

CRABBE AS A BOTANIST.

BY JAMES GROVES, F.L.S.

I have been asked to say a few words about your distinguished townsman in his capacity as a botanist.

Poetry and the natural sciences do not often go hand in hand, and though many of our poets have discoursed on the flowers, and the trees, and the grass, and a few of them, as, for instance Tennyson, had more than a superficial acquaintance with plants, I can only recall three who are entitled to be called botanists—Erasmus Darwin, George Crabbe, and the late Lord de Tabley.

It would be interesting to know what first led Crabbe, as a youth, to study natural history in times when naturalists were few, and books on such subjects scarce and expensive. The principal source of information about him, the biography by his son, is silent on this point; but from it we learn that his love for the study most probably took root during the period of his apprenticeship to the surgeon at Woodbridge—that is, between the ages of 17 and 21. From that time forward almost to the end of his life he was an enthusiastic naturalist. Even during his second sojourn in London, that terrible time of privation and disappointment, we are told that he used to partake himself to Hornsey Wood to search for plants and insects.

Crabbe was a *general naturalist*, a species which unfortunately bids fair nowadays to become extinct, owing to the excessive tendency to differentiation in scientific research, as in other departments of life. Until his later years, however, when Crabbe became engrossed in paleontology, botany seems to have been his favourite recreation. I say recreation advisedly, because the study of human life and its portrayal in verse, even during the long period of apparent unproductiveness, was, we cannot

doubt, the serious purpose of his life. His son tells us that even when searching for and examining plants and insects, he was moulding verses into measure and smoothness. No doubt his botanical pursuits received a great impulse during his not very successful practice of medicine at Aldeburgh, when we are told Col. Conway presented him with some botanical books, including Hudson's "Flora Anglica," at a time when he had rather too much leisure in which to make use of them.

During his first sojourn in Leicestershire, at Belvoir Castle, and afterwards successively at Stathern and Muston, he collected materials for his Natural History of the Vale of Belvoir, which was published in 1795, in the first volume of Nichols' big folio "History and Antiquities of Leicestershire." The list comprises about 200 species of flowering plants and ferns, and about 60 non-vascular cryptograms.

Crabbe was always fond of cultivating rare and interesting British plants, and just before his removal from Muston, we learn that he was engaged in laying out a new botanic garden. The very interesting letter to Lieut. Cartwright, dated 5th September, 1792, gives us an idea of how eager he was to add fresh species to his collection of growing plants.

He left Muston late in 1792, and lived for the next 13 years in Suffolk. His son considers that it was during this period that Crabbe was most ardent in pursuit of natural history. No doubt his one botanical book, which is variously referred to as an "Essay" and a "Treatise" on Botany, was written during this time. but this book was never published. It was written in English, and a Cambridge friend, whom he seems unfortunately to have consulted about its publication, considered this a fatal defect, holding that a botanical work should be written in Latin, and as a consequence of this advice the MSS. were destroyed. We cannot imagine why Crabbe gave so much weight to this opinion in view of the success of Dr. Withering's admirable "Botanical Arrangement of British

Plants," written in English, which had already run to a second edition, and, on the other hand, considering the obvious advantage of using a modern language to express modern ideas and terms, rather than to coin dog-Latin for the purpose. If, however, Crabbe was convinced that the treatise ought to be in Latin, one wonders why he did not translate it into that tongue, with which he was apparently well acquainted. We have no evidence as to the size or scope of the "Essay" or "Treatise," but it is hardly likely that it would have been a great contribution to the sum of botanical knowledge. Still, with so keen and accurate an observer for its author, it could scarcely have failed to be useful; while to the biographer it would be of great value as an index to the breadth and extent of Crabbe's botanical outlook, which his other publications, little more than catalogues of names, fail to afford. In referring to the book, his son writes:—"My father used to say that had this Treatise come out at the same time when his friend arrested its progress, he would have had the honour of being considered as the first discoverer of more than one addition to the British Flora, since those days introduced to notice, classed and named by other naturalists. I remember his mentioning as one instance, the humble trefoil, now known as the *Trifolium Suffocatum*."

As regards the discovery of the *Trifolium*, some of the letters exhibited afford valuable evidence, and to my thinking go to show that Crabbe was *not* the first to find the plant in Britain. From the Transactions of the Linnean Society we learn that a specimen of the *Trifolium* collected by Mr. Lilly Wigg, at Great Yarmouth, was exhibited at a meeting of the Society held on the 7th May, 1793, and this could not well have been collected later than the summer of 1792, and this is the accepted date of its first discovery. On the 11th August, 1794, Lieut. Cartwright wrote to Sir Joseph Banks, enclosing extracts from Crabbe's letters to him, dated 22nd July and 4th August of that year, which I will read to you,

being of special interest both as regards the *Trifolium* and as possibly throwing a sidelight on the unpublished book.*

Parham,

22nd July, 1794.

. . . I am enabled to introduce (as far as I know at present) to the Botanical world a new species of British Plant, or rather, a new species, speaking more generally, for I can neither find it in the Flora of these Kingdoms nor the Species Plantarum of the last and enlarged editions.

I was observing the progress of the vegetation on the beach at Aldborough, in Suffolk, where the sea had a few years since overflowed, and where the stones were nearly bare, or partially covered with a little light sand blown from the neighbouring banks. Here I found the *Pisum Maritimum*, the *Chelidonium Glaucium*, the *Statice Armeria*, and several other hardy and frugal plants which live on little, and thrust their roots far in the soil in search of nourishment, but among these I was struck with the more than usual number of Trefoils, and some of them the very scarce kinds, which grew almost on one spot in this bare and nearly barren surface. The *Medicago polymorpha* was the most common, but beside this were the *Medicago lupulina*, and the *Trifolium repens*, pretense, arvense, striatum, subterraneum, agrarium, and procumbens. There indeed are no rare plants, but I was surprised to see such an assemblage of them in such a spot, though all were dwarfish and of the humblest growth. On a more strict scrutiny I found the *Trifolium Scabrum*, though sparingly, and after that, and still more rare, the *Ornithopoides*; here I concluded the Trefoils were exhausted, but one day I met with a plant (evidently the same genus as *Trifolium*), but different from all there and the remaining species of that genus which I had seen, viz., the procumbens, the fragiferum, the agrarium, and the filiforms. The *Stellatum* I had not then seen, and though it ill-answered the character; I was willing to suppose it a stunted and sessile variety of that species—more specimens, and a knowledge of the *Stellatum* convinced me I was wrong, and further convinced me that my plant is new, or at least no author I have read describes either that or any that resembles it, but as Sir Joseph Banks possesses a library, as Mr. Relham truly calls it, "*Omnium facile delissimus*," (sic)† he may find some description of it or may have read some account. If not, I claim the discovery, and if I can once more shake off my complaints, and gain a little life and spirit, I believe I shall publish an account of my plant with a plate of it, and a narration of the progressive vegetation of the spot it grows on, etc., etc.

* The Post's letters from which the following extracts are taken, are the property of Mrs. Mackay and Mr. Buxton Forman, c.B., to whom I am indebted for their kind permission to make use of them.—J. G.

† The ms. is indistinct here.

Parham,

4th August, 1794.

. . . . I have carefully compared it with every other species, not one of which bears any resemblance to it, except that there is a similitude in the foliage of this and the *Ornithopodioides*, but the fructification is totally different. In the divisions of the *Trifolia* this would class with the *Lotoidia*, or those with covered pods which contain more than one seed. Yet, when the pod is fully formed, it projects a little beyond the calyx, like the *Meliloti*.

My present intention is to publish a short history of all the *Trifolia* which I have cultivated with so much care for three or four years past, I am tolerably acquainted with their comparative merits, and among them I shall give this new species with a plate and description. I will, by way of introduction or appendix, give the history of the vegetation which accompanies this plant, as it grows in a remarkably sterile place, and an account of it will not be incurious.

With these extracts Lieut. Cartwright also sent Crabbe's memorandum (also exhibited) . . . together with the specimen, MS. description, and a drawing of the plant, these latter are preserved with the rest of the Banks Herbarium at the British Museum. These letters were written in 1794. There is a subsequent letter dated Aug. 30th, in which Crabbe writes: "I find a material distinction now when the last year's seeds of my species have begun to vegetate; the first *Trifoliage* of my plant being remarkably different from any of the genus." In a subsequent letter dated Feb. 3rd, 1794,* he writes—"I found my *Trifolium* out before Sir Joseph was so kind as to inform me. I fear the materials at Aldboro' are very scanty, however I don't lay aside my purpose but I should be glad if you could obtain for me some information of what would be expected of him who wrote the *History of incipient vegetation, etc., etc.*" Now, if we refer to the biography, we find that Crabbe left Leicestershire in November, 1792, and went "shortly after his arrival in Suffolk to pay a visit of several months to his sister at Aldborough." And in view of these facts and the wording of the letters, I think we may reasonably conclude that Crabbe first found the *Trifolium* at Aldeburgh in the

* Evidently 1795 is intended, and the letter is so endorsed.

summer of 1793, the year following its discovery at Yarmouth by Mr. Wigg. So much for the Trifolium. Possibly the projected dissertation on his researches among the Trifolia and the rest of the sand vegetation may have formed a part of the lost "Treatise," and in this case the book might have proved a pioneer essay in plant-ecology.

In 1798 Mr. R. Loder published the "History of Framlingham," and for this work Crabbe drew up a list of about 230 odd plants growing in or near the parish.

He also contributed a number of notes of Suffolk plant-localities to the "Botanist's Guide to England and Wales," compiled jointly by his friend Dawson Turner, the Yarmouth banker, and Mr. Lewis Dillwyn, which was published in 1805. The localities furnished by Crabbe may fairly be taken as an indication of the ground over which he botanised. By far the greater number of them are either within a radius of about six miles of Parham, or in Aldeburgh and the immediate neighbourhood. Some are for the district south of Aldeburgh as far as Hollesley, some from Woodbridge neighbourhood as far as Kesgrave, some from scattered localities along the coast northward as far as Benacre, some from Beccles and a few miles around, a few from Coddington and Claydon, and two or three from the other side of the county, near Newmarket and Bury.

Perhaps the most interesting plants he recorded are *Diotis maritima*, a species formerly abundant on the Suffolk coast, especially on Orford Beach, and occurring at a few other places by the sea, but now apparently quite extinct in Britain. Others are *Senecio palustris*, one of the old fenland plants now almost extinct; *Sonchus palustris*, another rare composite; *Lathyrus maritimus* (or *Pisum maritimum*), the sea pea, which only occurs on shingly beaches in a few counties; and, of course, the Trifolium. Curiously enough, only one of Crabbe's notes in the "Botanist's Guide" relates to a cryptogram, while from his son's remarks it would appear that he was especially fond of studying the mosses, fungi, and algæ,

and this is borne out by the number of such plants included in his "Natural History of Belvoir." The notes in the "Botanist's Guide" are repeated in Hind's recent "Flora of Suffolk," except in a few cases where the plants were doubtful. Crabbe's determinations were generally speaking correct. Occasionally he makes mistakes, as, for instance, when he records the rare subalpine *Me. ampyrum sylvaticum*, instead of *M. pratense*, as growing at Framlingham; but we must remember that this mistake has often been made by others, and the difference between the two species was not then as clearly understood as it is now.

During Crabbe's second resident at Muston he does not seem to have done any botanical work which has remained on record, and after his wife's death and his removal to Trowbridge, according to his son's testimony, he practically relinquished the study altogether. Much as his son admired and revered him, one cannot help feeling in reading the biography that he had not much sympathy with his father's scientific pursuits, hence the information about such is often meagre. For instance, we are told but little about his botanical friendships. Indeed, Mr. James Donn, the Curator of the Cambridge Botanic Gardens, where Crabbe was always a welcome visitor, and Mr. Dawson Turner of Yarmouth, to whom I have already alluded, are, I think, the only botanist friends specifically mentioned. We do not know whether Crabbe ever became personally acquainted with Sir Joseph Banks. When staying in London, although his son tells us the Botanic Gardens were a favourite resort, he seems to have been principally engrossed by literary and fashionable society. After his early struggles, Crabbe was not a poor man, and from two or three allusions we gather that he possessed a fairly good botanical library and this he supplemented by copying drawings of plants from some of the large illustrated books, such as the great "Flora Danica," and from Lightfoot's "Flora Scotica," as well as extracts from other books. In one of the MS. books there are some

labelled capsules containing sections of roots, stems and petioles showing that Crabbe was not content with an examination of the external parts of plants.

If we turn to the poems we shall perhaps be somewhat disappointed with the allusions to plants. It must, however, be admitted that Crabbe shows himself the greater artist in not allowing a special knowledge of a certain class of facts to obtrude itself into undue prominence. When he refers to the vegetable world, it is only as a piece of background for his men and women, and if in portraying such a background he is more minute than most poets, it is only in harmony with his general methods. We feel sometimes that such descriptions are almost necessarily the work of a botanist, but at the same time there is never any pedantic display of knowledge. In fact, botanical pedantry is more than once held up by him to ridicule, and he administers a well-merited rebuke to those who are content with merely knowing the Latin names of plants.

The lesson in Botany in the piece called "The Preceptor Husband," is distinctly humorous, and one admires the dexterity with which Crabbe marshals the botanical terms in his verse.

"He showed the various foliage plants produce,
 "Lunate and lyrate, runcinate, retuse,
 "Long were the learned words, and urged with force,
 "Panduriform, pinnatifid, premorse,
 "Latent and patent, papulous, and plane,"—

Among Crabbe's descriptions of vegetation, we find a few excellent pieces of word-painting, notably the well-known picture of the Sand Flora in "The Village," and that of the Saltmarsh, in "The Lover's Journey." In the latter poem we do not quite understand how the thorn came to be in the flower at the same season as the ling. His allusions to individual plants are not always happy. True, "The neat low gorse . . . with golden bloom" exactly hits off *Ulex minor*, but the

“faded green, and pencilled flower of sickly scent,” by no means adequately portrays the sinister beauty of the henbane, while the “soft slimy mallow of the marsh” is a libel on the delicate beauty of *Althæa officinalis*. Again, one of the ornaments of Suffolk marshes is summarily disposed of as “the salt lavender that lacks perfume.” The comparison of the scarlet of the lichen to the maiden’s lips is not flattering to either. One is a little surprised to find our somewhat matter-of-fact poet giving currency to the weird legend of the Mandrake. Without for a moment wishing that Crabbe had written odes to daisies or such-like, one cannot help a feeling of disappointment that so ardent a botanist could write of flowers in such a cold-blooded fashion. The only place I can recollect in which he gets up any enthusiasm about the beauty of plants is in “The Lover’s Journey,” and here the whole landscape is supposed to assume a preternaturally roseate hue in the eyes of the lover advancing to meet his lady love. Some light is thrown on this aspect of Crabbe’s writings by his son, who, speaking of his father’s natural history tastes, remarks: “Generally speaking, I should be inclined to say that those [departments] usually considered as the least inviting, had the highest attraction for him. In botany, grasses, the most useful but the least ornamental, were his favourites. . . . His devotion . . . appeared to proceed purely from the love of science and the increase of knowledge—at all events, he never seemed to be captivated with the mere beauty of natural objects.” I think the poems bear out this view, and that the fact was, Crabbe was almost entirely lacking in the appreciation of physical beauty. Even when he is describing the personal charms of a pretty village maiden or a high-born lady, one feels that his admiration for the fairest of all God’s creatures is but conventional and half-hearted. But I must not be tempted to wander from my province into any general discussion of his writings, so will conclude by saying that although it cannot be claimed that Crabbe was a great botanist, the evidence goes to show that he

was a careful and conscientious one, and that he approached the study of Nature with the open mind and the reverent spirit with which alone we can hope to understand her laws or win her secrets.