

WILLIAM HERBERT (1778–1847) SCIENTIST AND
POLYMATH, AND HIS CONTRIBUTIONS TO *CURTIS'S*
BOTANICAL MAGAZINE

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‘Hon. and Rev. W. Herbert, afterwards Dean of Manchester, in the fourth volume of the ‘Horticultural Transactions’, 1822, and in his work on the ‘Amaryllidaceae’ (1837, pp. 19, 339), declares that ‘horticultural experiments have established, beyond the possibility of refutation, that botanical species are only a higher and more permanent class of varieties’. He extends the same view to animals. The Dean believes that single species of each genus were created in an originally highly plastic condition, and that these have produced, chiefly by intercrossing, but likewise by variation, all our existing species’.

[Preface to the third edition (1860) of *On the Origin of Species*, by Charles Darwin]

The Hon. and Rev. William Herbert, often known as Dean Herbert, to whom Vol. 65 (1839) of *Curtis's Botanical Magazine* was dedicated, was an exceptional polymath – a poet and classical scholar, linguist, reforming MP, clergyman – as well as amateur botanist and botanical artist. His best-known botanical work, illustrated with 48 of his own paintings, was the two volume work *Amaryllidaceae*, quoted above by Darwin. Although this extraordinary man counted botany as just one of his many interests, his output was prodigious; in addition to studying and breeding plants, such as *Crocus*, *Gladiolus*, *Hippeastrum*, *Narcissus* and *Rhododendron*, he also wrote and drew prolifically for journals such as *Curtis's Botanical Magazine* and its rival publication, *Edwards's Botanical Register*. In addition to Darwin, he corresponded with many other notable people, including Sir William Hooker and William Fox Talbot, and his letters paint a picture of a rather serious and industrious character.

William Herbert was born on January 12, 1778 at Highclere, near Newbury, Hampshire, the third son of Henry, first Earl of Carnarvon, and his wife, Lady Elizabeth Alicia Maria Wyndham. He received the conventional education at Eton and Oxford, and showed considerable literary and linguistic talent from an early age;

in addition to his Classical studies, he wrote poetry and became interested in ancient Scandinavian literature (Anon, 1847). Amongst his extraordinarily eclectic catalogue of works may be found, for example, *Select Icelandic Poetry, Translated from the Originals, with Notes* (1804–1806), *Helga* (1815), *Hedin; or, the Spectre of the Tomb; A tale, from the Danish history* (1820), *The Wizard Wanderer of Jutland, a Tragedy* (1820–1822), *Iris, a Latin ode* (1826) the 12 volume epic poem *Attila, or, The Triumph of Christianity* (1838) and *Five odes, translated from the Greek of Pindar* (1843). Some of his poems were reviewed in the quarterly intellectual journal, *The Edinburgh Review*, the tone of which can be appreciated by the following comment on Herbert's poem, *Helga*: 'We apprehend that very few of our readers can be strangers to Mr Herbert's translations from the Icelandic.....', and his literary output was well-considered by a number of his contemporaries, including Byron and Sir Walter Scott.

Herbert, like the earlier naturalist clergyman, Gilbert White (1720–1793), appears always to have been interested in Natural History, and studied birds and flowers with enthusiasm, so that when White's *The Natural History and Antiquities of Selborne*, first published in 1789, was reissued in 1833, and again in 1837, Herbert was a natural choice as a contributor to the notes. In the Preface to the latter edition, the brother of the Editor, the zoologist Edward Turner Bennett (who did not live to see its publication) writes that 'Of the notes.....a large proportion are from the pen of my brother, but not a few have been contributed by the kindness of his friends.....The Hon. and Rev. W. Herbert has again drawn largely on his stores of information connected with ornithology and other branches of natural history.....'.

Herbert spent his childhood at Highclere, which at that time, was a handsome, classical Georgian mansion (rather than the highly ornamented Castle, designed by Sir Charles Barry in 1839–1842, that one sees today), built on the site of an earlier Elizabethan house, and set in many acres of medieval deer park, 'improved' by Herbert's father to designs by Lancelot 'Capability' Brown (1716–1783). The first Earl, whose own enthusiasm for bulbs such as *Hippeastrum* became a lifelong obsession for his son, was also keen on trees and other plants, and some of the earliest Cedars of Lebanon to be introduced to Britain, collected by the traveller Reverend Richard Pococke in the

Lebanon in 1739, were planted in the grounds at Highclere (Hepper, 2001).

Despite his privileged upbringing, as a younger son William had to find himself a career, and, whilst living at Park Place (now a Toby carvery!), in Mitcham, Surrey, at that time a popular and prosperous suburb, at first dabbled in politics, being elected one of two MPs for Hampshire in 1806–1807, and representing the Borough of Cricklade in Wiltshire in 1811–1812. His sympathies were liberal and reformist; he was in favour of the abolition of the slave trade, opposed legislation against the Luddite machine breakers, voted for Catholic relief and Irish tithe reform, and continued to take an interest in such matters long after his retirement from politics. His lengthy letter to the Chairman of the Committee of the House of Commons on the subject of the Game Laws, for example, indicates his concern for those less fortunate than himself:

‘The first object of a good government is not that rich men should have their pleasures in perfection, but that all orders of men should be good and happy..... The game laws have been carried to a pitch of oppression which is a disgrace to the country. The prisons are half filled with peasants, shut up for the irregular slaughter of rabbits and birds – a sufficient reason for killing a weazle, but not for imprisoning a man. Something should be done; it is disgraceful to a Government to stand by, and see such enormous evils without interference. It is true, they are not connected with the struggles of party; but still, the happiness of the common people, whatever gentlemen may say, ought every now and then to be considered’.

His later support of the Ten Hours Bill (1844), sponsored by Lord Shaftesbury, which was one of a series of Factory Acts limiting the working hours of children, was typical of his sense of social fairness, and it appears that he had genuine concern for the uneducated and oppressed (Herbert, 1823).

He married, on May 17, 1806, the Hon. Letitia Emily Dorothea Allen, second daughter of Joshua, fifth Viscount Allen, and the couple produced two sons, Henry and Frederick, and two daughters, Louisa and Cecilia. Whilst living at Mitcham, William found time to raise not only his family, but also plants, especially hybrids of amaryllis, and

encouraged his older brother, the second Earl of Carnarvon, to do the same at Highclere; A. P. de Candolle, of the Geneva Botanic Garden, later named *Amaryllis carnarvonia* DC (De Candolle, 1825–1827) in honour of the latter. William and his brother were also both keen hybridisers of rhododendrons and azaleas, and in 1817 William crossed *Rhododendron viscosum* with *R. maximum* to produce a hybrid which he named \times *Azaleodendron hybridum*; his brother produced a cross named ‘Altaclerense’ which was figured in *Curtis’s Botanical Magazine* as *Rhododendron arboreum* (hybridum) *altaclerense* (Hooker, 1835; Bean, 1976).

Meanwhile, in 1814, Herbert had been ordained, and was presented to the living of All Saints Church, Spofforth, near Wetherby in North Yorkshire, whose patron was his mother’s eccentric brother, the third Earl of Egremont, owner of large estates in Yorkshire and Cumberland as well as at Petworth in Sussex. Once settled in the Rectory, Herbert seems to have had time to carry on an extensive correspondence, indulge his love of plants and painting. Letitia was as good an artist as her husband, and also painted plants from their garden; there are at Kew several of her excellent watercolours, signed L.E.D. Herbert, at least two of which, *Crinum submersum* and *Crinum broussonetii*, are very similar to paintings of the same plants by William, reproduced in *Curtis’s Botanical Magazine* (Fig. 1).

One of William’s great interests was in bulbs, both European, such as *Crocus* and *Narcissus*, and also more exotic genera, such as *Hippeastrum*, *Brunsvigia*, *Crinum*, and *Gladiolus* from the Cape, and his first contribution (in 1820) to *Curtis’s Botanical Magazine* was *Crinum broussonetii* (t. 2121); for this he not only produced eight pages of text, but also drew the accompanying plate.

In addition to growing numerous species of bulbs, Herbert was one of a small band who attempted to produce hybrids, and in 1819 he wrote an article entitled *On the production of hybrid Vegetables* and encouraged gardeners to start experimenting by crossing flowers and fruits so as to produce improved hybrids (Herbert, 1822). He was also (somewhat strangely for a classical scholar) in favour of using vernacular names for ‘accidental and cultivated’ varieties, rather than the complex Latin names which had hitherto found favour with breeders and nurserymen.



Fig. 1. *Crinum broussonetii* Herb. (Amaryllidaceae). Original watercolour by Letitia Herbert for Curtis's *Botanical Magazine*, t. 2121 (1820).

Two years later, in October 1821, he wrote a treatise on the *Amaryllidaceae*, illustrated with four plates, which was published as *An Appendix to the Botanical Register and Botanical Magazine. Intended to bind up with either of those Works. Containing, a Botanical Arrangement and Description of the Plants heretofore included under the Genera Amaryllis, Cyrtanthus, Crinum and Pancratium; with general Observations, and Directions for their Cultivation*. (It is usually bound with volume 48 of *The Botanical Magazine* and volume 7 of *Edwards' Botanical Register*).

This was the precursor of his major work, *Amaryllidaceae; preceded by an attempt to arrange the Monocotyledonous orders and followed by a Treatise on cross-bred vegetables, and supplement* which was finally published in 1837. This book, in two volumes, was illustrated with 48 plates, drawn by himself, showing detailed dissections; some copies were coloured, again, perhaps, by Herbert himself.

Not content with his book on the Amaryllidaceae, Herbert continued to contribute numerous articles and illustrations to *Curtis's Botanical Magazine*. His involvement with this journal began in 1821 when Dr John Sims, a botanist and physician, was Editor, having succeeded to the post on William Curtis's death in 1799. (It was Sims who renamed the publication *Curtis's Botanical Magazine*; prior to this it was called simply *The Botanical Magazine; or Flower-Garden Displayed*.) Sims, who had studied in Leiden and Edinburgh, steered the magazine into a rather more scientific path, assisted by various contributors with specialist expertise. Herbert was able to produce many articles, based on observations of plants he had grown at Spofforth, and he also eventually contributed 66 drawings to this publication (Desmond, 1987).

An example of his prodigious output can be seen in Volume 52, published in 1825, which, quite apart from a four page 'Amaryllidearum Synopsis', with four sections of genera..... includes several other tender plants, such as *Cyrtanthus striatus* (t. 2534) described as having 'flowered in the green-house at Spofforth', while the 'stove' also produced *Dendrobium pierardi* (t. 2584), *Pancratium zeylanicum* (t.2538), a specimen of *Zephyranthes rosea* (t. 2537: Fig. 2), and *Hippeastrum solandriflorum* (t. 2573); the latter was accorded the honour of a fold-out drawing by Herbert, who noted that the:

'Bulbs of two varieties were imported by Mr. BROOKES, from Cayenne.Our sketchwas taken from a bulb imported by Mr. LEE from Brazil, which flowered, in the Spofforth collection, with flowers, measuring from nine to ten and a half inches.....The bulbs thrive freely in the stove, and flower upon a shelf. Mules have been produced at Spofforth by its pollen, from *H. stylosum*, *H. pulverulentum*, and *H. reginae-vittatum*'.



Fig. 2. *Zephyranthes rosea* Herb. (Amaryllidaceae). Original watercolour by William Herbert for Curtis's *Botanical Magazine*, t. 2537 (1825).

Another fold-out plate (t. 2592), of *Crinum elegans*, is accompanied by the following text, in which he raises some important questions concerning the status of species:

‘This plant, sent by Dr. CAREY, flowered at Spofforth in September, 1824. Raised by seed from Rangoon, it rarely produces seed or offsets with him.....The Birman Crina are not easily cultivated....three bulbs of *procerum* perished at Spofforth, being impatient of wet amongst the leaves.

The more we consider the nice gradations by which the species of this extensive genus slide into each other, and the facility with which the most remote interbreed, the more difficulty we shall find in deciding what features constitute a specific difference, and the more we shall be led to view the whole genus, including the species formerly confounded with *Amaryllis*, as having branched from one original type. We are inclined to the same opinion of the whole genus HIPPEASTRUM and GLADIOLUS, as limited in this work. This view would lead to the further important question, whether, in Botany, the well-defined genera are not analogous to the species, the natural orders to the genera, in zoology. Two mule Crina have produced offspring at Spofforth, by the pollen of a third species, uniting in one produce the three different sections of the genus.....’

Other plants figured in this volume include *Brunsvigia josephinae* (t. 2578), with text by Herbert and illustrated by John Curtis (1791–1862) who also illustrated *Zephyranthes verecunda* (t. 2583); *Zephyranthes striata* (t. 2593), illustrated by Herbert from the nursery of Mr. Tate in Sloane Street (brought from Mexico by Mr. Bullock), and *Habranthus bifidus* (t. 2597), which had a family connection, having been:

‘imported by LORD CARNARVON from Buenos Ayres;.....The flowers of this genus expand in the sun, and probably those of *H. bifidus* are at times much more open, than when our sketch was made from a fresh specimen, carefully brought to us in a tin box, by J. R.GOWAN, Esq. from Highclere.....’

Another family connection is seen in Plate 2599, ‘*Tigridia herberti*. Mr. George Herbert’s Tiger-Flower’.

‘This beautiful species of *Tigridia* produced a long succession of flowers at Spofforth, in June and July, having been imported from Buenos Ayres.....

‘We had prepared this article for the press under the name of *T. ramosa*, but having learnt from Mr LINDLEY, that he was about to describe the same species under the name *Herberti*, in compliment to the memory of the late Hon. and Rev. GEORGE HERBERT, deeply lamented by the many to whom he was dear, in whose conservatory at Burghclere it flowered for the first time in Europe, in the Autumn of 1824, we have not hesitated to adopt his name’.

George Herbert, another clergyman, and one of William’s two younger brothers, had died in March, 1825. Interestingly, William later thought better of the generic name, and in 1831 it was included under the revised name, *Cypella herberti*, as t. 33 in Sweet’s *The British Flower Garden* (Sweet, 1831).

In 1827, William Jackson Hooker, at that time Professor of Botany at Glasgow, took over as Editor of *Curtis’s Botanical Magazine*, and, after a break of nearly 10 years, Herbert continued his long association with the publication. The two men were in almost constant correspondence, mostly concerning the plants which Herbert was growing and/or drawing for the magazine (Fig. 3). One letter, written just after publication of his book on the Amaryllidaceae, shows Herbert suffering the familiar fate of the author, in spotting mistakes in his new work: (DC Vol 9 (2) Letters 219/220).

‘Dear sir,

Pray take a pen in your hand, and open my vol.....Ridgway has at last sent my volume out.....Pray correct by hand in Plate 20 montanum for montana; an erratum which I had noted that he neglected to have rectified. If he had not hurried to the printing without being ready with the plates, the volume would have been more satisfactory’

Herbert supported William Hooker’s ambition to become Director of Kew, which eventually occurred in July 1841, and meanwhile Volume 65 of *Curtis’s Botanical Magazine*, published in February 1839, was dedicated by Hooker to the:



Fig. 3. *Hibiscus militaris* Cav. Watercolour by William Herbert for *Curtis's Botanical Magazine* t. 2385 (1842).

‘Hon. & Rev. William Herbert, of Spofforth, distinguished no less as a cultivator, than by his vast knowledge of the Amaryllidaceae and other Monocotyledous Orders, many of which have been represented in this work, illustrated both by his pencil and pen....’

Herbert was always happy to receive bulbs from others to grow and observe in his garden, and a letter from Spofforth, (Fox Talbot Collection, 3722) dated August 21, 1838 to William Henry Fox Talbot, the pioneer photographer, provides us with a glimpse of his interests:

‘My dear sir,

I hope as you have reached Newcastle that it may not be inconvenient to you to pay us a few days visit in your way back.....

I have not a collection of Alliums, tho’ I grow some for ornament. I shall be glad of an offset or seed of your Swiss plant at any future opportunity. Sir W. Hooker has pushed me on into preparation for a volume on Iridaceæ & the Cape bulbs are therefore an object of peculiar interest to me at this moment. I purchased a lot from a German collection in June, some of them are shewing flower; a *Trichonema* will indeed be blown in a day or two, but the season is sadly against them. If anything unusual should appear amongst yours you will oblige me by communicating it. *Gladiolus Namaquensis*, *Antholyza lucida*, *Watsonia punctata*, *Gladiolus permeabilis*, *Glads flexuosus*, *Tritonia refracta*, *Tritonia viridis*, *Tr. Rochensis*, *Geissorhiza fulva*, *Moraea lugens* alias *Aristea melileuca*, *Trichonema* [illegible], *Judicum speciosum* & *caulescens* are amongst my principle desiderata, & a great villous *Babiana* allied to *Ringens*. Have you any of them?’

Around this time, Herbert was also in communication with John Stevens Henslow, another clergyman and botanist, in an attempt to answer a number of puzzling questions posed by the latter’s former pupil at Cambridge, Charles Darwin. In a lengthy letter dated April 5, 1839, Herbert began modestly:

‘Dear sir

I wish it was in my power to give definitive answers to Mr Darwin’s questions. They are all fit points to be investigated, but they require a longer course of experience than the life

of one man, especially of one who attends to the subject only incidentally, can furnish.....

‘Up to this day, tho’ I am still trying, I have failed in all attempts to cross Crocuses, yet there is a different either species or variety of *Crocus* in almost every part of S. Europe, & the garden varieties of *Crocus vernus* & *versicolor* are very numerous. I think conformity of constitution a great point to facilitate intermixtures; but I cannot conceive why the genus *Hippeastrum* courts hybridization, while it is produced with difficulty in the genera closely allied to it, *Zephyranthes* & *Habranthus*’. (Darwin Correspondence Database, 503)

This elicited the following response from Darwin, dated June 26:

‘I hope you will excuse me taking the liberty of sending you a copy of my Journal, during the voyage of the *Beagle* – knowing that you have interested yourself in the Natural History of S. America, I have ventured to hope that some few parts of my volume might interest you, although it contains no botanical information. I feel extremely grateful for your kindness in writing so long a letter to Professor Henslow in answer to the questions I sent him – I can hardly hope you will excuse me troubling you once again – but you mention new facts, which have much interested me.....’

A few days later, Herbert wrote to Darwin:

‘I return my best thanks to you for your obliging present of your very interesting journal.....I hope to publish in the spring or sooner a supplement to my *Amaryllidaceae* with some further remarks on crossbred plants, but my knowledge is very defective as to much of the mystery’.

Herbert had, by the standards of the time, an open mind, and quite ‘advanced’ views on hybridization and adaptation, or evolution; in the face of objections from religious conservatives, he persisted in his experiments. He continued to worry away at the problems of ‘Hybridization amongst Vegetables’ (i.e. plants), and in October 1846, only a few months before his death, he communicated his latest thoughts on the matter to the Horticultural Society (Herbert, 1847a).

One of his observations concerned the genus *Crinum* which

‘.. goes round the belt of the world not exceeding a certain distance from the equator. A portion of it was originally included in the genus *Amaryllis*, being supposed to conform with the Belladonna lily, on which it was founded. The greater part of that portion breed as willingly with those within the old Linnaean limitation of *Crinum* as with each other; but those from the west coast of Africa (although one of them, *C. spectabile*, is naturalized in Brazil) usually fail to breed with any other species.....Here is one of the unintelligible freaks of nature; that is to say, one of the departures from analogy in the Dispositions of the Allwise, of which I at least cannot fathom either the cause or the mode’.

Yet again, as he had already confided in Darwin, he noted the unwillingness of *Crocus* to interbreed, although ‘with greater similarity of habits and constitution than *Crinum*....it might have been supposed that, when brought into cultivation, their seminal produce would become confounded. On the contrary, I have tried in vain for years to obtain any cross.....’

He studied the geological map of Greece, produced by the French naturalist Jean Baptiste Bory de St.Vincent (1778–1846), who had led the scientific expedition accompanying the French Morea expedition, and after whom *Crocus boryi* is named, and was still puzzled.

‘Half the island of Milo consists of igneous rock, half of marble and schist. On the schist he found *C. laevigatus*. The same schist appears in Thermia; *C. laevigatus* is there. I know that it passes thence to Hymettus and to the neighbourhood of the quarantine station at Zeitun. I doubt not that a like calcareous formation will be found there. But why does *C. laevigatus* jump from the summit of Milo to the summit of Thermia, and thence by Hymettus to Zeitun, without touching the hills of Episaurus or Nauplia, or any part of the Moraea, as far as it has been searched? I believe because the soil, subsoil, and climate, in which it grows, have forced *Crocus* to take that form and aspect which botanists call *C. laevigatus*, not that it has a predilection for such, for experience leads me to think that few local bulbs or even plants prefer their native soil, though they are found in it because they can endure it, while the rivals, which would otherwise oppress them, cannot thrive vigorously in it. Many such are found to perish if potted

or cultivated in their native soil removed to another situation, finding either an injurious increase or diminution of moisture in the new position, which makes a different soil expedient for them there’.

As if these matters were not puzzling enough, there remained the problem of the +*Laburnocytisus* (now known to be a chimaera, not a genetic hybrid); Herbert had already mentioned in a former treatise

‘a remarkable circumstance concerning the purple hybrid laburnum, on a plant of which a small branch with the habit and nearly the leaves and flowers of the diminutive *Cytisus purpureus* had sprouted and maintained itself in the garden of my brother.....is not the plain inference, that they were one individual kind when they proceeded from the Creator, and are so still, though diversified in appearance? If two plants so dissimilar are admitted to have so diverged, the like course of change must be attributed to other genera also; for I cannot think it will be shown that those two are by any peculiarities entitled to form an exception from the general law imposed upon vegetables’.

‘.....it is a matter deserving grave consideration, whether even a multitude of established genera are not variations from fewer original kinds, of which the real limitation may be found in a higher position amongst tribes, classes or orders? And, if that point be established, as I humbly think it must be in the vegetable kingdom, upon what footing will the species and varieties of zoologists stand, when the analogies between plants and animals are fully considered, which it is not my province, and which I do not pretend to have sufficient depth of knowledge, to investigate?’

‘.....Can we, in face of those phenomena, assert that no vegetable since the period before the sun and moon gave it light, no bird or fish since the Almighty called them forth from the salt mud, no creature of the earth since it was evoked from the dust, can have departed from its precise original structure and appearance?’

Herbert was here fumbling his way towards the ideas later developed by Darwin, although he apparently managed to reconcile his

findings with his religious beliefs, without too much difficulty. (Darwin wisely refused to be drawn into the religious debates and traps set for him, asserting that his scientific views did not qualify him to speak on religious matters.) This was fortunate, as in July 1840, Herbert had been appointed to the Wardenship of Christ's College, Manchester; under the Cathedrals Act 1840, the Warden and Fellows of the collegiate church of Manchester were styled Deans & Canons, as the church was to assume the title and role of Cathedral of the new diocese of the fast-growing town of Manchester. In 1840 Herbert became known as the first Dean of Manchester, although the status of the new cathedral, was not actually officially recognized until shortly after his death in 1847. From 1840 onwards, however, Herbert was generally known as 'The Dean', although he usually signed his botanical work simply 'WH'.

Although still writing occasionally for *Curtis's Botanical Magazine*, Herbert also contributed to *Edwards's Botanical Register*, a competitor of *Curtis's Botanical Magazine*. The *Register* had, been founded in 1815 by Sydenham Edwards, a botanical artist originally employed by William Curtis. Edwards left Curtis to set up his own magazine, entitled *The Botanical Register*, and edited and illustrated five volumes, before dying in 1819. The publisher, Edward Ridgway, then took over the editorial task until 1829, when John Lindley (Assistant Secretary of the Horticultural Society) was appointed Editor, renamed the journal *Edwards Botanical Register*, and edited it until its demise in 1847.

In 1830, Lindley included a drawing (by M. Hart) of *Calceolaria Herbertiana*, Mr W. Herbert's *Calceolaria*, in *Edwards's Botanical Register* (t. 1313, volume 16), noting that 'Our drawing was made from specimens communicated by the Honourable and Rev. William Herbert, in honour of whom we have taken the liberty of naming it...'. A number of articles in *Edwards's Botanical Register* refer to the species and varieties of *Crocus*, and one example shows the attractive, and unusual-coloured, *Crocus insularis*, which was sent to him by 'Mons. Palmado, the British Consul at Bastia' (Lindley, 1843), and two years later, he contributed a detailed plate and seven page description of a group of *Crocus* species, the first of which he had received from J. Cartwright, the Consul-general at Constantinople.

The genus *Crocus* was to prove an abiding interest, as shown in the nine-page enumeration of all the known species of *Crocus* in

volume 29, and culminated in his *History of the Species Crocus*, which was published in the *Journal of the Horticultural Society* in 1847 (Herbert, 1847b).

Daffodils were another of Herbert's interests, and Plate 38, Vol.29, also drawn by him, shows a very elegant group of six different hybrid narcissi, raised amongst many others from seed at Spofforth. He writes rather earnestly:

‘It is desirable to call the attention of the humblest cultivators, of every labourer indeed, or operative, who has a spot of garden or a ledge at his window, to the infinite variety of narcissi that may thus be raised; offering him a source of harmless and interesting amusement, and perhaps a little profit and celebrity’.

One of the Dean's acquaintance was Edward Leeds of Longford Bridge in Stretford, near Manchester, a keen plantsman and grower, who, in addition to other florists flowers, raised numerous daffodil hybrids, naming one of his cultivars ‘Dean Herbert’.

Although Herbert often illustrated his own plant descriptions, on some occasions Lindley used his ‘in-house’ artist, this being Sarah Anne Drake, an accomplished botanical artist, whom he had taught to draw. In Volume 29, plate 62, for example, Miss Drake illustrated the eccentrically named *Rhododendron* × *aprilis*, which Herbert had obtained in 1843 by crossing *R. ponticum* and *R. dauricum*. It was described as ‘A beautiful hybrid, raised by the Hon. and Very Rev. the Dean of Manchester from seed of *Rhododendron ponticum*, fertilized by the Evergreen Davurian *Rhododendron*. It flowers in April, for which reason Mr. Herbert has given it the name of *Aprilis*’.

In addition, Herbert found time to add some Miscellaneous Matter to *Edwards's Botanical Register*, consisting of drawings and a discussion of some ‘Monstrum Planti’ – misshapen roots – sent to him by Mr Plant, a nurseryman from Cheadle. Herbert noted rather patronizingly that:

‘Mr. Plant pays a great deal of attention to the state of the stigma and pollen, but I cannot find that he has done so more than I have during the last thirty years, when I was desirous of obtaining a difficult cross..... Every encouragement should be given by cultivators to Mr. Plant, who would perhaps effect much by industry and perseverance, if his means were equal to his zeal’.

John Lindley, meanwhile, also added a waspish note to this volume:

‘For the very curious information conveyed in the following pages, we are indebted to the Honourable and Very Rev. the Dean of Manchester, whose experiments on hybridizing plants have now assumed a precision and importance which could scarcely have been anticipated from the early researches into this subject. We particularly commend the facts here detailed to the attention of those Botanists who see a genus or species in any little variation from the habitual condition of a plant’.

It seems that Herbert was neither a great theologian nor an impressive orator, his sermons being often considered dull, but his goodness of heart was never doubted. Despite a slight attack of ‘apoplexy’ in 1845, Herbert continued, apparently in moderately reasonable health, as Dean of Manchester until his sudden death at his house in London on May 28, 1847, at the age of 70. (Raines, 1885) One of his last visitors had been Charles Darwin, who reported to Joseph Hooker on June 2, 1847, that: ‘I saw the poor old Dean of Manchester on Friday & he received me very kindly; he looked dreadfully ill & about an hour afterward died! I am most sincerely sorry for it’. (Darwin Correspondence Database, 1094).

Though Herbert is not as well-known as his contemporaries Darwin, Henslow and the Hookers, his botanical researches were important as the background to their theories on the variation of plants, hybridisation and plant geography (Stearn, 1952). His divisions of the diverse members of the Amaryllidaceae into genera has continued until the present, and the most recent account of the family supports at least 15 of Herbert’s genera. *Nerine*, *Hippeastrum*, *Phaedranassa*, *Vagaria* and *Lycoris* are some of the more familiar which show the extent and originality of Herbert’s studies of the family.

William Herbert is commemorated by the small genus of American bulbous plants, *Herbertia* Sweet (Iridaceae). *Herbertia pulchella* was illustrated by Edwin Dalton Smith as plate 222, in nurseryman Robert Sweet’s *The British Flower Garden* (London, 1827). Herbert considered Smith’s figure ‘so indifferent’ that he drew an improved version, which was published as t. 3862 of *Curtis’s Botanical Magazine*.

Herbert's name is also perpetuated in *Herbertia*, the journal of the International Bulb Society, and in the Herbert Medal awarded by the same Society. The previous Editor of *Curtis's Botanical Magazine*, Brian Mathew, author and bulb expert, was awarded this medal in 1992. In his acceptance speech, Brian said:

'It is particularly appreciated, since in my taxonomic studies I have often admired and utilized The Rev. Dean's [Herbert's] work which, although 150 or so years old, is still as valuable today as it was innovative in his time. His monographic work on *Crocus*, for example, which has been particularly valuable to me in my own studies of the genus, was extremely astute, considering the limited material which was available to him. In fact his taxonomic judgment was such that the basic ideas of his classification of *Crocus* are as valid today as they were in the 1840s. So, needless to say, it is a great honour to have been awarded this coveted medal and to be associated more closely with the revered name of William Herbert'.

Another recent recipient of the Herbert Medal was Harry Hay, plantsman and keen bulb grower, who until his death in 2010 was supplying information and specimens for illustration in this Magazine.

The last of Herbert's contributions to *Edwards's Botanical Register* are found in volume 33, the year of his death, and the last year in which the Register was published.

'We much regret our inability to furnish any account of these two pretty Trichonemas, which were collected by our late lamented friend the Dean of Manchester, drawn by his own faithful hand, and prepared for publication by himself; but Alas! Diis aliter visum est. He is gone: and no trace of his views about them remains behind'.

ACKNOWLEDGEMENTS. The author thanks the staff of Library, Art and Archives at the Royal Botanic Gardens, Kew for their courtesy and help in locating books, illustrations and papers; Julia Buckley, Anne Marshall and Kiri Ross-Jones in particular, have given freely of their time and knowledge. Despite many hours reading original papers and letters, I am conscious that the present article can only be regarded as an overview, and that there is much more material to be studied. (Files from the Directors Correspondence at Kew are identified by the prefix DC.) Brian Mathew has kindly read the manuscript, and I thank him for his comments.

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