## SOME FURTHER LIGHT ON THE HISTORY OF THE VASCULUM

## By D. E. Allen

Since the publication of the history of the vasculum (Allen, 1959) a considerable amount of additional evidence has inevitably come to light. Much of this merely furnishes corroborative detail to parts of the story that were previously thin; but in certain respects (and in one respect in particular) the new material compels a major alteration in focus.

The first point that now needs revision is the date at which 'vasculum' lost its traditional italics and slipped into use as an ordinary English word. Previously, the earliest this could be traced back, at least as a word clearly used in preference to any other, was 1830-in both cases, however, in works specially devoted to a description of botanical equipment. The discovery of a passage by Bowman (1828) now indicates that the word was already familiar among leading amateurs even before this. Praising the botanically-minded innkeeper of 'The Running Horses' near Box Hill, he adds: "May botanists continue to find at this humble inn, cleanliness and civility, a trowel to dig up their plants, and even a vasculum to secure them". But Bowman was seasoned and experienced. At this time and well into the next decade or two 'botanical box' or 'botany box' were still being regularly used in preference by various writers, possibly because 'vasculum' was felt to sound pretentiously technical and esoteric. Certainly, in an article for beginners, Kent (1828) plays safe with "a little tin case", merely mentioning in a footnote that this is "called by botanists a vasculum".

This last author goes on to add that a vasculum is "more readily obtained by the title of a sandwich-box; being precisely the same thing, and the latter name being more familiar to the tinman". Dale (1838), even more unequivocally, recommends to entomologists "a vasculum (for sandwiches)". This outright identification with sandwich-boxes is, however, misleading. The more usual, and traditional, shape of the vasculum was not the rectangular one of the sandwich-box but the more or less cylindrical outline of the (much more ancient) candle-box. The vascula turned out on a standard pattern for university students about this time certainly bore far more resemblance to the latter. Sandwich-boxes, as the tin containers in widest general use for an outdoor purpose at this period, doubtless came to be adopted automatically by those newcomers to the study least indoctrinated with the older field-botany traditions. As sandwich picnics were an essentially British innovation, the unique influence on design of sandwich-boxes in this country may well explain why British vascula from this time onwards have been mostly shorter and flatter than their counterparts on the Continent.

Hitherto it has not been clear how widely vascula were in use among British botanists before about 1830, for there are very few mentions of them earlier than this, partly because of the dearth of literature containing instructions on how to collect. Two items of evidence have now been discovered that indicate that by 1800, at any rate, their use was already indeed fairly general. In a paper delivered to the Linnean Society two years earlier Stackhouse (1800) can be found advising that "as plants cannot be preserved any length of time in perfection even with the usual apparatus of a vasculum, or tin-case, no botanical traveller should be without a small press". This is backed up by an account by the Edinburgh botanist, Patrick Neill (1853), of his first meeting with George Don, sometime between 1797 and 1802:—

"On reaching Forfar towards evening, I soon found Don's garden, and entering, inquired of a very rough-looking person with a spade in his hand, whom I took for a workman, whether Mr. Don was at home. The answer was, 'Why, Sir, I am all that you will get for him'. Having apologised in the best way I could, I stated that when I left home I did not anticipate a visit to Forfar, else I could have brought a note of introduction from Mr. John Mackay. Mr. Don, pointing to my botanical box, immediately said, 'That is introduction enough to me'."

Thus, already at this date the vasculum was sufficiently standardised in design and in wide enough use to serve as a badge of recognition between botanists—a striking indication of the emergence even so early of the consciousness of forming a special in-group of their own.

It is to this early visual significance of the standardised tin that we should, perhaps, look for an explanation for the long failure to exploit the advantages of small airtight bags. "A tasteful oiled silk bag" for carrying a woman's bathing-dress was one of the fashions of 1814 (Cunnington, 1937, p.47); but apart from a mention by an American writer (Short, 1833), there appears to have been no interest till Landsborough (1849), in his best-selling book on seaweeds, prescribed "a tin vasculum or an oil-skin bag". Even then their use seems to have been very limited.

The history of the vasculum during the eighteenth century is still obscure, though there is reason to believe that it had become part of the standard equipment by 1775, if not earlier. Before this date—if we exclude a mystifying Austrian reference that apparently would have us believe that a tin collecting-case was used in the Alps in the early seventeenth century—the only mention that could previously be traced was the description by Linnaeus of the 'Vasculum Dillenianum' in his Philosophia Botanica in 1751. The choice of epithet seems to imply that Linnaeus (who himself merely used "a parcel of paper stitched together for drying plants"

on his Lapland journey in 1732) owed his entire knowledge of this collecting aid to J. J. Dillenius, who came over from Giessen to live in England in 1721. Dillenius' own writings throw no light on the matter. Assuming that Linnaeus saw his vasculum when the two had their only meeting in person, at Oxford in 1736, it could still not be ruled out that the implement was a German invention that Dillenius had brought with him when he immigrated.

It can now be shown that at least two botanists had tin collecting-cases in Britain as early as 1720\*. In answer to a letter from John Wilmer, a London apothecary and his first botanical mentor, asking him to say if there were any of his botanical utensils he would like to have (Wilmer was evidently overwhelmed with business and field-work was temporarily out of the question). John Martyn replied on April 9th of that year: "I thank you for the kind offer of your utensils, I have got a Tin Box, made after the pattern of yours . . . .". Both letters are now in the Banks collection in the Department of Botany, British Museum (Natural History), and the key part of the second one is quoted by Martyn & Gorham (1830, p. 13). Wilmer was then aged about twentythree and Martyn a few months under twenty-one. Martyn, in due course to be Professor of Botany at Cambridge but at this time a rather frustrated clerk in his father's counting-house in Cheapside, was just starting to form a herbarium and that summer went on at least two of the 'Herbarizings' organised by the Society of Apothecaries for its apprentices. The very next year he and Wilmer were two of the founders of the first Botanical Society (of London), which held meetings in the City and lasted till the end of 1726. As Dillenius was the president, certainly two and quite possibly three out of the known total membership of twenty-three are thus now revealed as owners of vascula. Conceivably every member had one. It is possible, even, that vascula were regulation equipment ordained by the Society of Apothecaries for those attending its 'Herborizings', just as a century later they apparently had to be carried by all who went on the first student excursions at both Edinburgh and Cambridge.

Wilmer had begun his apprenticeship in the Society of Apothecaries in 1712. Did he in turn first learn of the advantages of the tin case from attending the Society's 'Herborizings'? Evidence of a long-standing tradition of the use of the vasculum by the Apothecaries and their physic garden at Chelsea is, unfortunately, slight and not completely convincing; nevertheless, some pointers

\*Since this paper went to press it has come to light that vascula were in use even earlier—in 1704, just within the lifetime of Ray. William Stukeley, the great antiquary, records in his Commentaries that on going up to Cambridge to study medicine he frequently went "a simpling" that summer with various fellow students, "armed with Candleboxes and Ray's Catalogus" (The Family Memoirs of the Rev. William Stukeley, M.D., Ed. W. C. Lukis, 1880, Surtees Soc., 73, p. 21). That early vascula were often, or even usually, candleboxes has previously only been surmise. This discovery now converts this into certainty.—D.E.A.

do exist. Writing of the period 1823-33, Field & Semple (1878. pp. 142, 146) record that on the Society's excursions led by the redoubtable Thomas Wheeler, an attendant carried a large metal box for the collecting of the official specimens for later demonstration, and each student wore a similar but smaller box slung round his shoulder. Wheeler was then in his seventies, but he had been Demonstrator to the Society from 1778, and over the years had built the 'Herborizings' into a veritable ritual. His predecessor in the post had been William Curtis; and it is tempting to see in the vignette depicting botanists and a vasculum on the title page of the latter's Flora Londinensis (the first part of which is known to date from 1775) a portraval of an actual scene on one of the Society's excursions, or else on one of those that had to be made privately by the Demonstrator, if necessary with two or three assistants, to gather plants two days before the Society's 'General Herborizing' each July. Curtis was appointed to the post in 1773, only five years after coming to London as an apprentice. Shortly before his appointment, early in 1770, the Committee of the Chelsea Garden, as noted in their minute-book (now in the Guildhall Library), had obtained "a dozen of black tin square boxes". Their purpose is not explicitly stated, but the fact that Mr. Warden Lisle was "desired to pay for them and the clasps for the Herbarium" suggests they were intended for collecting. It is conceivable that it is one of these very tins that appears in the Flora Londinensis vignette.

Using Dillenius' (presumed) vasculum as a stepping-stone, it is not an impossible jump from 1770 to 1720. Nevertheless, the possibility of an unbroken tradition must remain a conjecture. There is no evidence, most unfortunately, of how the Apothecaries collected their plants on Thomas Johnson's famous excursions around 1630. And between the time of Johnson and the time of Wilmer, only collecting-books are mentioned (or else, when roots were required for transplanting, baskets)—by Lhwyd in 1682 and 1686, in sending instructions from Oxford to his kinsman David Lloyd in Merioneth (Gunther, 1945, pp. 69, 81), and by Petiver in two of his broadsheets for collectors issued sometime about 1700. Just possibly they used tins themselves and only recommended the more readily-procured paper folders to their agents. The real truth, however, will now almost certainly never be known.

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