Middle Articles

MEDICAL HISTORY

Tabulae Harveianae: a 17th-century Teaching Aid

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For over 100 years it had been accepted that the anatomical tables that had been in the possession of the Royal College of Physicians of London since 1823 had been used by Harvey himself to demonstrate the circulation of the blood. Later views about their history are discussed below.

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Among the Royal College of Physicians' most valued possessions are six seventeenth-century anatomical tables, known as the *Tabulae Harveianae*, that were at one time thought to have been used by William Harvey to demonstrate the circulation of the blood. Three of them are reproduced below.

The tables, which were probably made by drying and mounting the actual blood-vessels and nerves of the human body on to thin blocks of wood and then varnishing them, were kept for many years at Burley-on-the-Hill, the Rutland seat of the Earls of Winchilsea.

The earldom is derived through the widow of Sir Moyle Finch; and his grandson was Sir Heneage Finch, who married Elizabeth, a daughter of William Harvey's younger brother Daniel. These tables were given to the Royal College of Physicians by the tenth Earl of Winchilsea in March 1823, two years before the College's house in Pall Mall East was opened. Sir Henry Hallford, the then President, described them as:

"tracing the first steps by which physic was elevated to the dignity of a science; and though experience has made great improvements in the art of preserving such curious and instructive objects, yet viewed as specimens of the earliest anatomical preparations ever made to illustrate one of the most important discoveries ever disclosed to mankind for its benefit by the great master himself, who first expounded the circulation of the blood, these relics are invaluable in the eyes of the College."¹

The tables were carefully preserved behind glass in the north gallery of the College library, but so dark had they become that visitors to Pall Mall East often failed to notice them. When the College moved to its new home in St. Andrew's Place the tables were cleaned and restored. Placed at intervals between the bookcases in the west gallery of the library, the tables, four of which measure 75 in. by 27 in. and two 40 in. by 27 in., can now be appreciated for their artistic, as well as for their scientific merit, particularly as in the air-conditioned library there is no need for them to be kept behind glass.

It has already been mentioned that these tables were originally accepted as having been used by Harvey himself to demonstrate the circulation of the blood, and this view went unchallenged for nearly 100 years. Then, twice in successive years, their direct association with Harvey was questioned, first by Sir Thomas Barlow in his *Harveian Oration* given in 1916² and then by Archibald Malloch in 1917.³ It was argued that if Harvey had used them it was unlikely that they would not have been presented to the College by him, or at his death, and that if they were not so presented they would at least have been

mentioned in his will. Furthermore, they would have been known by Sir Charles Scarborough, who succeeded Harvey as Lumleian lecturer. That they were not known by him is shown by the fact that when John Evelyn showed Scarborough a similar set, but consisting of only four tables, he tried to persuade him to give them to the College. This Evelyn was unwilling to do, but he did at least agree to lend them to the College during their anatomical lecture(s).⁴ This was in 1652, and Harvey did not die until 1657. Evelyn eventually gave them to the Royal Society in 1667. They were transferred to the British Museum in 1782, and finally to the Royal College of Surgeons of England in 1809.

As far as can be discovered at present these two sets of anatomical tables are the only ones known to exist anywhere; but much more is known about the provenance of those that belonged to John Evelyn.

According to Evelyn's own account⁵ they were the work of Dr. Joanno Athelsteinus Leoncenae, presumably Joannes Leonius, called Estensis probably from his birthplace, who was Vesling's assistant at Padua from 1644 to 1649. Having extracted "the veins and other vessels which contain the blood, spirits, etc., out of humane bodies (which the many hospitals and infirmaries of that city [Padua] plentifully afford), [he] begun to apply and distend them on tables according to their natural proportion and position, as an improvement which might be of use for anatomy." Evelyn negotiated their purchase for 150 scudi on condition that Leonius should add "a table more, namely that of the liver, gastric nerves and other vessels to complete the fourth." This was in 1646 when Evelyn witnessed dissections in the anatomical theatre at Padua. The tables being transported to England, they were described as being then "the first of that kind . . . ever seen in our country, and for ought I know, in the world, though afterwards there were others."⁶

It seems likely that these dissections would have been dried and mounted, and from time to time varnished. Vesling has been suggested as the originator of this kind of teaching aid, which would doubtless have fallen into disuse soon after the introduction of spirit as a preservative.

When Vesling died in 1649 the chair of anatomy at Padua was eventually filled by Dominique Marchetti. It is he to whom Edward Browne refers, when writing from Padua to his father, Sir Thomas Browne, on 20 March 1665⁷:

"The anatomy is done; it hath given mee great satisfaction, not in any thing that hath been said upon the parts, but in seeing the preparations, which was done so neatly, that I think I shall never see any thing like it againe. 'Twas young Marchetti that

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dissected; hee first learned this dexterity of Sr John Finch, a worthy gentleman, and of great esteem all over Italy, and one that in anatomy hath taken as much pains as most now living. Hee hath tables of the veines, nerves, and arteries, five times more exact then are described in any author."

It is this letter that offers a clue to the identity of the original owner of the *Tabulae Harveianae*, and that suggests how they may have come into the possession of a descendant of the Harvey family, for this Sir John Finch was a younger brother of the Sir Heneage Finch mentioned above. He had graduated at Padua in about 1651, and had become professor of anatomy in Pisa in 1659. After something more than a year there he returned to England, and was admitted an Extra-ordinary Fellow of the College of Physicians in March 1661, doubtless as a result of his connexion with William Harvey. Before returning to England he had travelled to Holland to find out how bodies were preserved there, and had written to his patron, Prince Leopold, comparing the methods used in Holland with their own practice in Florence.

Some years after the death of Sir John Finch, his favourite nephew, Daniel, took with him to Burley his uncle's belongings. The fact that Finch owned a set of anatomical tables and that,

more than 100 years after his personal property was taken to Burley-on-the-Hill, such a set was found there, makes it reasonably certain that the anatomical tables now in the Royal College of Physicians originally belonged to him.

I am particularly grateful to Professor G. Causey for advice on problems posed by these tables. The photographs are reproduced by courtesy of the treasurer of the Royal College of Physicians of London.

REFERENCES

- ¹ Munk, W. (1878). *The Roll of the Royal College of Physicians of London*, vol. 1, 1518 to 1700, p. 145. Royal College of Physicians, London.
- ² Barlow, Sir Thomas (1916). *Lancet*, 2, 739.
- ³ Malloch, A. (1917). *Finch and Baines; a Seventeenth-century Friendship*, pp. 83-4. University Press, Cambridge.
- ⁴ Evelyn, J. (1955). *Diary*. Ed. E. S. de Beer, vol. 3, pp. 77-8. Clarendon Press, Oxford.
- ⁵ "An account of divers schemes of arteries and veins, dissected from adult human bodies, and given to the repository of the Royal Society, by John Evelyn," *Phil. Trans.*, 1702, 23, p. 1178.
- ⁶ Evelyn, J. (1955). *Diary*. Ed. E. S. de Beer, vol. 2, p. 475. Clarendon Press, Oxford.
- ⁷ Browne, Sir Thomas (1836). *Works*, ed. Simon Wilkin, vol. 1, p. 91. William Pickering, London.

Arteries.

Sympathetic nervous system.

Nervous system.