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AND FIELD CLUB.

No. 2.

AUGUST 8th, 1864.

NOTICES TO MEMBERS.

Subscriptions are payable in advance, and should be remitted to the Treasurer, Market Place, Dudley, or to the Secretary. Ordinary Members pay One Guinea; Field Club Members, Five Shillings per annum. The financial year commenced on May 1st.

Communications for the Society should be addressed to the Secretary, The Trindle, Dudley; or if relating to the Museum, to the Honorary Curator, Mr. E. Hollier, Market Place.

THE LLANGOLLEN MEETING.

THE Second Field Meeting for the present season was held at Llangollen and the neighbourhood, on Thursday and Friday, July 14th and 15th, in connection with the Liverpool and Manchester Geological Societies. Amongst the Members present were the Revds. J. Heafield and J. W. Bain (Bilston), Dr Longman, (Sedgley), Messrs. E. Wood, (Richmond), E. W. Binney, (Manchester), H. Beckett, F. P. Fellows, W. Fleeming, S. S. Mander, E. Hollier, J. Stokes, E. Grainger, J. Finch, E. Pugh, J. Hambleton, J. Jones, (Secretary,) &c. Several ladies were also with the party, besides about thirty Members of the Northern Societies. Shortly after twelve o'clock on Thursday, the visitors commenced their examination of the geological features of the northern side of the valley. The route lay along the banks of the Dee for upwards of a mile, and the first halt was made at the slate works, near Llantysilio, where the huge slabs brought down from the quarries near the summit of the adjoining hills are prepared for industrial purposes. The next point of interest was the venerable pile of ruins, all that now remains of Valle Crucis Abbey, which was, at a former period, a famous monastic establishment in the Valley of the Cross, certainly one of the most secluded and picturesque dells which could have been selected for a religious community. At this point the party divided, one portion under the guidance of Mrs. Bickerstaffe, of Llangollen, and including several accomplished botanists of the Vale, taking the road for the World's End, a division of the Mountain Limestone ridge of Eglewseg, while the remainder took a pathway across the hills and came upon the range further south. The organic remains to be

found are principally *Producta* (of which the *P. Llangollensis* is the most characteristic), *Syringopora*, *Euomphali*, *Pleurotomaria*, *Spirifera*, *Rhynchonella*, &c. At the base of these rocks a small exposure of the old red sandstone gives its peculiar colour to the slope. After some time spent in skirting the Eglewseg Rocks, and with many a halt to admire the ever-changing scenery, the summit of Dinas Bran was at length attained. From this point the sea of hills piled up in tumultuous succession towards the west, the blue outlines of the more distant mountains, and the varied features of the adjoining vale, almost entirely diverted attention from the ruined fortress which crowns the eminence, and dates its origin from very early times. At five o'clock the various sections assembled at the Hand Hotel, where a cold collation was provided. Mr. Edward Wood presided, and after creature comforts had been liberally discussed, he stated that though arrangements had been made for holding a meeting later in the evening, it would perhaps be desirable to have the addresses, &c., instead of any formal toasts. Mr. Plant, (Salford Museum), then gave an account of the geological features of the district inspected during the day. That gentleman commenced his address by a description of the Upper Silurian Rocks, which are supposed to be the equivalents of the Wenlock Shale and Limestone. These measures form the hills in the immediate neighbourhood of Llangollen, and also those from which the slates are obtained. He was of opinion that these vast layers of rock must have been formed in a deep sea, and hence they are not rich in fossil remains; but the few that have been found undoubtedly connect this formation with the limestones and shale of Dudley and Wenlock. The sandy character of the beds would also account for the scarcity of fossils. Passing upwards, another member of the Palæozoic series was faintly represented in the district. He had, until that day, always entertained some doubt of the correctness of the geological survey in putting in a patch of old red sandstone at the base of the Eglewseg Rocks, but what he had seen on the excursion fully convinced him that the published maps were correct. Above this formation came the Mountain Limestone, which was remarkably rich in fossils, and which he claimed as belonging to the geology of Manchester, for the range of hills near Llangollen formed their horizon line. Mr. Jones, (Dudley), expressed, on behalf of the Midland Society, his pleasure in meeting so many distinguished representatives of the Manchester and Liverpool Geological Societies, and hoped that such meetings might be of frequent occurrence. He raised one or two points for discussion in connection with Mr. Plant's paper, particularly with reference to the conditions under which the Wenlock beds were deposited in North Wales and in the neighbourhood of Dudley respectively. The President and several gentlemen took part in the discussion, after which a vote of thanks was given to Mr. Plant for his valuable address. The customary vote of thanks to the Chairman closed the official business of the day, after which, in the cool of the evening, many points of interest in the locality were visited.

Early on Friday morning the party set out for a day's excursion on the south side of Llangollen, under the guidance of Mr. C. D. Davies, (Oswestry). The road to Glyn Ceiriog, the place of destination, leads over a portion of the Berwyn Hills, and for a considerable distance is extremely steep and fatiguing, but almost at every point fresh combinations of rugged scenery opened up. The village of Llansaintfraid was reached about eleven o'clock, and, after due refreshment, the geological features of the valley were examined. The principal point of interest was a quarry of Bala Limestone, where a few characteristic fossils of the formation were obtained. The Botanists were rewarded by several rare plants; but time did not allow of a very careful search. A portion of the party made a long *detour*, in order to reach the lower beds of limestone, and the curious interstratified layers of igneous rock. They spent considerable time in examining the first bed of Bala Limestone, which affords numerous and varied organizations. They also passed the several bands of felspathic ash, and joined the straggling remains of the general party at the New Inn, Glyn Ceiriog. The majority of the Members, after partaking of luncheon at Llangollen, returned home, after a most interesting meeting.

Errata in Members' List published last month.

McGhie, Robert, for McGhie, J.	Corngreaves
Spruce, William, for Spruce, T.	Pennett
Latham, Thomas, for Latham, J.	Dudley
Strongitharm, H. H., Rushall, for Strongitharm, H. H. ...	Pelsall
Smallman, Josephus, Tipton, for Smallman, Jos.	Burnt Tree

Supplementary List of Members.

ORDINARY.

Crewe, Thomas	Dudley
Turner, E. B.	Dudley
Moreton, J., Jun.	Wolverhampton
Rose, Thomas	Merridale
Rose, Daniel	New Village
Rose, David	Moxley
Loveridge, Henry	Wolverhampton
Rooker, Rev. J. Y.	Gornal
Phillips, C. J.	Birmingham
Taylor, John	Stourbridge

FIELD CLUB MEMBERS.

Timmins, D.	Dudley
Howells, W.	Tipton
Shann, George	Tettenhall
Albright, Arthur	Oldbury
Rollason, Carmi	Sedgley
Shaw, Joseph	Walsall
Waterfield, W.	Gornal
Wright, Thomas	Dudley
Orford, C. W.	Lifford
Thomason, George	Birmingham
Addenbrooke, Rev. E.	Smethwick

Chapelle, L.	Willenhall
Tomson, Job	Brades
Auden, Rev. W.	
Solly, N. N.	Moseley Hall
Rose, E. F.	Moxley

CHELTENHAM FIELD MEETING.

THE next Field Meeting will be held at *Cheltenham*, on Monday, August 15th. As a Special Train will run from South Staffordshire on that day it has been deemed advisable to change the date originally fixed, in order to obtain the cheap excursion fares, and also the advantage of several hours longer stay in Cheltenham than could be arranged by ordinary trains. Those Members who take three day tickets will have an opportunity of meeting the Cotteswold and Malvern Clubs on Wednesday.* Carriages will be reserved for Members, and will be labelled "Dudley Geological Society." The Train will reach Cheltenham about 9 a.m., and after spending an hour in the town the party will proceed by conveyances to "Seven Springs," the source of the Thames. They will thence cross over to Leckhampton Hill which affords a fine section of the Inferior Oolite, Upper Lias, and Marlstone. The extensive plain at the foot of the Cotteswold range is formed of the Lower Lias, which is exposed in brick pits near Cheltenham. The Marlstone, (Middle Lias) forms the basement of the hills, and is succeeded by the Upper

Lias. This consists of blue clay with occasional beds of calcareous matter, and above of a considerable thickness of brown sand crowned with a thin stratum remarkably rich in Ammonites, &c., and hence termed the "Cephalopoda bed." The *Inferior Oolite* is well developed in the district, particularly at Leckhampton Hill, where it is admirably exposed in the freestone quarries. The bottom of this formation consists of about forty feet of coarse rock termed "Pea Grit," containing numerous fossils, particularly Echini, Corals, and Crinoids. The Oolitic Freestone, consisting of Lower Freestone, Oolite Marl, and Upper Freestone is extensively quarried for building purposes, and affords a section nearly 130 feet thick. The Upper Member of the Inferior Oolite is the Ragstone which caps the Hill and is about 40 feet in thickness. The party will assemble, for dinner, at the Queen's Hotel, at 4.30 p.m. at the usual charge.

Members intending to be present are requested to inform the Secretary, not later than Saturday morning, and also to state whether they purpose dining with the party.

* The Special Train will leave as under:—

	A.M.	FARES FOR THE DOUBLE JOURNEY.		
		1st Cls.	2nd Cls.	
Wolverhampton (low level) ..	6.10	For 1 Day,	6s.	3s.6d.
Bilston	6.17			
Princes End	6.21			
Tipton	6.24			
Dudley	6.30	For 3 days,	8s.	4s.6d.
Brierley Hill	6.37	For 1 Day,	5s.	3s.
Brettell Lane	6.41			
Stourbridge	6.47			
Kidderminster	7. 0			
Droitwich	7.20	For 3 days,	7s.	4s.

This will be a Special Fast Train from Worcester.

The Return Train will leave Cheltenham 7.45 the same evening, and on Wednesday, August 17th. Members travel to Dudley from Birmingham at 6.0, Smethwick at 6.10, Oldbury 6.15, Walsall 6, Wednesbury 6.8, Great Bridge 6.13, paying ordinary fare, and join the Excursion at Dudley.