

A HOLIDAY IN SHROPSHIRE.

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The first extension of the Cambrian Archaeological Association was held at Shrewsbury on August 2, the whole of the day being devoted to an examination of the town. Botany appeared in force in the person of the President, Professor C. C. Haldeney, of Cambridge, accompanied as he was by several botanists and horticultural friends. The Rev. Canon Lewis, of Shrewsbury, was strongly represented by the Rev. Perceval Davies, of Mans Court, and other members, including Mr. W. Phillips, of Shrewsbury, and the Rev. J. E. V. Von, of Foston; the latter gentleman, however, found greater attractions amongst leaf-fauna than old churches, and so left the party. At Shrewsbury railway station the company was strongly and nobly met by the presence of the Rev. W. Alport Leighton, the eminent ichthyologist, so that taking the succession all is all there was quite as much biology (especially cryptogamic botany) as entomology represented in the members. Mr. Leighton, like me, brought a splendid opportunity of bromeliad specimens, and a still (apparently an Elenodactylus), so that some one asked him if he proposed dilating on the Schwabenwälder hypothesis. Not he; he was one with Dr. Nylander, and did not believe the hypothesis had a leg to stand upon. Had he ever refuted the hypothesis? No, he had better employment for his time,—the hypothesis did not disturb him; it had been refuted and named inside out ever and over again. Did Mr. William Phillips give credence to the Schwabenwälder hypothesis? No, he did not believe a word of it; he was one with Mr. Leighton, with Dr. Nylander, the Rev. James Gwynne, and others. Among the other organic botanists at Shrewsbury there was not one with a favourable word for the Schwabenwälder hypothesis. [Was they familiar with the cultural evidence supplied by insects and others? Ent.] What is the Schwabenwälder hypothesis? It is that the small plants known as lichens are really small fungi parasitic upon Alga. Every one who has looked at old wooden staves by damp ditch sides, or at tree trunks in humid woods, must have noticed the bright green stains on the wood and bark; this green colour is caused by the presence of sprays of small green-coloured plants termed Alga.

Lichens grow on old stumps and stones, and frequently resemble small black marks, and when these lichens are cut in two successive green orths (the Alga), called parasites, are seen within them. Schwabenwälder says these green orths are really Alga, and that the lichens which enclose them is a parasitic fungus. Parasites are generally very much smaller than the objects they prey upon, but here is a parasite a thousand times larger than its host! It is like an elephant being a parasite on a fly. Now, if a very big thing is parasitic upon a very little one, one would naturally expect the little one to be specially outlandish, but in the case of the lichen-Alga hypothesis the little Alga thrives well under the attack of its huge coloniser: it licks its attack, thoroughly enjoys it, and Schwabenwälder says, the parasite excites the Alga "to more rapid activity and more vigorous increase." The hypothesis is not universally accepted in this country at present; neither, for that matter, is the identity of *Ascidium herbicola* with the coral skeleton. Mr. Leighton is an excellent antiquary, and he brought with him to the railway station plates of ancient British, Roman, Saxon, Norman, and medieval Shrewsbury. No more able and indefatigable guide than Mr. Leighton could have been found; he was with the party the whole of the day, increasing and explaining the town and its buildings from end to end. The first place visited in the County; of this nothing but moments of time suffice for the ancient British and Saxon positions, of the Norman wall only a gateway and a tower being visible. After ascending to the highest point, on to a huge mound of earth, capped by a party like garden, an excellent view of Shrewsbury is obtained, and in the distance, on The Mount, Fossilwell, may be clearly seen the birthplace of our famous countryman, Charles Darwin. This house was pointed out as one of the sights of Shrewsbury, and in respectful remembrance of the great philosopher's attainable teaching a small sketch of the house was made on the mound with the names, and is here reproduced (fig. 47). Mr. Leighton, who was a schoolfellow with Charles Darwin, recalls many pleasant reminiscences of his school companion as a boy, and afterwards as a

man. One thrilling reminiscence it may be advisable to print. Darwin and Leighton as lads were fond of plants and gardening. One day Darwin brought a plant to Leighton, and told him that his mother had said if he wanted the little threads (pointing to the stem) inside the flower, he could find out its name. "But how can that be done?" said Leighton. "Ah!" replied his gardening companion, "I cannot remember that."

The school founded by Edward VI. was visited, and then St. Mary's Church, founded by King Edgar; Canon Lewis described the architecture and glass of this fine building. Architecture and glass, however, not being such specialities of the *Gardener's Chronicle* as gardens and gardening, a transcript of an inscription at the east end of the church may here suffice. It is in memory of a Mr. John Gardener, of Jansau—a former master of Sedbury, a planter of trees, and is all respects an excellent "gardener." The inscription runs—

"Gula sacca Dei tibi fuit, ovis Johanna,
Et in nomine patris, hoc tibi pro
Herd other ovis; tibi rex solis, polius
Puerus agris solvere stans tibi
stat."

It does not rhyme,—the author was perhaps not quite equal to it; but if a rhyming translation may be ventured upon, the following may serve—

"Dear John, a gift from God has come on you;
Your name, and work! lie together, show it.
The garden well you tended, other plants grew.
To earth and heaven's glory.—Now all know it."



FIG. 47.—BIRTHPLACE OF CHARLES DARWIN, SHREWSBURY. (FROM MR. LEIGHTON.)

I cannot answer for the last four words, but if any reader of the *Gardener's Chronicle* can produce something more satisfactory, let him send it on to 47, Wellington Street for printing.

The abbey of SS. Peter and Paul was next visited, built partly in the eleventh century; it has a handsome choir pulpit, belonging to the former refectory, stands discoloured and overgrown with weeds in a railway cut-yard. An inscription in the building records a curious gift of corn in the following words:—"Richardus Jones, Eng., left ten Cwt., viz. five for Mass and five for Vicar, to be given to ten Paupers of this Parish every fifth Day of November for ever." At the Dissolution a part of the abbey was pulled down and the structure known as Whitwell (Jansau's is also gone) was built out of the ruins. The old abbey structure is divided into three to sell the last slice of architecture belonging to Whitwell.

At the latter place there is a magnificent Walnut tree, here illustrated (fig. 48); the circumference at 4 feet from the ground is 15 feet 7½ inches; the spread of the branches is over 24 yards; this tree probably dates from about 1550. Walnut trees seldom attain these dimensions; perhaps some readers of the *Gardener's Chronicle* may, however, be able to refer to other large specimens.

The last place visited was the "George Hotel," here the members of the Cambrian Archaeological Association, the Westchester, the numerous members of the Shropshire Archaeological and Natural History Society, together with many visitors, sat down to a good dinner. To the writer of these notes a large dish of hot Mushrooms was brought (as an unexpected present), on being himself somewhat liberally a Shropshire arctothelid got caught hurriedly forward and begged that the article's valuable life might not be risked before consulting with Mr.

William Phillips, a famous fungus authority, who, as that day, told the arctothelid, was most fortunately in the room.—W. G. SACK.

(To be continued.)

BIRMINGHAM BOTANIC GARDENS.

A few days since I visited these attractive and well-kept gardens, when I saw many interestingly grown specimens both in and out-of-doors, together with an almost endless variety of seedlings and cuttings, and of which I was much pleased. Having first found Mr. Latham, the energetic Curator, who at once proceeded on our ramble through the numerous plant-houses and stores. In the first of these I selected *Glossa aspera* (Melastoma) was the first plant to attract my attention. This great greenhouse chamber is so seldom met with that one is apt to forget it altogether; although it was introduced nearly two centuries ago from the East Indies it still retains localities, and certainly is deserving of more extended culture. Here it grows in a way almost everywhere, but is not so common as it used to be, and producing its lovely orange-coloured blossoms in profusion. This plant is worthy the notice of those who must have exhibition plants on tables or window-sills, for which purpose it is admirably adapted. Growing on a fine tree of *Ocotelea Krameri* was, as was to be seen in close proximity a fine pair of *Philopeltis* (*Arctostaphylos*) petals. Some few plants of *Thlaspi* were suspended in baskets and thriving admirably. Among these were *T. annulata*, *T. grandiflora*, *T. Lindleyana*, and others. I also noted some very interesting specimens of *Thlaspi* growing in pots. Among other objects of interest in this house were fine plants of *Dioscorea* and *Canna*, of which latter *C. neapolitana* was most noticeable, being highly coloured.

Leaving this we entered the Cuttings-house, where in was a variety of large well grown specimens, which occupied one side of the house, the other being devoted to choice Ferns. There were but few *Oxalis* in flower here, but among those flowering may be mentioned *Oxalis latifolius*, *lutea*, *peruviana*, *Stachys trifida*, and *Oxycoccus Schlegeliana*. I also noted *Russelia jansau*, which was producing abundantly its heads of sweet little flowers, which, springing from a very green foliage, were quite charming. Some fine plants of *Banana* (Dwarfed) in variety met our eye, and, closely associated was the New Holland *Phacelia*, *Cephalanthus filifolius*. To some care and interesting Ferns I next turned attention, foremost among which was *Gymnocarpium Fenzl*, a neat and attractive plant, somewhat resembling in general structure *G. dissectum*, but differing from this in its more robust, and being in reproduction half with the freedom of the latter. A fine plant of *Thymophytum elegans* was a feature in leaf, and they may safely be said of a fine pair of *Nepenthes* (*Viviparous*) *Lingua serpentina*. Some large plants of the giant water fern, *Ceratopteris thalictroides*, were seen in the most worthy company of this house. Next in turn came a small store, in which *Chorizanthe*, *Sagittaria*, *Scorpioides* was flowering freely; here I also noted a nice bunch of an old-fashioned plant—*Senecio* *Melastomae*, and which, when well managed, is one of the most of stove-growing plants; in large heads on large plants are most conspicuous. The lath in question were young plants, and promising well. Leaving this we came to some large open-roofed pits, in which were fine specimens *Glechiza*, *C. styracis*, *Salsola*, *repens*, and *Salsola*, being represented in large handsome specimens. Here my attention was drawn to some large plants of the most curious of *Centrosema* plants, viz., *Trifolium* *adpressum*, the leaves or plumes of which are very slender at the base, widening all the way is reached, when they curve and form a hood, from which extend two leafy wing-like appendages.

My guide next led the way to the cool-house, which is set apart for a variety of plants which are considered hardy, so deemed too rare to be subjected to the conditions of the weather outside. The first to claim attention was *Fragaria indica*, from which numbers of its scarlet fruit were hanging; then came *Lilium plow*, a truly *Staphylea* adorned with flowers; *Taillera* *viridis*, producing its delicate shaded flowers in great numbers, which have a most