

ILLUSTRATIONS FROM THE WELLCOME INSTITUTE LIBRARY

A JEWISH PHYSICIAN IN THE SEVENTEENTH CENTURY*

ONE of the most interesting figures in the annals of Jewish medical history is Tobias Cohn (1652–1729), sometimes called Kohn or Katz. His claim to immortality cannot be based on any originality as a thinker or innovator but is simply due to the breadth of his knowledge reflected in his encyclopaedic work entitled *Ma'aseh Tobiyah*, written in Hebrew and first published in Venice in 1708. A copy of this work is held in the Library of the Wellcome Institute for the History of Medicine.¹

Tobias presents himself to his public on the verso of the title page with a portrait designed and engraved by Antonio Luciani of Venice (fl. 1710), Fig. 1. He is shown with a book in his right hand and a doctor's ring to denote the savant, and an astrolabe in his left hand to signify one seeking the natural order. Around the portrait runs a border in which Tobias furnishes the following information about himself, given here in English translation: "If you seek my name, my family, or my town I will answer you that you may know the truth. I am Tobias Cohn from a family of scholars, and from a town of scholars, faithful city, Metz in France may God for ever preserve her. And now I am 48 years: in the month Etanim of this year.² And yet I am with my people in Constantinople: but my hope is that I shall have the honour to see Jerusalem rebuilt."

Tobias, as he tells us, came from a family of scholars. His grandfather, Eleazar Cohn, emigrated from Safed in Palestine to Cracow and had printed in that city a theological work of his uncle, R. Elijah ben Moses de Vidas, entitled *Re'sit hokmah*.³ Eleazar settled in Kamenetz-Podolsk where he practised medicine. His youngest son, Moses Kohn, also practised medicine, and was appointed rabbi of the town of Narol in the district of Biask on the Ukrainian border. Moses left Narol during the Cossack revolt of 1648 to escape the persecution of the Cossack leader, Bogdan Chmielnicki, which was directed with particular vigour against the Jewish community, and settled in Metz where in 1649 he was appointed rabbi of the important Jewish community.

Moses died in 1659 leaving a widow and two sons. His widow married a second time and subsequently left Metz. The upbringing of the two sons was entrusted to their

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¹ See *A catalogue of printed books in the Wellcome Historical Medical Library*, vol. 2: *Books printed from 1641 to 1850, A–E*. London, Wellcome Historical Medical Library, 1966, p. 367. There is some doubt as to the exact dating of the book. H. Friedenwald, *Jewish luminaries*, Baltimore, Md., Johns Hopkins Press, 1946, p. 59 has "1707" but the licence is dated 7 June 1708 (f. 158^v).

² I.e. September/October 1700. Etanim = Tishri, the seventh month of the Jewish calendar.

³ See J. Zedner, *Catalogue of the Hebrew books in the library of the British Museum*. London, British Museum, 1867, pp. 230f. The first edition was published in Venice in 1578, later editions in Venice and Cracow in 1593. See also A. E. Cowley, *A concise catalogue of the Hebrew printed books in the Bodleian Library*. Oxford, Clarendon Press, 1929, pp. 184f.

uncles, who sent Tobias and his brother to Cracow where they received a conventional Jewish education. At the age of twenty-five, Tobias decided to follow the family tradition and study medicine. It was not easy, however, for Jews in the seventeenth century to gain admittance to German universities. Typical of this prejudice was the hostile attitude expressed by the Medical Faculty of Vienna University in 1610: "The Jews are bound by their law to destroy the life of every tenth Christian patient by drugs."⁴ However, through the good offices of the Grand Elector of Brandenburg, an exception was made to the statutes of the University of Frankfurt an der Oder, and Tobias with his friend Gabriel Felix⁵ were admitted and given a stipend⁶ but barred from examination for degrees. This disadvantage, together with the requirement to participate in public discussions concerning their faith, did not make their sojourn at Frankfurt an der Oder a particularly happy one. They subsequently left and went to Padua University, where there was a large number of Jewish students not only from Italy but from many other parts of Europe, especially Poland.⁷ While they were in Italy, Tobias and Gabriel⁸ were for some time the pupils of Solomon Canegliano (1642–1719), one of the two celebrated Canegliano brothers. Tobias described Solomon as one of the greatest physicians of his time.⁹ He became a lifelong friend and benefactor and wrote a detailed preface to *Ma'aseh Tobiiyah*.¹⁰

Tobias obtained his medical degree at Padua on 25 June 1683, and then returned to Poland where he practised for some time before moving to Adrianople. There he became physician to five successive sultans, Muhammad IV, Sulaiman II, Ahmad II, Mustafa II, and Ahmad III, eventually moving with the court to Constantinople.¹¹ Finally, at the age of sixty-two, having by that time acquired a considerable fortune,

⁴ H. Friedenwald, *The Jews and medicine: essays*, vol. 1, Baltimore, Md., Johns Hopkins Press, 1944, p. 235.

⁵ Felix was evidently the translation of the forename Gabriel also bore. See D. Kaufmann, 'Trois docteurs de Padoue: Tobias Moschides – Gabriel Selig b. Mosé-Isak Wallich', *Rev. Études Juives*, 1889, 19: 293–298.

⁶ In recognition of this favour, Tobias and Gabriel gave the Elector a scroll containing tables of Hebrew grammar. See *ibid.*

⁷ See L. Lewin, 'Jüdische Aerzte in Gross-polen', *Jb. Jüdisch-Literarischen Ges.*, 1911, 11: 367–420, especially pp. 378ff.

⁸ See D. Kaufmann, 'Une lettre de Gabriel Félix Moschides', *Rev. Études Juives*, 1896, 32: 134–137. Gabriel qualified as a doctor in philosophy and medicine on 9 July 1683.

⁹ Cf. J. Seide, 'Tobia hacohen the physician', *Dapim Refuim*, 1953, 12: 209–216.

¹⁰ Solomon Canegliano attended the University of Padua where he obtained the degrees of MD and PhD in January 1660. Returning to Venice, he became a noted teacher of medicine to whom young Jews from all over Europe came to attend his preparatory school. He was honoured with citizenship by the Republic of Venice. The younger brother, Israel (d. 1720), first practised medicine in Venice then in Constantinople where he acted as the Venetian representative. He returned to Venice in 1693 and was appointed an *ex officio* member of the peace congress which met at Carlovitz near Belgrade. His efforts with the Turkish Commission were successful and on 26 January 1699 the peace protocol was signed. Like his brother, he was made a citizen of the Venetian republic. See Friedenwald, *op. cit.*, note 4 above, vol. 2, p. 604, and *The Jewish encyclopaedia*, vol. 1, New York and London, Funk & Wagnalls, 1903, pp. 209f.

¹¹ Besides his professional duties, one of Tobias's principal concerns was the publication of a biblical commentary compiled from notes left by his father, which were partly in Worms in the library of his brother R. Jaïr Bacharach. The work appeared under the title *Birkat tof*, published by Bragadin of Venice in 1711. In order to defray the cost of publication, Tobias sent some money and asked that the outstanding expenses might be paid by the sale of 650 copies of *Ma'aseh Tobiiyah*. See A. Cahan, 'Le Rabinat de Metz pendant la période française (1567–1871) (suite)', *Rev. Études Juives*, 1883, 7: 204–226. Cf. Cowley, *op. cit.*, note 3 above, p. 491, and Zedner, *op. cit.*, note 3 above, p. 568.

he retired from the court and settled in Jerusalem.¹² He died and was buried there in 1729, so fulfilling the wish he expressed around his portrait at the beginning of *Ma'aseh Tobiyah*.

As a result of having spent his life in many countries, Tobias was conversant with some nine languages, which facilitated his writing *Ma'aseh Tobiyah*. This work, for which he is chiefly remembered, was completed some years before it was first published in 1708 and has been reprinted many times, the most recent edition having been published in Cracow in 1908.¹³ It is divided into eight parts, dealing with theology, astronomy, medicine, hygiene, syphilitic maladies, botany, cosmography, and an essay on the four elements, but the major part is devoted to medicine. It contains many interesting scientific and medical illustrations, in fact, it is one of the first books printed in Hebrew to do so.

Many of the views current at the time in medicine are discussed by Tobias. The system of Copernicus is described and rejected on theological scruples (ff. 50^v, 52^v, 53^r).¹⁴ In a section devoted to the elements, Tobias presents the various arguments of Hippocrates, who showed that there must be more than one element in the body, and presents the argument of Aristotle against the one element idea. By an examination of different elements he shows that they each possess two qualities: fire, which possesses the qualities of heat and dryness; air comprising moisture and heat; earth, composed of dryness and cold; and water made up of cold and moisture. However, as neither cold and heat, the properties of earth and fire, nor dryness and moisture, the properties of fire and water, can be combined, Tobias shows that there are only four elements, each of which he discusses in turn with numerous arguments to support his conclusion (ff. 79^v–90^v)¹⁵ Fig. 2.

Tobias was one of the first to describe the disease known as *plica polonica*,¹⁶ and tells his readers that when in Padua he received letters from a man in Lemburg who complained about the matting of his hair. Many Polish physicians had written to the professors in Padua concerning the disease but they could find no remedy for it (f. 109^v). He describes with great accuracy and detail the symptoms of the disease, which was an infection of the roots of the hair and a thrombosis of superficial vessels. As a therapy he prescribes purging by vomiting, emetics, and cleansing the blood (f. 110^r+^v). In his description of abdominal sickness, Tobias gives a fairly clear representation of hyperacidity of the stomach and the alkaline treatment (f. 126^r).

The most interesting feature of Tobias' work is his comparison of the anatomy of the body to the construction of a house, illustrated on f. 107^r, Fig. 3. This visually

¹² Tobias retired from court in 1715, but his reputedly large fortune was much reduced by robbery and pillage. He was, however, able to maintain a house in Jerusalem and dispense some aid to the poor. See D. Kaufmann, 'Une lettre de Tobia Cohen (Moschides) de Jérusalem', *Rev. Études Juives*, 1890, 21: 140–142.

¹³ J. O. Leibowitz, 'Tobie Cohen: auteur médical de langue hébraïque (1652–1729)', *Rev. Hist. Méd. hébraïque*, 1964, 17: 15–24.

¹⁴ References to particular folios are those in the 1708 Venice edition.

¹⁵ See A. Levinson, 'A medical cyclopedist of the seventeenth century', *Bull. Soc. Med. Hist. Chicago*, 1917–22, 2: 27–44.

¹⁶ The first description of this disorder was given by Giovanni Tommaso Minadoi of Padua (1548–1618) in the final section of his work. *De humani corporis turpitudinibus cognoscendis et curandis. Libri tres; in quibus cum cutanearum, tum organicarum turpitudinum . . . cognitio et curatio traditur*. Padua, 1600. The section is dedicated to the celebrated Polish soldier, Marshal Nicolas Zebrydovskii of Cracow.



Figure 1. Tobias Cohn (1652–1729). From T. Cohn, *Ma'aseh Tobiyah*, Venice, Stamparia Bragadina, [1708], front. engr. (Copy in the Wellcome Institute Library, London.)

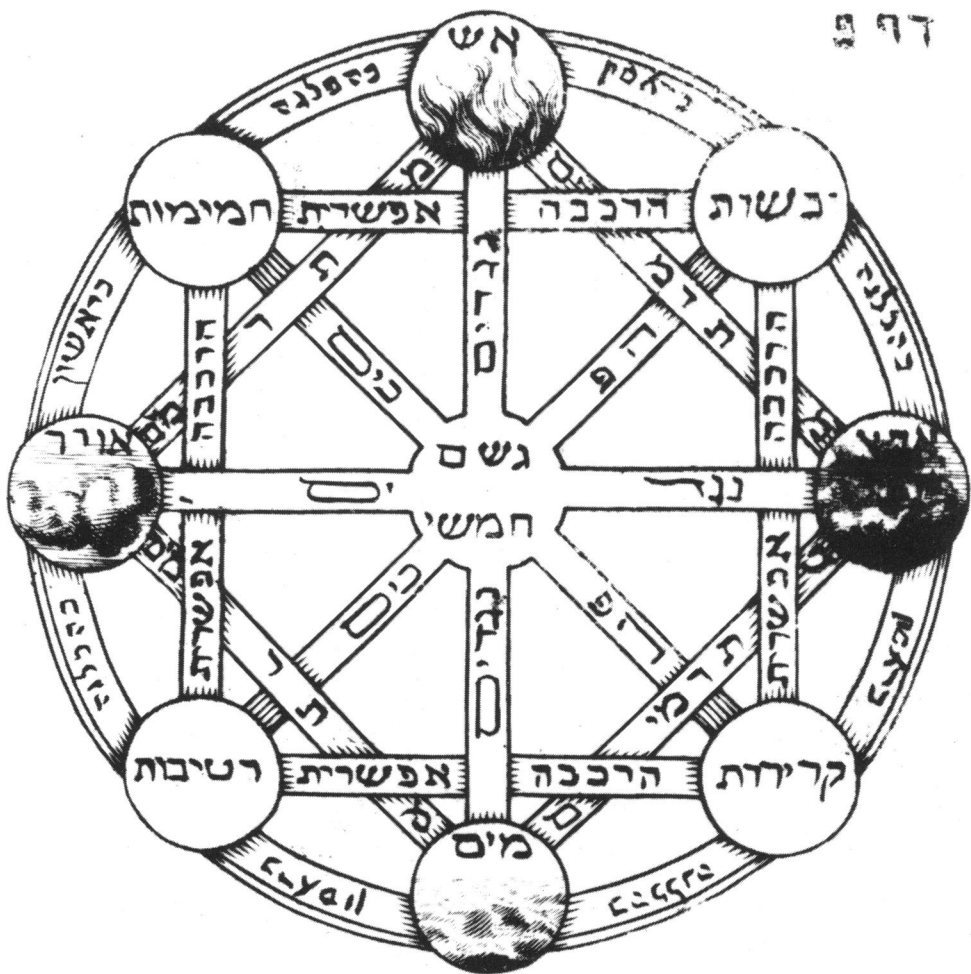
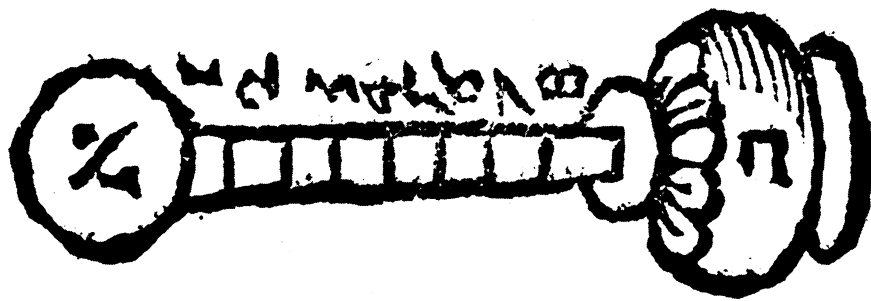


Figure 2. Diagram illustrating the four elements of fire, air, earth, and water, each element possessing two properties. From *ibid.*, fol. 80^v.



Figure 3. Anatomy of the body compared to the structure of a house. From *ibid.*, fol. 107^r.



קור

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Figure 5. Thermometer. From *ibid.*, fol. 84r.

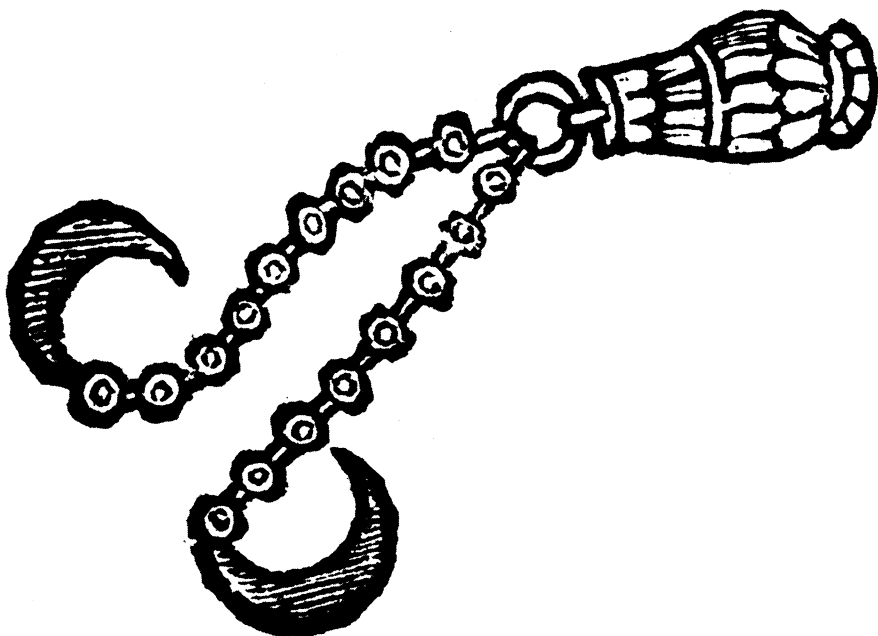


Figure 4. Obstetrical forceps. From *ibid.*, fol. 138r.

didactic method likens the hair to the roof, the corners of the roof to the ears, the eyes to the windows, and the mouth to the door. The lungs are the upper (ventilated) storey, the stomach, liver and spleen are the middle storey where the baker cooks and the cellar (spleen) is located. The kidneys are the water reservoirs, the lower intestines the lavatory, and the feet are the foundation of the house. This analogy was not new but a development of a similar analogy used by William Harvey (1578–1657) who referred to the thorax as a “parlour”,¹⁷ the stomach as the “kitchen” or “shop”,¹⁸ and spoke of “furnaces to draw away the phlegm, raise the spirit”.¹⁹ Neither was Tobias the first to use Harvey’s analogy of the house to explain the human anatomy for we find John Donne (1573–1631), Dean of St Paul’s Cathedral, in a sermon on the sin of avarice preached at Whitehall on 8 April 1621 telling his congregation: “When I looke into the larders and cellars and vaults into the vessels of our body for drink, for blood, for urine, they are pottles and gallons. When I looke into the furnaces of our spirits the ventricles of the heart and of the braine, they are not thimbles; for spirituall things, the things of the next world we have no roome; for temporall things the things of this world we have no bounds. How then shall this over-eater bee filled with honey?”²⁰

On f. 114^v of his book, Tobias refers to Harvey’s discovery of the circulation of the blood, which, by the beginning of the eighteenth century, had achieved widespread acceptance, and he compares the four blood vessels with the four rivers emerging from the garden of Eden.²¹ A space is left in the printed text for the date of the publication of Harvey’s discovery,²² which Tobias, writing first in Adrianople and then in Constantinople, was unable to supply his printer with in Venice, not, it would seem, having returned to Italy since completing his studies at Padua.²³

Many disorders affecting different parts of the body are discussed in detail, including a section on gynaecology beginning on f. 132^r which contains an interesting illustration of an obstetrical forceps, Fig. 4, and is followed by chapters on paediatrics (ff. 139^r–141^v) and medical botany (f. 145^r–150^r). Plants from distant lands are treated in the geographical section, including tea – at that time a novelty – (f. 72^v) and tobacco, also a recent importation to Europe. The book concludes with an alphabetical list of medicaments in Latin or Italian, Turkish and Hebrew, all the names being given in Hebrew transliteration.²⁴

¹⁷ W. Harvey, *Prelectiones anatomiae universalis edited with an autotype reproduction of the original by a Committee of the Royal College of Physicians of London*, London, J. & A. Churchill, 1886, f. 4^v.

¹⁸ *Ibid.*, f. 8^v.

¹⁹ *Ibid.*, f. 24^v.

²⁰ The text of the sermon was, ‘Hast thou found honey? Eat so much as is sufficient for thee, lest thou be filled therewith, and vomit it.’ Prov. 25:16 from sermon LXX of John Donne’s *LXXX Sermons*, London, 1640, p. 714. For the relationship between Harvey and Donne see F. N. L. Poynter, ‘John Donne and William Harvey’, *J. Hist. Med.*, 1960, 15: 233–246.

²¹ Gen. 2:10: “and a river went out of Eden to water the garden; and from thence it was parted and became into four heads.”

²² W. Harvey, *Exercitatio anatomica de motu cordis et sanguinis in animalibus*. Frankfurt, G. Fitzer, 1628. See *A catalogue of printed books in the Wellcome Historical Medical Library*, vol. 1: *Books printed before 1641*. London, Wellcome Historical Medical Library, 1962, p. 161.

²³ See J. O. Leibowitz, ‘Harveian items in Hebrew Medicine’, *Harofé haivri*, 1957, 2: 74–79 [in Hebrew]; 134–138 [in English], who draws attention to the error in the last sentence to Harvey’s theory of the circulation that the blood circulates three or four times a day, while on f. 100^r he asserts that the blood circulates many times.

²⁴ See Leibowitz, *op. cit.*, note 13 above.

Illustrations from the Wellcome Institute Library

Tobias, although unable to claim a place in the first rank of medical history, nevertheless characterizes the Jewish physician and savant typical of his time. He stands in a period of transition between the thought of the Middle Ages rooted in the medicine of Galen and Hippocrates while at the same time aware and often advocating the great developments in the medicine of his time. He is able to say in his very baroque and original Hebrew given here in translation. "I do not wish beloved reader to force you to follow in a rigorous way my teachings, and to urge you to go in the ways of modern physicians without deviating to right or left; but it is true that the method which modern physicians use with such constancy and reflective analysis has led them to new discoveries . . . thus they have enlightened us so that they could establish in our time a practical method of medicine and that also the sick have no distaste in taking drugs." (f. 126^r). Such was the breadth not only of the man's learning but his understanding and ability to discern what was good both in the time-honoured medical systems of the ancients and the brilliant advances in his own time of transition and change.

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