

The Earliest English Herbal.

BY IDA M. ROPER, F.L.S.

THE books of a Dean of Wells, William Turner (1510-1568), are the starting point and chief source in England of all our writings on wild flowers, and as he gathered many of his examples in Somerset or its neighbourhood in compiling his famous "Herball," an account of the book and its surroundings have a local interest well worth consideration.

In modern times by the help of University training and the study of many books of science and literature, students are able to carry on the work of extending their knowledge, not by haphazard methods, but on lines laid down for them on a scientific basis. There is accurate information to which they may add, and with which they may reconcile their new thoughts and observations in the certainty that they are building on a sure foundation.

Turner had no such help, and we are grateful to him, because he recognised the shortcomings of his period and applied his active brain and years of education to putting knowledge on a higher plane, and producing a work that set an example to all succeeding writers.

The Greeks about 300 years before the Christian era wrote of some 350 plants, telling of the shape of the leaves, the fruits, the bark or the texture. The Romans followed on similar lines, until the downfall of their Empire blotted out for some ten centuries the knowledge of their arts. When the revival of learning in Europe came, Italy took the lead, and gradually in the XV Century the books of the early Greek and

Arabian herbalists were discovered afresh with their original wording. This gave an immense impetus to the new students for many false translations and absurd superstitions were avoided, and caused the educated physicians to take in hand the study of the newly found knowledge. Such enthusiasm spread from Italy to other countries, but there it was largely wasted, because of the difficulties that met Western students in trying to reconcile the descriptions and properties attributed to various plants of the Mediterranean with such as they found growing in their own countries. It took them long to grasp the fact that placed so far apart scarcely any herbs could be alike; another stumbling block was the difficulty of understanding each other with the limited and imperfect descriptions then customary. Comparisons were made of one plant with another equally unrecognisable; and the mention of names in Latin, Greek, German and Italian, arranged merely in alphabetical order, did not help much, the sure foundations known to modern botanists having not yet been laid. Other sciences were as barren of good results.

But the early part of the XVI Century saw a great change. It was then that the science of Botany may be said to have been born, and this awakening in England was largely brought about by the work and observations of William Turner whilst resident in the county of Somerset. He well deserved his title of "Father of English Botany."

It was in 1527 that Turner went to Cambridge, a time when knowledge was awakening from nearly 300 years of lethargy and duhness. There he found the limitations mentioned, but beginning to give way. Instead of the teachings of Aristotle overlaid by the interpretations of the medieval schools, the Greek language was again coming into its own, and by means of it many students were eager to recover much learning that had been lost.

At Pembroke Hall the head was Ridley, afterwards the famous protestant Bishop. Turner came fully under the influence of his religious teaching during his thirteen years of residence at Cambridge. His ardour made him an itinerant preacher in neighbouring villages, but on his journeys he sought for medicinal plants, in order to observe them at first

hand, and to compare them with the statements of Greek writers. So far nothing had been written in Britain about Botany except copy dished up from others, based on the most fantastic ideas of the supposed properties of the herbs named. At a later date Turner laments in his preface that certain learned English doctors and philosophers had not cared to publish anything, and he said that it was this hanging back on their part that caused him to risk writing the first portion of a great herbal.

Determined on downright original work Turner, before he published his Herbal, took ample time to carry out his plan. Born about 1510 at Morpeth in Northumberland, he took his B.A. degree and followed to a Fellowship of his College in 1531. In this position he continued for seven or more years, until perhaps the time of his marriage with the daughter of an Alderman of Cambridge. He published in 1538 his *Libellus*, a little book giving in list form new information about plants. After this he preached in many parts of England, but got into trouble with the law for preaching without a licence. He was banished and travelled on the Continent, being engaged chiefly in writing against Roman Catholic doctrine. Whilst in Italy he took the degree of Doctor of Medicine, as one result of his studies. He returned when Edward VI was King, and two years later was made Dean of Wells. In the Wells Cathedral MSS., kindly extracted for me by the present Dean, Dr. Armitage Robinson, is the entry:—

“King Edward VI granted Dean Turner on 10th April 1551 dispensation from residence, without loss of emoluments, whenever he may be occupied in preaching the Gospel in any part of the Kingdom.” It was nearly twelve months after this that he was ordained a priest.

In 1551, a year after his appointment as Dean, he decided to bring out “The Herball,” of which he distinctly tells us he had deferred the issue until he had travelled in the western part of England. Opportunities for the study of plants there would arise whilst he was waiting upon and acting as physician to the Lord Protector (Edward, Duke of Somerset), who owned estates in the West; and again in moving about be-

tween Wells and the manors, prebends, and churches whence he derived his decanal income of £151 a year.

In addition he established a "physic garden" at Wells for his own use, and we should like to think he helped Henry Lyte of Lytes Cary to stock his fine botanic garden, then in process of formation.

Some of the examples of herbs described by Turner from Somerset may be mentioned, for his Herbal shows how he observed them and built up on solid facts the information he wished to impart. For instance he tells of the *Sinapis alba*, the White Mustard, that "it groweth in the corne in Somersetshire a little from Glassenberrye, is much shorter than the gardine mustarde is, but nothyng behynde it in byting and sharpnes." In speaking of *Bupleurum rotundifolium* he says: "I have sene this herb growing in great plentye . . . in Somersetshire. I have not sene it in Italye, neither have I heard anye English name of it: saving for lack of other I name it Throw-waxe." As the seeds of this plant came to England with foreign grain Turner may well have been unacquainted with it in Italy.

While he was travelling between Bath and Wells, he stopped at Bristol and may have regarded the gorge of the river Avon as "a horrid alp" as did some of his contemporaries who had no eye for natural beauty. There the rare *Trinia glauca* attracted his attention, for he says: "I found a root of it at Saynt Vincentis rock a little from Bristow. But it was nothyng so great as it of Germany." Turner evidently went to Weston-super-Mare in his wanderings, because he speaks of *Smyrium Olusatrum*, an umbelliferous plant with large leaves resembling celery, which "groweth . . . in Ilandes compassed about the se, as in a certaine Ilande betwene the far parte of Somerset Shere and Wales," a plain reference to the Steep Holm, where the plant is still abundant. Possibly too that island may have given the "good plentye of Sampere," which Turner enjoyed when "dwelling in the farther of Summersetshyre not far from the sea syde." For pickling this he gives an excellent recipe "which lyketh me and all them that have prove it, much better than any other." He also calls attention to the abundance of Sloe trees, and of still

greater interest is the mention of the Glastonbury Thorn, one of the oldest trees known in English history, and published by him for the first time in a list of plants,—“ In Summersetshyre about six myles from Welles, in ye parke of Glassenbury there is an hawthorne which is grene all the wynter, as all they that dwell there about do stedfastly holde.” The tree which Turner saw was of course the one cut down by a fanatic in the reign of Elizabeth, but an offshoot still flourishes within the Abbey precincts.

It is to Turner that we owe the introduction of Lucerne into England. He recognised the value of cultivating the plant for fodder and describes it as “ a very excellent herbe, because when it is ones sowed it dureth for the space of ten yeres . . . it may be well mowed four times every yere, and in some yeres six times . . . it fatteth every lene beaste, and heleth every sick beaste.”

A little after the publication of the first part of the Herbal, Turner was forced to become a fugitive to the Continent on the accession of Queen Mary. During this stay he visited for lengthy periods Italy, Switzerland and the Rhine Valley, being continually with physicians and literary men of high repute. At this period he issued one of his many theological books entitled, “ Booke of Spirituall Physicke.” He tells of his studies with them in order to gain personal experience in the use of herbs to cure various ills and diseases, and to be able to teach the common people to make a wise use of them and “ thereby take great advantage to their health.” He even had an “ orchard ” on the Rhine for the purpose of study, and mentions several “ physic gardens ” where he stayed.

In 1559 on Queen Elizabeth coming to the throne, Turner returned to England and was reinstated in the Deanery of Wells, the fact being again referred to in the Wells Cathedral MSS. : “ Queen Elizabeth on the 20th July 1560 confirmed the grant of her predecessor.”

From this time ill-health came to him and as a relaxation he finished off the remaining two parts of his Herbal, issued to the world in 1562 and 1568 respectively. The first part had been published in London, but the other two were printed

at Cologne for the sake of obtaining the woodcuts, which are incorporated in them.

Soon afterward his diseases increased and he died in London in July, 1568, and was buried at the Church of St. Olave's, Crutched Friars, where a tablet remains to his memory.

In spite of the stormy times in which he lived, and his own disappointments, with sickness during the eight years following his second coming to Wells, he was the first writer to put on record a description of plants found wild in England.

The labour was all his own, as well as the cost of printing, and his work shows powers of observation akin to genius which place him amongst the foremost writers on Natural History. The Herbal was an achievement marking a step in science and justifies our admiration.

His criticism was to the point, and his work distinguished by facts and not by traditions. His teaching was "Let every man folowe that which he fyndeth to be most true."

NOTES BY THE REV. PREB. J. HAMLET.

1. The very volumes of the Greek naturalists and botanists used by Turner are to be seen in the Cathedral library at Wells; Aristotle and Theophrastus in the early and now extremely rare Aldine edition of 1495-8. These volumes had before belonged to Erasmus and bear his autograph. In the third volume Turner recorded in an elegiac couplet his gift:—

Hæc ego dona dedi Wellensi bibliothecæ
Turnerus nomen cui Guilielmus erat.

2. Turner's use of these early printed editions of the Greeks not only made him 'the father of English botany,' but gave him a foremost place amongst the botanists of Europe. Cordus is now said to be the first real botanist after Theophrastus, *circa* 300 B.C. His work was not published until 1546, shortly after his death. Even Brunfels of Strasbourg who is said to have initiated the independent observation of plants themselves and is accounted the founder of German botany was not published until 1537. Turner's *Libellus* describing 173 species was printed in London in 1538. It is pleasant to find in it names still familiar to the tongues of the children of our Somerset villages: gelofer, kingeups, sour-docks, priméroses, daffadilly, flowers de luce.

3. Turner's interest and observations were not limited to plants. He wrote also of birds and fishes, of stones and metals and medicinal waters. His book on the principal birds noted by Aristotle and Pliny, giving their English names, published in Cologne in 1544, was reprinted in 1823 and again, at the Cambridge Press, in 1903; "the first book on birds which treats them in anything like a modern spirit."

4. Letters of Turner's with touching and intimate personal detail, not devoid of humour, may be read in *State Papers, Domestic, Edward VI*,—7, no. 32; 11, no. 14; 13, Jan. 1550, and 13, 19. His will, printed in Mr. Daydon Jackson's facsimile edition of the *Libellus*, remembered the poor of Wedmor, Marke, Wellingtone, Combe [St. Nicholas], Charde, and Wynshame.