day. Their insignificant infusions lost credit after a time; their absurdly complicated mixtures excited contempt, and their nauseous prescriptions provoked loathing and disgust. A simpler and bolder practice found welcome in Germany, depending chiefly on mineral remedies, mercury, antimony, sulphur, arsenic, and the use, sometimes the secret use, of opium. Whatever we think of Paracelsus, the chief agent in the introduction of these remedies, and whatever limits we may assign to the use of these long-trusted mineral drugs, there can be no doubt that the chemical school, as it was called, did a great deal towards the expurgation of the old, overloaded, and repulsive pharmacopœia. We shall find evidence in the practice of our New-England physicians of the first century, that they often employed chemical remedies, and that, by the early part of the following century, their chief trust was in the few simple, potent drugs of Paracelsus.

We have seen that many of the practitioners of medicine, during the first century of New England, were clergymen. This relation between medicine and theology has existed from a very early period; from the Egyptian priest to the Indian medicine-man, the alliance has been maintained in one form or another. The partnership was very common among our British ancestors. Mr. Ward, the Vicar of Stratford-on-Avon, himself a notable

example of the union of the two characters, writing about 1660, says, —

“The Saxons had their blood-letters, but under the Normans physicke begunne in England; 300 years agoe itt was not a distinct profession by itself, but practised by men in orders, witness Nicholas de Ternham, the chief English physician and Bishop of Durham; Hugh of Everham, a physician and cardinal; Grysant, physician and pope; John Chambers, Dr. of Physick, was the first bishop of Peterborough; Paul Bush, a bachelor of divinitie in Oxford, was a man well read in physick as well as divinitie, he was the first bishop of Bristol.<sup>1</sup>

“Again in King Richard the Second’s time physicians and divines were not distinct professions; for one Tydeman, Bishop of Landaph and Worcester, was physician to King Richard the Second.”<sup>2</sup>

This alliance may have had its share in creating and keeping up the many superstitions which have figured so largely in the history of medicine. It is curious to see that a medical work left in manuscript by the Rev. Cotton Mather, and hereafter to be referred to, is running over with follies and superstitious fancies; while his contemporary and fellow-townsmen, William Douglass, relied on the same few simple remedies which, through Dr. Edward Holyoke and Dr. James Jackson, have come down to our own time, as the most important articles of the *materia medica*.

Let us now take a general glance at some of the conditions of the early settlers; and first, as to the healthfulness of the climate. The mortality of the season that followed the landing of the Pilgrims at Plymouth has been sufficiently accounted for. After this, the colonists seem to have found the new country agreeing very well with their English constitutions. Its clear air is the subject of eulogy. Its dainty springs of sweet water are praised not only by Higginson and Wood, but even the mischievous Morton says, that for its delicate waters Canaan came not near this country.<sup>3</sup> There is a tendency to dilate on these simple blessings, which reminds one a little of the Marchioness in Dickens’s story, with her orange-peel-and-water beverage. Still more does one feel the warmth of coloring, —

<sup>1</sup> Diary of the Rev. John Ward, A.M., p. 117. London, 1839.

<sup>2</sup> *Ib.*, p. 160.

<sup>3</sup> Chronicles of the Pilgrims, p. 129, *note*.

such as we expect from converts to a new faith, and settlers who want to entice others over to their clearings, — when Winslow speaks in 1621, of “abundance of roses, white, red, and *damask*; single, but very sweet indeed.”<sup>1</sup> Most of all, however, when, in the same connection, he says, “Here are grapes white and red, and very sweet and strong also.” This of our wild grape, a little vegetable Indian, which scalps a civilized man’s mouth, as his animal representative scalps his cranium. But there is something quite charming in Winslow’s picture of the luxury in which they are living. Lobsters, oysters, eels, muscles, fish, and fowl, delicious fruit, including the grapes aforesaid, — if they only had “kine, horses, and sheep,” he makes no question but men would live as contented here, as in any part of the world. We cannot help admiring the way in which they took their trials, and made the most of their blessings.

“And how *Content* they were,” says Cotton Mather, “when an Honest Man, as I have heard, inviting his Friends to a Dish of *Clams*, at the Table gave Thanks to Heaven, who *had given them to suck the abundance of the Seas, and of the Treasures hid in the Sands!*”<sup>2</sup>

Strangely enough, as it would seem, except for this buoyant determination to make the best of every thing, they hardly appear to recognize the difference of the climate from that which they had left. After almost three years’ experience, Winslow says, he can scarce distinguish New England from Old England, in respect of heat and cold, frost, snow, rain, winds, &c. The winter, he thinks (if there is a difference), is sharper and longer; but yet he may be deceived by the want of the comforts he enjoyed at home. He cannot conceive any climate to agree better with the constitution of the English, not being oppressed with extremity of heats, nor nipped by biting cold: —

“By which means, blessed be God, we enjoy our health, notwithstanding those difficulties we have undergone, in such a measure as would have been admired, if we had lived in England with the like means.”<sup>3</sup>

Edward Johnson, after mentioning the shifts to which they were put for food, says, —

“And yet, methinks, our children are as cheerful, fat, and lusty, with

<sup>1</sup> Chronicles of the Pilgrims, p. 234.

<sup>2</sup> Magnalia, book i. chap. 5.

<sup>3</sup> Chron. of the Pilgrims, 369, 370.

feeding upon those muscles, clams, and other fish, as they were in England with their fill of bread.”<sup>1</sup>

Higginson, himself a dyspeptic, “continually in physic,” as he says, and accustomed to dress in thick clothing, and to comfort his stomach with drink that was “both strong and stale,”<sup>2</sup>—the “jolly good ale and old,” I suppose, of free and easy Bishop Still’s song,—found that he both could and did oftentimes drink New-England water very well,—which he seems to look upon as a remarkable feat. He could go as light-clad as any, too, with only a light stuff cassock upon his shirt, and stuff breeches without linings. Two of his children were sickly: one—little misshapen Mary—died on the passage, and, in her father’s words, “was the first in our ship that was buried in the bowels of the great Atlantic sea;”<sup>3</sup> the other, who had been “most lamentably handled” by disease, recovered almost entirely “by the very wholesomeness of the air, altering, digesting, and drying up the cold and crude humors of the body.” Wherefore, he thinks it a wise course for all cold complexions to come to take physic in New England, and ends with those often quoted words, that “a sup of New England’s air is better than a whole draught of Old England’s ale.”<sup>4</sup> Mr. Higginson died, however, “of a hectic fever,” a little more than a year after his arrival.

The medical records which I shall cite, show that the colonists were not exempt from the complaints of the Old World. Besides the common diseases to which their descendants are subject, there were two others,—to say nothing of the dreaded small-pox, which later medical science has disarmed,—little known among us at the present day, but frequent among the first settlers. The first of these was the scurvy, already mentioned, of which Winthrop speaks in 1630, saying, that it proved fatal to those who fell into discontent, and lingered after their former conditions in England; the poor homesick creatures in fact, whom we so forget in our florid pictures of the early times of the little band in the wilderness. Many who were suffering from scurvy, got well when the “Lyon” arrived from England, bringing store of juice of lemons.<sup>5</sup> The Governor speaks of another case in

<sup>1</sup> Chron. of Mass., p. 352, *note*.

<sup>2</sup> *Ib.*, pp. 251, 252.

<sup>3</sup> *Ib.*, p. 223.

<sup>4</sup> *Ib.*, p. 252.

<sup>5</sup> Winthrop’s New England, vol. i. pp. 44, 45.

1644; and it seems probable that the disease was not of rare occurrence.

The other complaint from which they suffered, but which has nearly disappeared from among us, was intermittent fever, or fever and ague. I investigated the question as to the prevalence of this disease in New England, in a dissertation, which was published in a volume with other papers, in the year 1836. I can add little to the facts there recorded. One which escaped me was, that Joshua Scottow, in "Old Men's Tears," dated 1691, speaks of "shaking agues," as among the trials to which they had been subjected. The outline map of New England, accompanying the dissertation above referred to, indicates all the places where I had evidence that the disease had originated. It was plain enough that it used to be known in many places where it has long ceased to be feared. Still it was and is remarkable to see what a clean bill of health in this particular respect our barren soil inherited with its sterility. There are some malarious spots on the edge of Lake Champlain, and there have been some temporary centres of malaria, within the memory of man, on one or more of our Massachusetts rivers, but these are harmless enough, for the most part, unless the millers dam them, when they are apt to retaliate with a whiff from their meadows, that sets the whole neighborhood shaking with fever and ague.

The Pilgrims of the "Mayflower" had with them a good physician, a man of standing, a deacon of their church, one whom they loved and trusted, Dr. Samuel Fuller. But no medical skill could keep cold and hunger and bad food, and, probably enough, desperate homesickness in some of the feebler sort, from doing their work. No detailed record remains of what they suffered or what was attempted for their relief during the first sad winter. The graves of those who died were levelled and sowed with grain that the losses of the little band might not be suspected by the savage tenants of the wilderness,<sup>1</sup> and their story remains untold.

Of Dr. Fuller's practice, at a later period, we have an account in a letter of his to Governor Bradford, dated June, 1630. "I have been to Matapan" (now Dorchester), he says, "and let some

<sup>1</sup> Holmes's Annals, vol. i. p. 168, *note*.

twenty of those people blood.”<sup>1</sup> Such wholesale depletion as this, except with avowed homicidal intent, is quite unknown in these days; though I once saw the noted French surgeon, Lisfranc, in a fine phlebotomizing frenzy, order some ten or fifteen patients, taken almost indiscriminately, to be bled in a single morning.

Dr. Fuller's two visits to Salem, at the request of Governor Endicott, seem to have been very satisfactory to that gentleman.<sup>2</sup> Morton, the wild fellow of Merry Mount, gives a rather questionable reason for the Governor's being so well pleased with the physician's doings. The names under which he mentions the two personages, it will be seen, are not intended to be complimentary. “Dr. Noddy did a great cure for Captain Littleworth. He cured him of a disease called a wife.”<sup>3</sup> William Gager, who came out with Winthrop, is spoken of as “a right godly man and skilful chyrurgeon,” but died of a malignant fever not very long after his arrival.<sup>4</sup>

Two practitioners of the ancient town of Newbury are entitled to special notice, for different reasons. The first is Dr. John Clark, who is said by tradition to have been the first regularly educated physician who resided in New England. His portrait, in close-fitting skull-cap, with long locks and venerable flowing beard, is familiar to our eyes on the wall of our Society's antechamber. His left hand rests upon a skull, his right hand holds an instrument which deserves a passing comment. It is a *trephine*, a surgical implement for cutting round pieces out of broken skulls, so as to get at the fragments which have been driven in, and lift them up. It has a handle like that of a gimlet, with a claw like a hammer, to lift with, I suppose, which last contrivance I do not see figured in my books. But the point I refer to is this: the old instrument, the *trepan*, had a handle like a wimble,—what we call a brace or bit-stock. The *trephine* is not mentioned at all in Peter Lowe's book, London, 1634; nor in Wiseman's great work on Surgery, London, 1676; nor in the translation of Dionis, published by Jacob Tonsion, in 1710. In fact it was only brought into more general use by Cheselden and Sharpe so late as the beginning of the last

<sup>1</sup> Chron. of Mass., p. 312.

<sup>2</sup> *Ib.*, p. 32.

<sup>3</sup> *Ib.*, p. 131.

<sup>4</sup> Winthrop's New England, vol. i. p. 33.

century.<sup>1</sup> As John Clark died in 1661, it is remarkable to see the last fashion in the way of skull-sawing contrivances in his hands,—to say nothing of the claw on the handle, and a Hey's saw, so called in England, lying on the table by him, and painted there more than a hundred years before Hey was born. This saw is an old invention, perhaps as old as Hippocrates, and may be seen figured in the *Armamentarium Chirurgicum* of Scultetus, or in the Works of Ambroise Paré.

Dr. Clark is said to have received a diploma before he came, for skill in lithotomy.<sup>2</sup> He loved horses, as a good many doctors do, and left a good property as they all ought to do. His grave and noble presence, with the few facts concerning him, told with more or less traditional authority, give us the feeling that the people of Newbury, and afterwards of Boston, had a wise and skilful medical adviser and surgeon in Dr. John Clark.

The venerable town of Newbury had another physician who was less fortunate. The following is a court record of 1652:—

“This is to certify whom it may concern, that we the subscribers, being called upon to testify against [doctor] William Snelling for words by him uttered, affirm that being in way of merry discourse, a health being drank to all friends, he answered, —

‘I'll pledge my friends,  
And for my foes  
A plague for their heels  
And, —

[a similar malediction on the other extremity of their feet.]

“Since when he hath affirmed that he only intended the proverb used in the west country, nor do we believe he intended otherwise.

[Signed],

WILLIAM THOMAS.

THOMAS MILWARD.

“March 12<sup>th</sup> 1651, All which I acknowledge, and I am sorry I did not expresse my intent, or that I was so weak as to use so foolish a proverb.

[Signed],

GULIELMUS SNELLING.”

Notwithstanding this confession and apology, the record tells us, that “William Snelling in his presentment for *cursing* is fined ten shillings and the fees of court.”<sup>3</sup>

<sup>1</sup> British and For. Med. Rev., vol. xvi. p. 49.

<sup>2</sup> Thacher, Med. Biography, p. 222.

<sup>3</sup> Coffin, Hist. of Newbury, p. 55.

I will mention one other name among those of the Fathers of the medical profession in New England. The "apostle" Eliot says, writing in 1647, "We never had but one anatomy in the country, which Mr. Giles Firman, now in England, did make and read upon very well."<sup>1</sup>

Giles Firmin, as the name is commonly spelled, practised physic in this country for a time. He seems to have found it a poor business; for, in a letter to Governor Winthrop, he says, "I am strongly sett upon to studye divinitie: my studyes else must be lost, for physick is but a meene helpe."<sup>2</sup>

Giles Firmin's Lectures on Anatomy were the first scientific teachings of the New World. While the Fathers were enlightened enough to permit such instructions, they were severe in dealing with quackery; for, in 1631, our court records show that one Nicholas Knopp, or Knapp, was sentenced to be fined or whipped "for taking upon him to cure the scurvey by a water of noe worth nor value, which he solde att a very deare rate."<sup>3</sup> Empty purses or sore backs would be common with us to day if such a rule were enforced.

Besides the few worthies spoken of, and others whose names I have not space to record, we must remember that there were many clergymen who took charge of the bodies as well as the souls of their patients, among them two Presidents of Harvard College, — Charles Chauncy and Leonard Hoar, — and Thomas Thacher, first minister of the "Old South," author of the earliest medical treatise printed in the country,<sup>4</sup> whose epitaph in Latin and Greek, said to have been written by Eleazer, an "Indian Youth" and a member of the Senior Class of Harvard College, may be found in the "Magnalia."<sup>5</sup> I miss this noble savage's name in our triennial catalogue; and, as there is many a slip between the cup and lip, one is tempted to guess that he may have lost his degree by some display of his native instinct, — possibly a flourish of the tomahawk or scalping-knife. However this may have been, the good man he celebrated was a notable instance of the

<sup>1</sup> Hist. Coll. 3d Series, vol. iv. p. 57.

<sup>2</sup> Winthrop Papers in Hist. Coll. 4th Series, vol. vii. p. 273.

<sup>3</sup> Mass. Col. Court Records, vol. i. p. 63.

<sup>4</sup> "A Brief Rule to guide the Common People in Small-pox and Measles." 1674.

<sup>5</sup> Book iii. chap. 26.

*Angelical Conjunction*, as the author of the "Magnalia" calls it, of the offices of clergyman and medical practitioner.

Michael Wigglesworth, author of the "Day of Doom," attended the sick "not only as a *Pastor*, but as a *Physician* too, and this, not only in his own town, but also in all those of the vicinity."<sup>1</sup> Mather says of the sons of Charles Chauncy, "All of these did, while they had Opportunity, Preach the Gospel; and most, if not all of them, like their excellent *Father* before them, had an eminent skill in physick added unto their other accomplishments," &c. Roger Williams is said to have saved many in a kind of pestilence which swept away many Indians.

To these names must be added, as sustaining a certain relation to the healing art, that of the first Governor Winthrop, who is said by John Cotton to have been "*Help* for our Bodies by *Physick* [and] for our Estates by Law,"<sup>2</sup> and that of his son, the Governor of Connecticut, who, as we shall see, was as much physician as magistrate.

I had submitted to me for examination, in 1862, a manuscript found among the Winthrop Papers, marked with the superscription, "For my worthy friend Mr. Wintrop," dated in 1643, London, signed Edward Stafford, and containing medical directions and prescriptions. It may be remembered by some present that I wrote a report on this paper, which was published in the "Proceedings" of this Society. Whether the paper was written for Governor John Winthrop, of Massachusetts, or for his son, Governor John, of Connecticut, there is no positive evidence that I have been able to obtain. It is very interesting, however, as giving short and simple practical directions, such as would be most like to be wanted and most useful, in the opinion of a physician in repute of that day.

The diseases prescribed for are *plague*, small-pox, fevers, king's evil, insanity, falling-sickness, and the like; with such injuries as broken bones, dislocations, and burning with gunpowder. The remedies are of three kinds: simples, such as St. John's wort, Clown's all-heal, elder, parsley, maidenhair; mineral drugs, such as lime, saltpetre, Armenian bole, crocus metallorum, or sulphuret of antimony; and thaumaturgic or mystical, of which the

<sup>1</sup> Cotton Mather's Funeral Sermon, preached Jan. 24, 1705.

<sup>2</sup> *Ib.*, book ii. chap. 4.

chief is, "My black powder against the plague, small-pox; purples, all sorts of feavers; Poyson; either, by Way of Prevention or after Infection." This marvellous remedy was made by putting live toads into an earthen pot so as to half fill it, and baking and burning them "in the open ayre, not in an house," — concerning which latter possibility I suspect Madam Winthrop would have had something to say, — until they could be reduced by pounding, first into a brown, and then into a black, powder. Blood-letting in some inflammations, fasting in the early stage of fevers, and some of those peremptory drugs with which most of us have been well acquainted in our time, the infragant memories of which I will not pursue beyond this slight allusion, are among his remedies.

The Winthrops, to one of whom Dr. Stafford's directions were addressed, were the medical as well as the political advisers of their fellow-citizens for three or four successive generations. One of them, Governor John, of Connecticut, practised so extensively, that, but for his more distinguished title in the State, he would have been remembered as the Doctor. The fact that he practised in another colony, for the most part, makes little difference in the value of the records we have of his medical experience, which have fortunately been preserved, and give a very fair idea, in all probability, of the way in which patients were treated in Massachusetts, when they fell into intelligent and somewhat educated hands, a little after the middle of the seventeenth century.

I have before me, while writing, a manuscript collection of the medical cases treated by him, and recorded at the time in his own hand, which has been intrusted to me by our President, his descendant. They are generally marked Hartford, and extend from the year 1657 to 1669. From these manuscripts, and from the letters printed in the Winthrop Papers published by our Society, I have endeavored to obtain some idea of the practice of Governor John Winthrop, Jr. The learned eye of Mr. Pulsifer would have helped me, no doubt, as it has done in other cases; but I have ventured this time to attempt finding my own way among the hieroglyphics of these old pages. By careful comparison of many prescriptions, and by the aid of Schröder, Salmon, Culpeper, and other old compilers, I have

deciphered many of his difficult paragraphs with their mysterious recipes.

The Governor employed a number of the simples dear to ancient women, — eilecampane and elder and wormwood and anise and the rest; but he also employed certain mineral remedies, which he almost always indicates by their ancient symbols, or by a name which should leave them a mystery to the vulgar. I am now prepared to reveal the mystic secrets of the Governor's beneficent art, which rendered so many good and great as well as so many poor and dependent people his debtors — at least, in their simple belief — for their health and their lives.

His great remedy, which he gave oftener than any other, was *nitre*; which he ordered in doses of twenty or thirty grains to adults, and of three grains to infants. Measles, colic, sciatica, headache, giddiness, and many other ailments, all found themselves treated, and I trust bettered, by nitre; a pretty safe medicine in moderate doses, and one not likely to keep the good Governor awake at night, thinking whether it might not kill, if it did not cure. We may say as much for spermaceti, which he seems to have considered "the sovereign'st thing on earth" for inward bruises, and often prescribes after falls and similar injuries.

One of the next remedies, in point of frequency, which he was in the habit of giving, was (probably *diaphoretic*) *antimony*; a mild form of that very active metal, and which, mild as it was, left his patients very commonly with a pretty strong conviction that they had been taking *something* that did not exactly agree with them. Now and then he gave a little iron or sulphur or calomel, but very rarely; occasionally, a good, honest dose of rhubarb or jalap; a taste of stinging horseradish, oftener of warming guaiacum; sometimes, an anodyne, in the shape of mithridate, — the famous old farrago, which owed its virtue to poppy juice;<sup>1</sup> very often, a harmless powder of coral; less frequently, an inert prescription of pleasing amber; and (let me say it softly within possible hearing of his honored descendant), twice or oftener, — let us hope as a last resort, — an electuary

<sup>1</sup> This is the remedy which a Boston divine tried to simplify. See "Electuarium Novum Alexipharmacum," by Rev. Thomas Harward, lecturer at the Royal Chappell. Boston, 1732. This tract is in our Society's library.

of *millipedes*, — sowbugs, if we must give them their homely English name. One or two other prescriptions, of the many unmentionable ones which disgraced the pharmacopœia of the seventeenth century, are to be found, but only in very rare instances, in the faded characters of the manuscript.

The excellent Governor's accounts of diseases are so brief, that we get only a very general notion of the complaints for which he prescribed. Measles and their consequences are at first more prominent than any other one affection, but the common infirmities of both sexes and of all ages seem to have come under his healing hand. Fever and ague appears to have been of frequent occurrence.

His published correspondence shows, that many noted people were in communication with him as his patients. Roger Williams wants a little of his medicine for Mrs. Weekes's daughter; worshipful John Haynes is in receipt of his powders; troublesome Captain Underhill wants "a little white vitterall" for his wife, and something to cure his wife's friend's neuralgia (I think his wife's friend's husband had a little rather have had it sent by the hands of Mrs. Underhill, than by those of the gallant and discursive captain); and pious John Davenport says, *his* wife "tooke but one halfe of one of the papers" (which probably contained the medicine he called *rubila*), "but could not beare the taste of it, and is discouraged from taking any more;" and honored William Leete asks for more powders for his "poore little daughter" Graciana, though he found it "hard to make her take it," delicate, and of course sensitive, child as she was, languishing and dying before her time, in spite of all the bitter things she swallowed, — God help all little children in the hands of dosing doctors and howling dervishes! Restless Samuel Gorton, now tamed by the burden of fourscore and two years, writes so touching an account of his infirmities, and expresses such overflowing gratitude for the relief he has obtained from the Governor's prescriptions, wondering how "a thing so little in quantity, so little in sent, so little in taste, and so little to sence in operation, should beget and bring forth such effects," that we repent our hasty exclamation, and bless the memory of the good Governor, who gave relief to the worn-out frame of our long-departed brother, the sturdy old heretic of Rhode Island.

What was that medicine which so frequently occurs in the printed letters under the name of "rubila"? It is evidently a secret remedy, and, so far as I know, has not yet been made out. I had almost given it up in despair, when I found what appears to be a key to the mystery. In the vast multitude of prescriptions contained in the manuscripts, most of them written in symbols, I find one which I thus interpret:—

"Four grains of (diaphoretic) antimony, with twenty grains of nitre, with a little salt of tin, *making rubila.*" Perhaps something was added to redden the powder, as he constantly speaks of "rubifying" or "viridating" his prescriptions; a very common practice of prescribers, when their powders look a little too much like plain salt or sugar.

Waitstill Winthrop, the Governor's son, "was a skilful physician," says Mr. Sewall, in his funeral sermon; "and generously gave, not only his *advice*, but also his *Medicines*, for the healing of the Sick, which, by the Blessing of God, were made successful for the recovery of many."<sup>1</sup> His son John, a member of the Royal Society, speaks of himself as "Dr. Winthrop," and mentions one of his own prescriptions in a letter to Cotton Mather. Our President tells me that there was an heirloom of the ancient skill in his family, within his own remembrance, in the form of a certain precious eye-water, to which the late President John Quincy Adams ascribed rare virtue, and which he used to obtain from the possessor of the ancient recipe.

These inherited prescriptions are often treasured in families, I do not doubt, for many generations. When I was yet of trivial age, and suffering occasionally, as many children do, from what one of my Cambridgeport schoolmates used to call the "ager,"—meaning thereby toothache or faceache,—I used to get relief from a certain plaster which never went by any other name in the family than "Dr. Oliver."

Dr. James Oliver was my great-great-grandfather, graduated in 1680, and died in 1703. This was, no doubt, one of his *nostrums*; for *nostrum*, as is well known, means nothing more

<sup>1</sup> See also his epitaph in "Life and Letters of John Winthrop," by his descendant, Hon. Robert C. Winthrop.

than *our own* or *my own* particular medicine, or other possession or secret, and physicians in old times used to keep their choice recipes to themselves a good deal, as we have had occasion to see.

Some years ago I found among my old books a small manuscript marked "James Oliver. This Book Begun Aug. 12, (16)85." It is a rough sort of account-book, containing among other things prescriptions for patients, and charges for the same, with counter-charges for the purchase of medicines and other matters. Dr. Oliver practised in Cambridge, where may be seen his tomb with inscriptions, and with sculptured figures that look more like Diana of the Ephesians, as given in Calmet's Dictionary, than like any angels admitted into good society here or elsewhere.

I do not find any particular record of what his patients suffered from, but I have carefully copied out the remedies he mentions, and find them to form a very respectable catalogue. Besides the usual simples, elder, parsley, fennel, saffron, snake-root, wormwood, I find the Elixir Proprietatis, with other elixirs and cordials, as if he rather fancied warming medicines; but he called in the aid of some of the more energetic remedies, including iron, and probably mercury, as he bought two pounds of it at one time.

The most interesting item is his bill against the estate of Samuel Pason, of Roxbury, for services during his last illness. He attended this gentleman—for such he must have been, by the amount of physic which he took, and which his heirs paid for—from June 4th, 1696, to September 3d, of the same year—three months. I observe he charges for *visits* as well as for medicines, which is not the case in most of his bills. He opens the attack with a carminative appeal to the visceral conscience, and follows it up with good hard-hitting remedies for dropsy,—as I suppose the disease would have been called,—and finishes off with a rallying dose of hartshorn and iron.

It is a source of honest pride to his descendant that his bill, which was honestly paid, as it seems to have been honorably earned, amounted to the handsome sum of seven pounds and two shillings. Let me add that he repeatedly prescribes plasters, one of which was very probably the "Dr. Oliver"

that soothed my infant griefs, and for which I blush to say that my venerated ancestor received from Goodman Hancock the painfully exiguous sum of no pounds, no shillings, and six-pence.

I have illustrated the practice of the first century, from the two manuscripts I have examined, as giving an impartial idea of its every-day methods. The Governor, Johannes Secundus, it is fair to remember, was an amateur practitioner, while my ancestor was a professed physician. Comparing their modes of treatment with the many scientific follies still prevailing in the Old World, and still more with the extraordinary theological superstitions of the community in which they lived, we shall find reason, I think, to consider the art of healing as in a comparatively creditable state during the first century of New England.

In addition to the evidence as to methods of treatment furnished by the manuscripts I have cited, I subjoin the following document, to which my attention was called by Dr. Shurtleff, our present Mayor. This is a letter of which the original is to be found in vol. lxxix. page 10 of the "Archives" preserved at the State House in Boston. It will be seen that what the surgeon wanted consisted chiefly of opiates, stimulants, cathartics, plasters, and materials for bandages. The complex and varied formulæ have given place to simpler and often more effective forms of the same remedies; but the list and the manner in which it is made out are proofs of the good sense and schooling of the surgeon, who, it may be noted, was in such haste that he neglected all his stops. He might well be in a hurry, as on the very day upon which he wrote, a great body of Indians—supposed to be six or seven hundred—appeared before Hatfield; and twenty-five resolute young men of Hadley, from which town he wrote, crossed the river and drove them away.<sup>1</sup>

HADLY May 30: 76

M<sup>r</sup> RAWSON S<sup>r</sup>

What we have rec<sup>d</sup> by Tho: Houey the past month is not the cheifest of our wants as you have love for poor wounded I pray let us not want for these following medicines if you have not a speedy conveyance of them I pray send on purpose they are those things mentioned in

<sup>1</sup> Holmes's Annals, vol. i. p. 381.

my former letter but to prevent future mistakes I have wrote them att large wee have great want with the greatest hast and speed let us be supplied

S<sup>r</sup>Y<sup>r</sup> Ser<sup>t</sup>

WILL LOCKE

<sup>1</sup> Imp. Ung <sup>t</sup> Basilic . . . . .	℞ ij	Oxyroceum . . . . .	℞ j
<sup>1</sup> Liniment Arcei . . . . .	℞ ij	Emp: Diachyl: Cum Gum . . . . .	℞ j
Ung <sup>t</sup> Nervin: . . . . .	℞ ij	De betonica . . . . .	℞ j
Ol: Rosarum . . . . .	℞ ij	Flor: chamemæli . . . . .	℞ j
<sup>2</sup> Ol: terebinth: . . . . .	℞ ij	Flor: meliloti . . . . .	℞ j
Mithridat: . . . . .	℞ j	Sal: prunellæ . . . . .	℥ iiij
Diascordii . . . . .	℞ j	pul: Aloes . . . . .	℥ iiij
theriac: Andromac: . . . . .	℞ ss	<sup>1</sup> Sem: Anisi Santonicæ an . . . . .	℥ iiij
Licortia . . . . .	℞ j	Aq: theriacalis . . . . .	℞ ij
Hord: Gallic: . . . . .	℞ iiij	Spt: Cinnamomi . . . . .	℞ j
Empl: Diapal: . . . . .	℞ ij	Syr: Gariophyllor: . . . . .	℞ ij
Empl: De Minio . . . . .	℞ ij	Syr: Rosarum Solut: . . . . .	℞ ij
Empl: De Meliloti . . . . .	℞ ij	. Croci . . . . .	℥ ss
Empl: paracelsi . . . . .	℞ j	Old linnin as much as you can get	

WILL: LOCKE

[Direction] for M<sup>r</sup> Edward Rawson  
 Secr<sup>s</sup>: w<sup>th</sup> hast & speed humbly  
 present These in  
 Boston

[Endorsed]

Mr Locke's Letter Rec<sup>d</sup> from the Governor 13 June & acquainted y<sup>e</sup> Council with it but could not obtaine any thing to be sent in answer thereto 13 June 1676

I have given some idea of the chief remedies used by our earlier physicians, which were both Galenic and chemical; that is, vegetable and mineral. They, of course, employed the usual perturbing medicines which Montaigne says are the chief reliance of their craft. There were, doubtless, individual practitioners who employed special remedies with exceptional boldness and perhaps success. Mr. Eliot is spoken of, in a letter of William Leete to Winthrop, Junior, as being under Mr. Greenland's mercurial administrations.<sup>3</sup> The latter was probably enough one of these specialists.

There is another class of remedies which appears to have been employed occasionally, but, on the whole, is so little prominent as to imply a good deal of common sense among the medical practitioners, as compared with the superstitions prevailing around them. I have said that I have caught the good Governor,

<sup>1</sup> Crossed out in the letter.<sup>2</sup> "The last was broken."<sup>3</sup> Hist. Coll. 4th Series, vol. vii. p. 575.

now and then, prescribing the electuary of millipedes; but he is entirely excused by the almost incredible fact that they were retained in the *materia medica* so late as when Rees's Cyclopædia was published, and we there find the directions formerly given by the College of Edinburgh for their preparation. Once or twice we have found him admitting still more objectionable articles into his *materia medica*; in doing which, I am sorry to say that he could plead grave and learned authority. But these instances are very rare exceptions in a medical practice of many years, which is, on the whole, very respectable, considering the time and circumstances.

Some remedies of questionable though not odious character appear occasionally to have been employed by the early practitioners, but they were such as still had the support of the medical profession. Governor John Winthrop, the first, sends for East-Indian bezoar, with other commodities he is writing for.<sup>1</sup> Governor Endicott sends him one he had of Mr. Humfrey.<sup>2</sup> I hope it was genuine, for they cheated infamously in the matter of this concretion, which ought to come out of an animal's stomach, but the real history of which resembles what is sometimes told of modern sausages. There is a famous law-case of James the First's time, in which a goldsmith sold a hundred pounds' worth of what he called bezoar, which was proved to be false, and the purchaser got a verdict against him. Governor Endicott also sends Winthrop a unicorn's horn, which was the property of a certain Mrs. Beggary, who, in spite of her name, seems to have been rich in medical knowledge and possessions.<sup>3</sup> The famous Thomas Bartholinus wrote a treatise on the virtues of this fabulous-sounding remedy, which was published in 1641, and republished in 1678.

The "antimonial cup," a drinking vessel made of that metal, which, like our quassia-wood cups, might be filled and emptied *in sæcula sæculorum* without exhausting its virtues, is mentioned by Matthew Cradock, in a letter to the elder Winthrop, but in a doubtful way, as it was thought, he says, to have shortened the days of Sir Nathaniel Riche; and Winthrop himself, as I think, refers to its use, calling it simply "the cup."<sup>4</sup> An antimonial

<sup>1</sup> Hist. of N. England, vol. ii. p. 385. Appendix.

<sup>2</sup> Hist. Coll. 4th Series, vol. vii. p. 156.

<sup>3</sup> Ibid.

<sup>4</sup> Hist. of N. England, vol. i. p. 394.

cup is included in the inventory of Samuel Seabury, who died 1680, and is valued at five shillings.<sup>1</sup> There is a treatise entitled "The Universall Remedy, or the Vertues of the Antimoniall Cup, By John Evans, Minister and Preacher of God's Word, London, 1634," in our own Society's library.

One other special remedy deserves notice, because of native growth. I do not know when Culver's root, *Leptandra Virginica* of our National Pharmacopœia, became noted, but Cotton Mather, writing in 1716 to John Winthrop, of New London, speaks of it as famous for the cure of consumptions, and wishes to get some of it, through his mediation, for Katharine, his eldest daughter.<sup>2</sup> He gets it, and gives it to the "poor damsel," who is languishing, as he says, and who dies the next month,<sup>3</sup>—all the sooner, I have little doubt, for this uncertain and violent drug with which the meddlesome pedant tormented her in that spirit of well-meant but restless quackery, which could touch nothing without making mischief, not even a quotation, and yet proved at length the means of bringing a great blessing to our community, as we shall see by and by; so does Providence use our very vanities and infirmities for its wise purposes.

Externally, I find the practitioners on whom I have chiefly relied, used the plasters of Paracelsus, of melilot, *diachylon*, and probably *diaphœnicon*, all well known to the old pharmacopœias, and some of them to the modern ones,—to say nothing of "my yellow salve," of Governor John, the second, for the composition of which we must apply to his respected descendant.

The authors I find quoted, are Barbette's Surgery, Camerarius on Gout, and Wecherus, of all whom notices may be found in the pages of Haller and Vanderlinden; also, Reed's Surgery, and Nicholas Culpeper's Practice of Physic and Anatomy, the last as belonging to Samuel Seabury, chirurgion, before mentioned. Nicholas Culpeper was a shrewd charlatan, and as impudent a varlet as ever prescribed for a colic; but knew very well what he was about, and badgers the College with great vigor. A copy of Spigelius's famous Anatomy, in the Boston Athenæum, has the names of Increase and Samuel

<sup>1</sup> Thacher's Medical Biography, p. 18.

<sup>2</sup> Mather Papers in Hist. Coll. 4th Series, vol. viii. p. 420.

<sup>3</sup> Ibid, note.

Mather written in it, and was doubtless early overhauled by the youthful Cotton, who refers to the great anatomist's singular death, among his curious stories in the "Magnalia," and quotes him among nearly a hundred authors whom he cites in his manuscript "The Angel of Bethesda." Dr. John Clark's "books and instruments, with several chirurgery materials in the closet,"<sup>1</sup> were valued in his inventory at sixty pounds; Dr. Matthew Fuller, who died in 1678, left a library valued at ten pounds; and a surgeon's chest and drugs, valued at sixteen pounds.<sup>2</sup>

Here we leave the first century and all attempts at any further detailed accounts of medicine and its practitioners. It is necessary to show in a brief glance what had been going on in Europe during the latter part of that century, the first quarter of which had been made illustrious in the history of medical science, by the discovery of the circulation.

Charles Barbeyrac, a Protestant in his religion, was a practitioner and teacher of medicine at Montpellier. His creed was in the way of his obtaining office; but the young men followed his instructions with enthusiasm. Religious and scientific freedom breed in and in, until it becomes hard to tell the family of one from that of the other. Barbeyrac threw overboard the old complex medical farragos of the pharmacopœias, as his church had disburdened itself of the popish ceremonies.

Among the students who followed his instructions, were two Englishmen: one of them, John Locke, afterwards author of an "Essay on the Human Understanding," three years younger than his teacher; the other, Thomas Sydenham, five years older. Both returned to England. Locke, whose medical knowledge is borne witness to by Sydenham, had the good fortune to form a correct opinion on a disease from which the Earl of Shaftesbury was suffering, which led to an operation that saved his life. Less felicitous was his experience with a certain *ancilla culinaria virgo*,— which I am afraid would in those days have been translated kitchen-wench, instead of lady of the culinary department,— who turned him off after she had got tired of him, and called in another practitioner.<sup>3</sup> This helped,

<sup>1</sup> Thacher's Med. Biog., p. 222.

<sup>2</sup> *Ib.*, p. 18.

<sup>3</sup> Locke and Sydenham, p. 124. By John Brown, M.D. Edinburgh, 1866.

perhaps, to spoil a promising doctor, and make an immortal metaphysician. At any rate, Locke laid down the professional wig and cane, and took to other studies.

The name of Thomas Sydenham is as distinguished in the history of medicine, as that of John Locke in philosophy. As Barbeyrac was found in opposition to the established religion, as Locke took the rational side against orthodox Bishop Stillingfleet, so Sydenham went with Parliament against Charles, and was never admitted a Fellow by the College of Physicians, which, after he was dead, placed his bust in their hall by the side of that of Harvey.

What Sydenham did for medicine was briefly this: he studied the course of diseases carefully, and especially as affected by the particular season; to patients with fever he gave air and cooling drinks, instead of smothering and heating them, with the idea of sweating out their disease; he ordered horse-back exercise to consumptives; he, like his teacher, used few and comparatively simple remedies; he did not give any drug at all, if he thought none was needed, but let well enough alone. He was a sensible man, in short, who applied his common sense to diseases which he had studied with the best light of science that he could obtain.

The influence of the reform he introduced must have been more or less felt in this country, but not much before the beginning of the eighteenth century, as his great work was not published until 1675, and then in Latin. I very strongly suspect that there was not so much to reform in the simple practice of the physicians of the new community, as there was in that of the learned big-wigs of the "College," who valued their remedies too much in proportion to their complexity, and the extravagant and fantastic ingredients which went to their making.

During the memorable century that bred and bore the Revolution, the medical profession gave great names to our history. But John Brooks belonged to the State, and Joseph Warren belongs to the country and mankind, and to speak of them would lead me beyond my limited subject. There would be little pleasure in dwelling on the name of Benjamin Church; and as for the medical politicians, like Elisha Cooke in the early

part of the century, or Charles Jarvis, the "bald eagle of Boston," in its later years, whether their practice was heroic or not, their patients were, for he is a bold man who trusts one that is making speeches and coaxing voters, to meddle with the internal politics of his corporeal republic.

One great event stands out in the medical history of this eighteenth century; namely, the introduction of the practice of inoculation for small-pox. Six epidemics of this complaint had visited Boston in the course of a hundred years.<sup>1</sup> Prayers had been asked in the churches, for more than a hundred sick in a single day, and this many times. About a thousand persons had died in a twelvemonth, we are told, and, as we may infer, chiefly from this cause.<sup>2</sup>

In 1721, this disease, after a respite of nineteen years, again appeared as an epidemic. In that year it was that Cotton Mather, browsing, as was his wont, on all the printed fodder that came within reach of his ever-grinding mandibles, came upon an account of inoculation as practised in Turkey, contained in the *Philosophical Transactions*. He spoke of it to several physicians, who paid little heed to his story; for they knew his medical whims, and had probably been bored, as we say now-a-days, many of them, with listening to his "Angel of Bethesda," and satiated with his speculations on the *Nishmath Chajim*.

The Reverend Mather, — I use a mode of expression he often employed when speaking of his honored brethren, — the Reverend Mather was right this time, and the irreverent doctors who laughed at him were wrong. One only of their number disputes his claim to giving the first impulse to the practice in Boston. This is what that person says: —

"The Small-Pox spread in *Boston, New England, A. 1721*, and the Reverend Dr. *Cotton Mather*, having had the use of these Communications from Dr. *William Douglass*" (that is, the writer of these words); "surreptitiously, without the knowledge of his Informer, that he might have the honour of a New fangled notion, sets an Undaunted Operator to work, and in this Country about 290 were inoculated."<sup>3</sup>

All this has not deprived Cotton Mather of the credit of sug-

<sup>1</sup> W. Douglass's Diss. concerning Inoc., p. 25. Boston, 1730.

<sup>2</sup> *Magnalia*, book i. "The Bostonian Ebenezer."

<sup>3</sup> Diss. concerning Inoculation, p. 2.

gesting, and a bold and intelligent physician of the honor of carrying out, the new practice. On the twenty-seventh day of June, 1721, Zabdiel Boylston, of Boston, inoculated his only son for small-pox, — the first person ever submitted to the operation in the New World. The story of the fierce resistance to the introduction of the practice; of how Boylston was mobbed, and Mather had a hand-grenade thrown in at his window; of how William Douglass, the Scotchman, “always positive, and sometimes accurate,” as was neatly said of him, at once depreciated the practice and tried to get the credit of suggesting it, and Lawrence Dalhonde, the Frenchman, testified to its destructive consequences; of how Edmund Massey, lecturer at St. Albans, preached against sinfully endeavoring to alter the course of nature by presumptuous interposition, which he would leave to the atheist and the scoffer, the heathen and unbeliever, while in the face of his sermon, afterwards reprinted in Boston, many of our New-England clergy stood up boldly in defence of the practice, — all this has been told so well and so often that I spare you its details. Set this good hint of Cotton Mather against that letter of his to John Richards, recommending the search after witch-marks, and the application of the water-ordeal, which means throw your grandmother into the water, if she has a mole on her arm; — if she swims, she is a witch and must be hung; if she sinks, the Lord have mercy on her soul!

Thus did America receive this great discovery, destined to save thousands of lives, *via* Boston, from the hands of one of our own Massachusetts physicians.

The year 1735 was rendered sadly memorable by the epidemic of the terrible disease known as “throat-distemper,” and regarded by many as the same as our “diphtheria.” Dr. Holyoke thinks the more general use of mercurials in inflammatory complaints dates from the time of their employment in this disease, in which they were thought to have proved specially useful.<sup>1</sup>

At some time in the course of this century, medical practice had settled down on four remedies as its chief reliance. When Dr. Holyoke, nearly seventy years ago, received young Mr. James Jackson as his student, he pointed to the labelled drawers and bottles all around his office, — for he was his own apothecary, —

<sup>1</sup> Memoir of Edward A. Holyoke, M.D., LL.D., p. 64. Boston, 1829.

and said, "I seem to have here a great number and variety of medicines; but I may name four, which are of more importance than all the rest put together; namely, Mercury, Antimony, Opium, and Peruvian Bark."<sup>1</sup> I doubt if either of them remembered, that, nearly seventy years before that, in 1730, Dr. William Douglass, the disputatious Scotchman, mentioned those same four remedies, in the dedication of his quarrelsome essay on inoculation, as the most important ones in the hands of the physicians of his time.

In the "Proceedings" of this Society for the year 1863 is a very pleasant paper by the late Dr. Ephraim Eliot, giving an account of the leading physicians of Boston during the last quarter of the last century. The names of Lloyd, Gardiner, Welsh, Rand, Bulfinch, Danforth, John Warren, Jeffries, are all famous in local history, and are commemorated in our medical biographies. One of them, at least, appears to have been more widely known, not only as one of the first aerial voyagers, but as an explorer in the almost equally hazardous realm of medical theory. Dr. John Jeffries, the first of that name, is considered by Broussais as a leader of medical opinion in America, and so referred to in his famous "Examen des Doctrines Médicales."

Two great movements took place in this eighteenth century, the effect of which has been chiefly felt in our own time; namely, the establishment of the Massachusetts Medical Society, and the founding of the Medical School of Harvard University.

The third century of our medical history began with the introduction of the second great medical discovery of modern times, — of all time up to that date, I may say, — once more *viâ* Boston, if we count the University village as its suburb, and once more by one of our Massachusetts physicians. In the month of July, 1800, Dr. Benjamin Waterhouse, of Cambridge, submitted four of his own children to the new process of vaccination, — the first persons vaccinated, as Dr. Zabdiel Boylston's son had been the first person inoculated in the New World.

A little before the first half of this century was completed, in the autumn of 1846, that great discovery went forth from the Massachusetts General Hospital, which repaid the debt of America

<sup>1</sup> Another Letter to a Young Physician, p. 15.

to the science of the Old World, and gave immortality to the place of its origin in the memory and the heart of mankind. The production of temporary insensibility at will—*tuto, cito, jucunde*, safely, quickly, pleasantly—is one of those triumphs over the infirmities of our mortal condition which change the aspect of life ever afterwards. Rhetoric can add nothing to its glory; gratitude, and the pride permitted to human weakness, that our Bethlehem should have been chosen as the birthplace of this new embodiment of the divine mercy, are all we can yet find room for.

The present century has seen the establishment of all those great charitable institutions for the cure of diseases of the body and of the mind, which our State and our city have a right to consider as among the chief ornaments of their civilization.

The last century had very little to show, in our State, in the way of medical literature. The worthies who took care of our grandfathers and great-grandfathers, like the Revolutionary heroes, fought (with disease) and bled (their patients) and died (in spite of their own remedies); but their names, once familiar, are heard only at rare intervals. Honored in their day, not unremembered by a few solitary students of the past, their memories are going sweetly to sleep in the arms of the patient old dry-nurse, whose "black-drop" is the never-failing anodyne of the restless generations of men. Except the lively controversy on inoculation, and floating papers in journals, we have not much of value for that long period, in the shape of medical records.

But while the trouble with the last century is to find authors to mention, the trouble of this would be to name all that we find. Of these, a very few claim unquestioned pre-eminence.

Nathan Smith, born in Rehoboth, Mass., a graduate of the Medical School of our University, did a great work for the advancement of medicine and surgery in New England, by his labors as teacher and author, — greater, it is claimed by some, than was ever done by any other man. The two Warrens, of our time, each left a large and permanent record of a most extended surgical practice. James Jackson not only educated a whole generation by his lessons of wisdom, but bequeathed some of the most valuable results of his experience to those who came after him, in a series of letters singularly pleasant and kindly

as well as instructive. John Ware, keen and cautious, earnest and deliberate, wrote the two remarkable essays which have identified his name, for all time, with two important diseases, on which he has shed new light by his original observations.

I must do violence to the modesty of the living by referring to the many important contributions to medical science, by Dr. Jacob Bigelow, and especially to his discourse on "Self-limited Diseases," an address which can be read in a single hour, but the influence of which will be felt for a century.

Nor would the profession forgive me if I forgot to mention the admirable museum of pathological anatomy, created almost entirely by the hands of Dr. John Barnard Swett Jackson, and illustrated by his own printed descriptive catalogue, justly spoken of by a distinguished professor in the University of Pennsylvania, as the most important contribution which had ever been made to the branch to which it relates in this country.

When we look at the literature of mental disease, as seen in hospital reports and special treatises, we can mention the names of Wyman, Woodward, Brigham, Bell, and Ray, all either natives of Massachusetts or placed at the head of her institutions for the treatment of the insane.

We have a right to claim also one who is known all over the civilized world as a philanthropist, to us as a townsman and a graduate of our own Medical School, Dr. Samuel Gridley Howe, the guide and benefactor of a great multitude who were born to a world of inward or of outward darkness.

I cannot pass over in silence the part taken by our own physicians in those sanitary movements which are assuming every year greater importance. Two diseases especially have attracted attention, above all others, with reference to their causes and prevention; cholera, the "black death" of the nineteenth century, and consumption, the white plague of the North, both of which have been faithfully studied and reported on by physicians of our own State and city. The cultivation of medical and surgical specialties, which is fast becoming prevalent, is beginning to show its effects in the literature of the profession, which is every year growing richer in original observations and investigations.

To these benefactors, who have labored for us in their peaceful vocation, we must add the noble army of surgeons, who went with the soldiers who fought the battles of their country, sharing many of their dangers, not rarely falling victims to fatigue, disease, or the deadly volleys to which they often exposed themselves in the discharge of their duties.

The pleasant biographies of the venerable Dr. Thacher, and the worthy and kind-hearted gleaner, Dr. Stephen W. Williams, who came after him, are filled with the names of men who served their generation well, and rest from their labors, followed by the blessing of those for whom they endured the toils and fatigues inseparable from their calling. The hard-working, intelligent, country physician more especially deserves the gratitude of his own generation, for he rarely leaves any permanent record in the literature of his profession. Books are hard to obtain; hospitals, which are always centres of intelligence, are remote; thoroughly educated and superior men are separated by wide intervals; and long rides, though favorable to reflection, take up much of the time which might otherwise be given to the labors of the study. So it is that men of ability and vast experience, like the late Dr. Twitchell, for instance, make a great and deserved reputation, become the oracles of large districts, and yet leave nothing, or next to nothing, by which their names shall be preserved from blank oblivion.

One or two other facts deserve mention, as showing the readiness of our medical community to receive and adopt any important idea or discovery. The new science of *Histology*, as it is now called, was first brought fully before the profession of this country by the translation of Bichat's great work, "*Anatomie Générale*," by the late Dr. George Hayward.

The first work printed in this country on *Auscultation* — that wonderful art of discovering disease, which, as it were, puts a window in the breast, through which the vital organs can be *seen*, to all intents and purposes — was the manual published anonymously by "A Member of the Massachusetts Medical Society."

We are now in some slight measure prepared to weigh the record of the medical profession in Massachusetts, and pass our judgment upon it. But in order to do justice to the first genera-

tion of practitioners, we must compare what we know of their treatment of disease with the state of the art in England, and the superstitions which they saw all around them in other departments of knowledge or belief.

English medical literature must have been at a pretty low ebb when Sydenham recommended Don Quixote to Sir Richard Blackmore for professional reading. The College Pharmacopœia was loaded with the most absurd compound mixtures, one of the most complex of which (the same which the Reverend Mr. Harward, "Lecturer at the Royal Chappel in Boston" tried to simplify) was not dropped until the year 1801. Sir Kenelm Digby was playing his fantastic tricks with the Sympathetic powder, and teaching Governor Winthrop, the second, how to cure fever and ague, which some may like to know. Pare the patient's nails; put the parings in a little bag, and hang the bag round the neck of a live eel, and put him in a tub of water. The eel will die, and the patient will recover.<sup>1</sup>

Wiseman, the great surgeon, was discoursing eloquently on the efficacy of the royal touch in scrofula.<sup>2</sup> The founder of the Ashmolean Museum at Oxford, consorting with alchemists and astrologers, was treasuring the manuscripts of the late pious Dr. Richard Napier, in which certain letters (**R** Ris) were understood to mean Responsum Raphaelis, — the answer of the angel Raphael to the good man's medical questions.<sup>3</sup> The illustrious Robert Boyle was making his collection of choice and safe remedies, including the sole of an old shoe,<sup>4</sup> the thigh bone of a hanged man,<sup>5</sup> and things far worse than these, as articles of his *materia medica*. Dr. Stafford, whose paper of directions to his "friend, Mr. Wintrop," I cited, was probably a man of standing in London; yet toad-powder was his sovereign remedy.

See what was the state of belief in other matters among the most intelligent persons of the colonies, — magistrates and clergymen. Jonathan Brewster, son of the church-elder, writes

<sup>1</sup> Hist. Coll. 3d Series, vol. x.

<sup>2</sup> Several Chirurgicall Treatises, p. 245. London, 1676.

<sup>3</sup> Turner (William), Remarkable Providences, part i. chap. 2. Also referred to in Mather's MS. "The Angel of Bethesda."

<sup>4</sup> Medicinal Experiments, p. 105. 5th edition. London, 1712. <sup>5</sup> *Ib.*, p. 105.

the wildest letters to John Winthrop about alchemy, — mad for making gold as the Lynn rock-borers are for finding it.<sup>1</sup>

Remember the theology and the diabolology of the time. Mr. Cotton's Theocracy was a royal government, with the King of kings as its nominal head, but with an upper chamber of saints, and a tremendous opposition in the lower house; the leader of which may have been equalled, but cannot have been surpassed by any of our earth-born politicians. The demons were prowling round the houses every night, as the foxes were sneaking about the hen-roosts. The men of Gloucester fired whole flasks of gunpowder at devils disguised as Indians and Frenchmen.<sup>2</sup>

How deeply the notion of miraculous interference with the course of nature was rooted, is shown by the tenacity of the superstition about earthquakes. We can hardly believe that our Professor Winthrop, father of the old judge and the "squire," whom many of us Cambridge people remember so well, had to defend himself against the learned and excellent Dr. Prince, of the Old South Church, for discussing their phenomena as if they belonged to the province of natural science.<sup>3</sup>

Not for the sake of degrading the aspect of the noble men who founded our State, do I refer to their idle beliefs and painful delusions, but to show against what influences the common sense of the medical profession had to assert itself.

Think, then, of the blazing stars, that shook their horrid hair in the sky; the phantom ship, that brought its message direct from the other world;<sup>4</sup> the story of the mouse and the snake at Watertown;<sup>5</sup> of the mice and the prayer-book;<sup>6</sup> of the snake in church;<sup>7</sup> of the calf with two heads;<sup>8</sup> and of the cabbage "in the perfect form of a cutlash,"<sup>9</sup> — all which innocent occurrences were accepted or feared as alarming portents.

We can smile at these: but we cannot smile at the account of unhappy Mary Dyer's malformed offspring;<sup>10</sup> or of Mrs.

<sup>1</sup> Hist. Coll. 4th Series, vol. vii. pp. 72, 77.

<sup>2</sup> Magnalia, book vii. art. 18.

<sup>3</sup> Two Lectures on Comets, p. vii. Boston, 1811.

<sup>4</sup> Magnalia, book i. chap. 6. Winthrop, Hist. of N. E., vol. ii. p. 328.

<sup>5</sup> Life and Letters of John Winthrop, p. 108.

<sup>6</sup> Winthrop, Hist. of N. E., vol. ii. p. 20.

<sup>7</sup> *Ib.*, vol. ii. p. 330.

<sup>8</sup> Mather Papers in Hist. Soc. Coll. 4th Series, vol. viii. p. 614.

<sup>9</sup> *Ibid.*

<sup>10</sup> Winthrop, Hist. of N. E., vol. i. p. 261.

Hutchinson's domestic misfortune of similar character,<sup>1</sup> in the story of which the physician, Dr. John Clark of Rhode Island, alone appears to advantage; or as we read the Rev. Samuel Willard's fifteen alarming pages about an unfortunate young woman suffering with hysteria.<sup>2</sup> Or go a little deeper into tragedy, and see poor Dorothy Talby, mad as Ophelia, first admonished, then whipped; at last, taking her own little daughter's life; put on trial, and standing mute, threatened to be pressed to death, confessing, sentenced, praying to be beheaded; and none the less pitilessly swung from the fatal ladder.<sup>3</sup>

The cooper's crazy wife — crazy in the belief that she has committed the unpardonable sin — tries to drown her child, to save it from misery; and the poor lunatic, who would be tenderly cared for to-day in a quiet asylum, is judged to be acting under the instigation of Satan himself.<sup>4</sup> Yet, after all, what can we say, who put Bunyan's *Pilgrim's Progress*, full of nightmare dreams of horror, into all our children's hands; a story in which the awful image of the man in the cage might well turn the nursery where it is read into a madhouse?

The miserable delusion of witchcraft illustrates, in a still more impressive way, the false ideas which governed the supposed relation of men with the spiritual world. I have no doubt many physicians shared in these superstitions. Mr. Upham says they — that is, some of them — were in the habit of attributing their want of success to the fact, that an "evil hand" was on their patient.<sup>5</sup> The temptation was strong, no doubt, when magistrates and ministers and all that followed their lead were contented with such an explanation. But how was it in Salem, according to Mr. Upham's own statement? Dr. John Swinnerton was, he says, for many years the principal physician of Salem.<sup>6</sup> And he says, also, "The Swinnerton family were all along opposed to Mr. Parris, and kept remarkably clear from the witchcraft delusion."<sup>7</sup> Dr. John Swinnerton — the same, by the way, whose memory is illuminated by a ray from the genius

<sup>1</sup> Winthrop, *Hist. of N. E.*, p. 271.

<sup>2</sup> Case of Elizabeth Knapp, *Hist. Coll. 4th Series*, vol. viii. p. 555.

<sup>3</sup> Winthrop, *Hist. of N. E.*, vol. i. p. 279.      <sup>4</sup> *Ib.*, vol. ii. p. 65.

<sup>5</sup> *Salem Witchcraft*, vol. ii. p. 361. Boston, 1867.

<sup>6</sup> *Ib.*, vol. i. p. 140.

<sup>7</sup> *Ib.*, vol. ii. p. 495 (Supplement).

of Hawthorne — died the very year before the great witchcraft explosion took place. But who can doubt that it was from him that the family had learned to despise and to resist the base superstition; or that Bridget Bishop, whose house he rented, as Mr. Upham tells me, the first person hanged in the time of the delusion, would have found an efficient protector in her tenant, had he been living, to head the opposition of his family to the misguided clergymen and magistrates?

I cannot doubt that our early physicians brought with them many Old-World medical superstitions, and I have no question that they were more or less involved in the prevailing errors of the community in which they lived. But, on the whole, their record is a clean one, so far as we can get at it; and where it is questionable, we must remember, that there must have been many little-educated persons among them; and that all must have felt, to some extent, the influence of those sincere and devoted but unsafe men, the physic-practising clergymen, who often used spiritual means as a substitute for temporal ones, who looked upon a hysteric patient as possessed by the devil,<sup>1</sup> and treated a fractured skull by prayers and plasters, following the advice of a ruling elder in opposition to the unanimous opinion of seven surgeons.<sup>2</sup>

To what results the union of the two professions was liable to lead, may be seen by the example of a learned and famous person, who has left on record the product of his labors in the double capacity of clergyman and physician.

I have had the privilege of examining a manuscript of Cotton Mather's relating to medicine, by the kindness of the librarian of the American Antiquarian Society, to which society it belongs. A brief notice of this curious document may prove not uninteresting.

It is entitled "The Angel of Bethesda: an Essay upon the *Common Maladies of Mankind*, offering, first, the sentiments of Piety," &c., &c., and "a collection of plain but *potent* and *Approved* REMEDIES for the Maladies." There are sixty-six "Capsula's," as he calls them, or chapters, in his table of contents; of which, five — from the fifteenth to the nineteenth, inclusive — are missing. This is a most unfortunate loss, as the eighteenth capsula treated of agues, and we could have learned

<sup>1</sup> *Ante*, p. 36.

<sup>2</sup> Winthrop's History, vol. ii. p. 203. The child recovered.

from it something of their degree of frequency in this part of New England. There is no date to the manuscript; which, however, refers to a case observed Nov. 14, 1724.

The divine takes precedence of the physician in this extraordinary production. He begins by preaching a sermon at his unfortunate patient. Having thrown him into a cold sweat by his spiritual sudorific, he attacks him with his material remedies, which are often quite as unpalatable. The simple and cleanly practice of Sydenham, with whose works he was acquainted, seems to have been thrown away upon him. Every thing he could find mentioned in the seventy or eighty authors he cites, all that the old women of both sexes had ever told him of, gets into his text, or squeezes itself into his margin.

Evolving disease out of sin, he hates it, one would say, as he hates its cause, and would drive it out of the body with all noisome appliances. "Sickness is in Fact *Flagellum Dei pro peccatis mundi.*" So saying, he encourages the young mother whose babe is wasting away upon her breast with these reflections:—

"Think; oh the grievous Effects of *Sin!* This wretched *Infant* has not arrived unto years of sense enough, to *sin after the similitude of the transgression committed by Adam.* Nevertheless the *Transgression of Adam*, who had all mankind *Fæderally*, yea, Naturally, in him, has involved this *Infant* in the guilt of it. And the *poison of the old serpent*, which infected *Adam* when he fell into his *Transgression*, by hearkening to the Tempter, has corrupted all mankind, and is a seed unto such diseases as this *Infant* is now laboring under. *Lord*, what are we, and what are our children, but a Generation of *Vipers?*"

Many of his remedies are at least harmless, but his pedantry and utter want of judgment betray themselves everywhere. He piles his prescriptions one upon another, without the least discrimination. He is run away with by all sorts of fancies and superstitions. He prescribes *euphrasia*, eyebright, for disease of the eyes; appealing confidently to the strange old doctrine of *signatures*, which inferred its use from the resemblance of its flower to the organ of vision. For the scattering of wens, "the efficacy of a Dead Hand has been out of measure wonderful." But when he once comes to the odious class of remedies, he revels in them like a *scarabeus*. This allusion will bring us quite near

enough to the inconceivable abominations with which he proposed to outrage the sinful stomachs of the unhappy confederates and accomplices of Adam.

It is well that the treatise was never printed, yet there are passages in it worth preserving. He speaks of some remedies which have since become more universally known:—

“Among the plants of our soyl, Sir William Temple singles out Five [Six] as being of the greatest virtue and most friendly to health: and his favorite plants, Sage, Rue, Saffron, Alehoof, Garlick, and Elder.”

“But these *Five* [Six] plants may admitt of some competitors. The QUINQUINA — How celebrated: Immoderately, Hyperbolically celebrated!”

Of Ipecacuanha, he says, —

“This is now in its reign; the most fashionable vomit.”

“I am not sorry that antimonial emetics begin to be disused.”

He quotes “Mr. Lock” as recommending red poppy-water and abstinence from flesh as often useful in children’s diseases.

One of his “Capsula’s” is devoted to the animalcular origin of diseases, at the end of which he says, speaking of remedies for this supposed source of our distempers:—

“Mercury we know thee: But we are afraid thou wilt kill us too, if we employ thee to kill them that kill us.

“And yett, for the cleansing of the small Blood Vessels, and making way for the free circulation of the Blood and Lymph — there is nothing like Mercurial Deobstruents.”

From this we learn that mercury was already in common use, and the subject of the same popular prejudice as in our own time.

His poetical turn shows itself here and there:—

“O Nightingale, with a Thorn at thy Breast; Under the trouble of a Cough, what can be more proper than such thoughts as these?” . . .

If there is pathos in this, there is bathos in his apostrophe to the millipede, beginning “Poor sowbug!” and eulogizing the healing virtues of that odious little beast; of which he tells us to take “half a pound, putt ’em alive into a quart or two of wine,” with saffron and other drugs, and take two ounces twice a day.

The "Capsula" entitled "Nishmath Chajim," was printed in 1722, at New London, and is in the possession of our own Society. He means, by these words, something like the Archæus of Van Helmont, of which he discourses in a style wonderfully resembling that of Mr. Jenkinson, in the "Vicar of Wakefield."

"Many of the Ancients thought there was much of a Real *History* in the *Parable*, and their Opinion was that there is, DIAPHORA KATA TAS MORPHAS, A *Distinction* (and so a Resemblance) of men as to their *Shapes after Death*."

And so on, with Irenæus, Tertullian, Thespesius, and "the TA TONE PSEUCONE CROMATA," in the place of "*Sanconiathon, Manetho, Berosus*," and "*Anarchon ara kai ateleutaion to pan*."

One other passage deserves notice, as it relates to the single medical suggestion which does honor to Cotton Mather's memory. It does not appear that he availed himself of the information which he says he obtained from his slave, for such I suppose he was.

In his appendix to "*Variolæ Triumphatæ*," he says, —

"There has been a *wonderful practice* lately used in several parts of the world, which indeed is not yet become common in our nation.

"I was first informed of it by a Garamantee servant of my own, long before I knew that any *Europeans* or *Asiaticks* had the least acquaintance with it, and some years before I was enriched with the communications of the learned Foreigners, whose accounts I found agreeing with what I received of my servant, when he shewed me the Scar of the Wound made for the operation; and said, That no person ever died of the *small-pox*, in their country, that had the courage to use it.

"I have since met with a considerable Number of these *Africans*, who all agree in one story; That in their country *grandy-many* dy of the *small-pox*: But now they learn this way: people take juice of *small-pox* and *cutty-skin* and put in a Drop; then by 'nd by a little sicky, sicky: then very few little things like *small-pox*; and nobody dy of it; and nobody have *small-pox* any more. Thus, in *Africa*, where the poor creatures dy of the *small-pox* like Rotten Sheep, a merciful God has taught them an *Infallible preservative*. 'Tis a *common practice*, and is attended with a *constant success*."

What has come down to us of the first century of medical practice, in the hands of Winthrop and Oliver, is comparatively simple and reasonable. I suspect that the conditions of rude, stern life, in which the colonists found themselves in the wilderness, took the

nonsense out of them, as the exigencies of a campaign did out of our physicians and surgeons in the late war. Good food and enough of it, pure air and water, cleanliness, good attendance, an anæsthetic, an opiate, a stimulant, quinine, and two or three common drugs, proved to be the marrow of medical treatment; and the fopperies of the pharmacopœia went the way of embroidered shirts and white kid gloves and malacca joints, in their time of need. "Good wine is the best cordial for her," said Governor John, Junior, to Samuel Symonds, speaking of that gentleman's wife, — just as Sydenham, instead of physic, once ordered a roast chicken and a pint of canary for his patient in male hysterics.

But the profession of medicine never could reach its full development until it became entirely separated from that of divinity. The spiritual guide, the consoler in affliction, the confessor who is admitted into the secrets of our souls, has his own noble sphere of duties; but the healer of men must confine himself solely to the revelations of God in nature, as he sees their miracles with his own eyes. No doctrine of prayer or special providence is to be his excuse for not looking straight at secondary causes, and acting, exactly so far as experience justifies him, as if he were himself the divine agent which antiquity fabled him to be. While pious men were praying — humbly, sincerely, rightly, according to their knowledge — over the endless succession of little children dying of spasms in the great Dublin Hospital, a sagacious physician knocked some holes in the walls of the ward, let God's blessed air in on the little creatures, and so had already saved in that single hospital, as it was soberly calculated thirty years ago, more than sixteen thousand lives of these infant heirs of immortality.<sup>1</sup>

Let it be, if you will, that the wise inspiration of the physician was granted in virtue of the clergyman's supplications. Still, the habit of dealing with things seen, generates another kind of knowledge, and another way of thought, from that of dealing with things unseen; which knowledge and way of thought are special means granted by Providence, and to be thankfully accepted.

The mediæval ecclesiastics expressed a great truth in that say-

<sup>1</sup> Collins's *Midwifery*, p. 812. Published by order of the Massachusetts Medical Society. Boston, 1841.

ing, so often quoted, as carrying a reproach with it: "*Ubi tres medici, duo athei*,"—"Where there are three physicians, there are two atheists."

It was true then, it is true to-day, that the physician very commonly, if not very generally, denies and repudiates the deity of ecclesiastical commerce. The Being whom Ambroise Paré meant when he spoke those memorable words, which you may read over the professor's chair in the French School of Medicine,—"*Je le pensay, et Dieu le guarit*,"—"I dressed his wound, and God healed it,"—is a different being from the God that scholastic theologians have projected from their consciousness, or shaped even from the sacred pages which have proved so plastic in their hands. He is a God who never leaves himself without witness, who repenteth him of the evil, who never allows a disease or an injury, compatible with the enjoyment of life, to take its course without establishing an effort,—limited by certain fixed conditions, it is true, but an effort, always, to restore the broken body or the shattered mind. In the perpetual presence of this great Healing Agent, who stays the bleeding of wounds, who knits the fractured bone, who expels the splinter by a gentle natural process, who walls in the inflammation that might involve the vital organs, who draws a cordon to separate the dead part from the living, who sends his three natural anæsthetics to the overtaxed frame in due order, according to its need,—sleep, fainting, death; in this perpetual presence, it is doubtless hard for the physician to realize the theological fact of a vast and permanent sphere of the universe, where no organ finds itself in its natural medium, where no wound heals kindly, where the executive has abrogated the pardoning power, and mercy forgets its errand; where the omnipotent is unfelt save in malignant agencies, and the omnipresent is unseen and unrepresented; hard to accept the God of Dante's *Inferno*, and of Bunyan's caged lunatic. If this is atheism, call three, instead of two of the trio, atheists, and it will probably come nearer the truth.

I am not disposed to deny the occasional injurious effect of the materializing influences to which the physician is subjected. A spiritual guild is absolutely necessary to keep him, to keep us all, from becoming the "fingering slaves" that Wordsworth treats with such shrivelling scorn. But it is well that the two callings

have been separated, and it is fitting that they remain apart. In settling the affairs of the late concern, I am afraid our good friends remain a little in our debt. We lent them our physician Michael Servetus in fair condition, and they returned him so damaged by fire, as to be quite useless for our purposes. Their Reverend Samuel Willard wrote us a not overwise report of a case of hysteria; and our Jean Astruc gave them (if we may trust Dr. Smith's Dictionary of the Bible) the first discerning criticism on the authorship of the Pentateuch. Our John Locke enlightened them with his letters concerning toleration; and their Cotton Mather obscured our twilight with his *Nishmath Chajim*.

Yet we must remember that the name of Basil Valentine, the monk, is associated with whatever good and harm we can ascribe to antimony; and that the most remarkable of our specifics long bore the name of "Jesuit's Bark," from an old legend connected with its introduction. "Frère Jacques," who taught the lithotomists of Paris, owes his ecclesiastical title to courtesy, as he did not belong to a religious order.

Medical science, and especially the study of mental disease, is destined, I believe, to react to much greater advantage on the theology of the future than theology has acted on medicine in the past. The liberal spirit very generally prevailing in both professions, and the good understanding between their most enlightened members, promise well for the future of both in a community which holds every point of human belief, every institution in human hands, and every word written in a human dialect, open to free discussion to-day, to-morrow, and to the end of time. Whether the world at large will ever be cured of trusting to specifics as a substitute for observing the laws of health, and to mechanical or intellectual formulæ as a substitute for character, may admit of question. Quackery and idolatry are all but immortal.

We can find most of the old beliefs alive amongst us to-day, only having changed their dresses and the social spheres in which they thrive. We think the quarrels of Galenists and chemists belong to the past, forgetting that Thomsonism has its numerous apostles in our community; that it is common to see remedies vaunted as purely vegetable, and that the prejudice against "mineral poisons," especially mercury, is as strong in many quarters

now as it was at the beginning of the seventeenth century. Names are only air, and blow away with a change of wind; but beliefs are rooted in human wants and weakness, and die hard. The oaks of Dodona are prostrate, and the shrine of Delphi is desolate; but the Pythoness and the Sibyl may be consulted in Lowell Street for a very moderate compensation. Nostradamus and Lilly seem impossible in our time; but we have seen the advertisements of an astrologer in our Boston papers year after year, which seems to imply that he found believers and patrons. You smiled when I related Sir Kenelm Digby's prescription with the live eel in it; but if each of you were to empty his or her pocket, would there not roll out a horse-chestnut from more than one of them, carried about as a cure for rheumatism? The brazen head of Roger Bacon is mute; but is not "Planchette" uttering her responses in a hundred houses of this city? We think of palmistry or chiromancy as belonging to the days of Albertus Magnus, or, if existing in our time, as given over to the gypsies; but a very distinguished person has recently shown me the line of life, and the line of fortune, on the palm of his hand, with a seeming confidence in the sanguine predictions of his career which had been drawn from them. What shall we say of the plausible and well-dressed charlatans of our own time, who trade in false pretences, like Nicholas Knapp of old, but without any fear of being fined or whipped; or of the many follies and inanities, imposing on the credulous part of the community, each of them gaping with eager, open mouth for a gratuitous advertisement by the mention of its foolish name in any respectable connection?

I turn from this less pleasing aspect of the common intelligence which renders such follies possible, to close the honorable record of the medical profession in this our ancient Commonwealth.

We have seen it in the first century divided among clergymen, magistrates, and regular practitioners; yet, on the whole, for the time, and under the circumstances, respectable, except where it invoked supernatural agencies to account for natural phenomena.

In the second century it simplified its practice, educated many intelligent practitioners, and began the work of organizing for concerted action, and for medical teaching.

In this, our own century, it has built hospitals, perfected and multiplied its associations and educational institutions, enlarged and created museums, and challenged a place in the world of science by its literature.

In reviewing the whole course of its history we read a long list of honored names, and a precious record written in private memories, in public charities, in permanent contributions to medical science, in generous sacrifices for the country. We can point to our capital as the port of entry for the New World of the great medical discoveries of two successive centuries, and we can claim for it the triumph over the most dreaded foe that assails the human body,—a triumph which the annals of the race can hardly match in three thousand years of medical history.









