ART. VII.—THE SOUTHERN SYNCLINAL OF THE PICTOU COAL FIELD. BY EDWIN GILPIN, M. A., F. G. S., &c., &c.

I PURPOSE this evening to draw your attention to a hitherto neglected part of this Coal field, and to add to the arguments already advanced, in favour of the extension of the Albion group across the eastern part of the district, in my papers on the Pictou Coal Field, and the grouping of its seams, read before the Newcastle (England) Institute of Mining Engineers, and before you. The investigations of the structure of the Pictou Coal field during the last few years have not been of importance; but I hope to show from the various available sources of information, that there is a strong probability that the portion now to be described, contains valuable deposits of coal.

It is to be greatly regretted that much of the prospecting done during the early history of this Coal field was entrusted to men little qualified for the task. Borings and trial pits were put down without the slightest regard to the general structure of the field, and in one or two instances based on wonderful ideas of the uselessness of searching for coal seams under conglomerates. These trial openings were seldom connected by surveys, and when records were kept, they generally gave merely so many feet of sandstones and shales as having been penetrated. The consequence of this is, that in spite of the large sums of money spent in explorations, there are many gaps left, of which little is positively known, and the information gathered was in some cases erroneously considered as indicating the absence of coal.

The researches of Sir W. Logan, while Director of the Canadian Geological Survey, have led to the generally received conclusion that the productive strata of the Pictou Coal field are bounded by four great faults, bringing up lower measures on all sides. This eminent field geologist has also determined the positions of various smaller dislocations affecting the different undulations, and repeating the crops of the lower seams.

NOTE.—Reference to Sir W. Logan's map of the Pictou Coal Field will show the position of the seams and faults referred to in this paper.