John Keats: POET AND HERBALIST

Part of John Keats' medical training and knowledge derived from close observation and training in the herbal tradition. Gareth Evans puts this into the context of his rich poetic imagery, and also provides an insight into Regency medicine, at a time when plant-based medicine was beginning to be relegated as folk medicine.

Drawing of Keats, age 24, by Charles Brown

In October 1815 a young London-born lad finished his four-year apothecary apprenticeship in rural Edmonton. During this long indenture such an apprentice would have had to handle and learn the preparation of infusions, decoctions, tinctures and syrups familiar to any herbalist. This apprentice, however, had a mind that absorbed what he saw and felt as he worked surrounded by the "fennel green and balm", "bay leaves and gummy frankincense". When, in a relatively short time, he became a mature poet his creative mind turned these early impressions into some of the vivid images with which he held the attention of his many readers: "jellies soother than the creamy curd, and lucent syrops, tinct with cinnamon".

One of the most sensual poets of the English language, John Keats is often claimed by doctors and surgeons as one of their own. But equally should not present-day medical herbalists make their own claim to his memory and work? Keats had a long education in herbal medicine and the largest part of the young poet's medical training was his time as an apothecaries' apprentice.

Later, at the end of 1815, he broke with his largely country upbringing and went to Guy's Hospital, he would have continued to study the use of herbal drugs. Regency medicine was well-known for the prescription of mineral and

metal salts, it was before the progress of analytical chemistry, and the use of plant-based drugs was still in the herbal tradition. All such drugs were still prepared from whole plant material, which many practitioners still preferred to the sometimes toxic salts. As Keats was studying however, chemists were continuing to identify the first isolated constituents of medical herbs, such as morphine from opium (*Papaver somniferum*) and coniine from the hemlock (*Conium maculatum*).

Naturally, medical students had to identify and understand medical herbs as the source of their tinctures and extractions, as do today's professional herbalists. The study of botany would have been a subject particularly attractive to Keats, as he had a strong affection for native flora which is clear in his poetry and extensive letters.

The lecturer in Medical Botany at Guy's during Keats' year there was William Salisbury, a botanical nurseryman and author. Salisbury was new to the post when he broke with the formal lectures of his predecessors, believing that "this delightful part of Natural History can be acquainted only by reading in the book of nature". He planned to take as much of his course as he could out of the lecture room and into the fields. The concept of these field trips was not new, but an extension of a 200-year-old tradition of herborising excursions undertaken by the Worshipful Society of Apothecaries, based at Blackfriars.

The excursions were often social and provided a welcome break for medical students. Salisbury chose some of the most noted botanical neighbourhoods of London such as Battersea Fields and Tooting, Wandsworth and Wimbledon Commons, Woolwich sand-pits and Croydon, West Wickham and Shirley Common.

This list of fields, woods, ponds, gardens and parks also included Hampstead Heath, which had been well-worked by herbalists and botanists for more than two centuries. The hilly village of Hampstead was to become particularly associated with Keats as he made his home there after he relinquished his medical training in the following year, and the Keats House Museum is to be found there today. Back in Spring 1816 what would the student Keats have found on the Heath?

Fortunately, William Salisbury regularly published a list of flowering plants found on his many excursions in a London medical journal. He led his students to the Heath in April and June 1816, a locality which could sometimes still be relatively inaccessible. The plant lists for those excursions give an indication of the wide variety of habitats still found there. Among the familiar medicinal herbs found blossoming on the Heath were tormentil (*Potentilla erecta*), wood avens (*Geum urbanum*), buckbean or bogbean (*Menyanthes trifoliata*) and coltsfoot (*Tussilago farfara*) whose seeds in April "were quite perfect and flying about".

All these were listed in current 1815 *London Pharmacopoeia*, whose Latin prescriptions Keats would have had to know for his Society of Apothecaries' examination later in the same year. Their unchanging therapeutic qualities listed in the *Pharmacopoeia* are what we know today; the astringency of tormentil and avens, and the anti-rheumatic and expectorant qualities of bogbean and coltsfoot, respectively. A more unusual pharmacopoeia entry is lady's smock (*Cardamine pratensis*), which was found to be "scarcely out" on the Heath in April. These delicate flowers had been used as a diuretic, but physicians of around Keats's time had reported some anti-spasmodic use for them in "hysteria", epilepsy and asthma.

If the Latin of Salisbury's botanical flower lists can seem a bit dry, they can be brought wonderfully to life by the coloured engravings of *Flora Londinensis* (1775-1798). Published by Salisbury's late partner, William Curtis (see *Herbs* Vol. 20 No. 2 page 18), it illustrates the flora within 8 kilometres of London. A landmark publication in British botany it would have been very much to Keats' taste. In Salisbury's own publication, the *Botanist's Companion*, brought out in 1816 to accompany his excursions, he laments the decline in the use of herbal drugs. In including a table of plants dropped from the pharmacopoeias he acknowledges "our good housewifes in the country, who, without disparagement to the medical science often relieve the distresses of their families and neighbours by judicious application of drugs of this nature".

In scouring the fields, woods and hedgerows for wild herbs and flowers, Salisbury's students were acting out a necessary role in production and supply of drugs of the time, that of the herb-gatherer. This unremembered band, consisting mostly of women, supplied apothecaries and druggists with wild herbs for their preparations. In Keats' well-known portrait of Walter Scott's Gipsy *Old Meg,* there is maybe a feel of Keats' own impressions of the herb-gatherers. It is an imaginative description written for his younger sister Fanny who would have been familiar with herb-gatherers as a feature of the countryside.

Old Meg she was a Gipsey,
And liv'd upon the Moors;
Her bed it was the brown heath turf,
And her house was out of doors.
Her apples were swart blackberries,
Her currants, pods o' broom
Her wine was dew of the wild white rose,
Her book a churchyard tomb . . .

The Herb Garret of Guy's Hospital was probably already a venerable feature of the hospital when Keats was "walking the wards" (see *Herbs* Summer 1995 Vol. 20 No. 2 page 20). The hospital accounts show past payments to a herb woman for cart-loads of collected herbs to keep the garret stocked.

After spending the winter of 1815-16 studying in the then squalid area surrounding Guy's, the evidence for Keats joining Salisbury's, or the Apothecaries', herborising excursions lies in his poetry.

Three sonnets, including *To one who has been long in city pent*, are all in praise of the countryside and were written in Spring 1816. The season marked the beginning of botany courses, the weather becoming too warm for anatomy and dissection. These three early poems precede a longer poem, *I stood tip-toe on a little hill*. Composed in fragments during the spring and summer of the same year, the first jottings of this 'apprentice piece' was known to have been written on a fine day on the highest top of Hampstead Heath:

. . . *The clouds were pure and white as flocks new shorn,*
And fresh from the clear brook; sweetly they slept
On the blue fields of heaven, and then there crept
A little noiseless noise among the leaves,
Born of the very sigh that silence heaves:
For not the faintest motion could be seen
Of all the shades that slanted o'er the green.
There was wide wand'ring for the greediest eye,
To peer about upon variety;

Despite the spring being "uncommonly backward", Keats most admired flowers were blooming by April: primrose (*Primula vulgaris*), violet (*Viola odorata*), and heartsease (*V. tricolor*) as well as butter-bur (*Petasites albus*), lesser celandine (*Ranunculus ficaria*) and shepherd's purse (*Capsella bursa-pastoris*). By June, Salisbury records that the hawthorn blossom was outstanding and the meadows had a "luxuriant appearance":

A bush of May flowers with the bees about them;
Ah, sure no tasteful nook would be without them;
And let a lush laburnum oversweep them,
And let long grass grow round the roots to keep them
Moist, cool and green; and shade the violets,
That they may bind the moss in leafy nets.

If Keats wrote this on an herborising excursion, an eye that was there to be "greedy" for specimens for the herbarium was, in fact, picking impressions among the detail that he readily found in corners and bowers of hedges and fields. "I have seen foreign flowers in hothouses of the most beautiful nature", he wrote during his last illness, "but I do not care a straw for them. The simple flowers of our Spring are what I want to see again". Like the best herb-gatherer, Keats knew the details and characters of his native herbs and flowers. This knowledge sets his work apart from the nature-writing of other Romantic poets, and a later passage in *I stood tip-toe* . . . becomes a neat poetic reflection of the art of botanic illustration:

Here are sweet peas, on tip-toe for a flight:
With wings of gentle flush o'er delicate white,
And taper fingers catching at all things,
To bind them all about with tiny rings.

A unique feature of the medicine of the time was the therapeutic use of highly-poisonous plants. Such potent plants as hemlock, blue monkshood or aconite (*Aconitum napellus*) and deadly nightshade (*Atropa belladonna*) had been part of ancient and medieval healing. Having fallen out of favour in mainstream medicine they were re-

introduced into medical practice towards the latter part of the eighteenth century following the recommendations of Baron Störck of the highly respected Vienna medical school.

This use of preparations from these dangerous plants was part of the "heroic" medicine of the age. As a current apothecaries' companion explained about deadly nightshade; "to be fearful and apprehensive in administering this active plant betrays a weakness of mind almost incompatible with medical practice". Through his *materia medica* and botany courses Keats would have learnt of the characteristics of these powerful plants. Hemlock, in particular, had been credited by Störck with effective curative properties. Taken internally and externally his hemlock treatments were copied in this country with hopes of anti-tumour properties; several hundredweight of hemlock leaves having being consumed per year in a single hospital. Typically, the best results in copying Störck's work were described in these terms; "as an external application for painful cancerous sores, it deserves our regard, it seldom fails to alloy the excruciating pain, and gives a blissful period of ease and rest unknown to the unhappy patient before its use".

Although he never practised, Keats qualified as an apothecary at the end of July 1816 and was well aware of the medical use of hemlock when he wrote familiar opening lines of *Ode to a Nightingale* (1819);

> *My heart aches, and drowsy numbness pains*
> *My sense, as though of hemlock I had drunk*
> *Or emptied some dull opiate to the drains*
> *One minute past, and Lethe-wards had sunk:*

Keats's reference to hemlock marries with its classification as a narcotic, as described by Curtis: "it eases pain and promotes rest even where opium has failed". The anodyne use of poisonous plants required great care. Doses started very small and increased until they had effect, and in this cautious way practitioners were sometimes tempted to experiment on themselves. Curtis describes some eminent apothecaries progressively eating hemlock root to discover any effect, one of which goes as far as to find it "agreeable eating at dinner with meat as carrots".

Any curiosity in experimenting with any part of the plant is quenched by reading one of Salisbury's many accounts of accidental poisoning: two poor soldiers at Waltham Abbey, who were served hemlock in a stew and salad, were "siezed by vertigo . . . [and] soon after, they were comatose . . . then became convulsed and died in about three hours".

Relying on the action of their active constituents on the nervous system, the range of poisonous plants were prescribed externally and internally for painful conditions such as rheumatism and cancer. The leaves of deadly nightshade gave "pleasing results in chronic inflammatory diseases" in addition to "epilepsy, melancholy and mania". Aconite mostly succeeded with "inveterate gonorrhoea" and "pains that were obstinate". It is these strongly characterised herbs, of recent medical interest, that colour the opening of one of Keats's mature poems: *Ode on Melancholy* (1819):

> *No, no, go not to Lethe, neither twist*
> *Wolf's-bane, tight rooted, for its poisonous wine;*
> *Nor suffer thy pale forehead to be kiss'd*
> *By nightshade, ruby grape of Proserpine;*

Tight rooted "wolf's-bane" refers to the blue monkshood or aconite. The "napellus" epithet of the plant's Latin name signifying a little turnip, an allusion to the shape of its root; an otherwise hidden feature with which the poet shows he was familiar. A source of poison since ancient times, aconite's most active constituent aconitine is now known to be one of the most powerful of naturally-found poisons. The plant's venom was invoked by Keats when passionately writing to his fianceé Fanny Brawne; "If we love we must not live as other men and women do – I cannot brook the wolfsbane of fashion and foppery and tattle".

The passage from the *Ode on Melancholy* also brings to mind some impressions that Keats would have gained in his apprenticeship. In addition to the familiar herbal preparations a screw-press would be brought into use to obtain extractions. Pressed from plants such as hemlock, aconite and deadly nightshade these juice extracts were the literal "poisonous wine" of Keats's ode. The 1815 *London Pharmacopoeia* describes the preparation *Extratum Aconti* (or *Aconiti Napelli*); "take of fresh aconite leaves, a pound . . . bruise them in a marble mortar". "Compress them strongly till they yield their juice." Keats reinforces this dreadful wine-making image, describing the deadly nightshade's black shiny fruit as the dark grape of the queen of *Lethe*, the realm of the dead.

Only four years after his year of study at Guy's, the 25-year-old Keats famously diagnosed himself with tuberculosis from which he was to die a year later, like his mother and brother before him. While recording his reaction to this "death warrant" he movingly revives his intimacy with his familiar flowers and looks back to more carefree days as a child and student: "How astonishingly does the chance of leaving the world impress a sense of its natural beauties on us . . . I think of green fields, I muse with the greatest affection on every flower I have known from my infancy – their shapes and colours are as new to me as if I had just created them with a superhuman fancy – It is because they are connected with the most thoughtless and happiest moments of our Lives".

Gareth Evans

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The material comes from my connection with the Chelsea Physic Garden where I act as a guide, with a particular interest in herbal medicine and its history. Learning that Keats qualified as an apothecary I began to research any connection with the garden and instead found Keats' evident interest, love and knowledge of the plant world, which I continue to investigate.