

crystals in order to determine, from the ratio of the fluid contents to the vacuoles in their cavities, the temperature and pressure at which the crystal itself had been formed. In a paper 'On the Original Nature and Subsequent Alteration of Mica-Schist,' published in the *Quarterly Journal* for 1863, he called attention to structures in that rock which he considered to be representative of a ripple-drift, and thus to prove that the schist had prior to metamorphism been a sediment. Though his interpretation of the structures has been disputed, the sedimentary origin of many mica-schists is indubitable. His two presidential addresses, delivered to the Society in 1879 and the following year, embody the results of long and careful investigations; the former describing the structure of calcareous rocks from recent muds and travertine, through the limestones of successive geological deposits in this country, down to those thoroughly crystalline; while the second one gives the results of a similar investigation of the sedimentary rocks other than calcareous, from the most recent examples to those affected by contact, pressure, or other metamorphism.¹

The first, we believe, to follow Dr. Sorby in the application of the microscope—for he tells us he began in 1852—was David Forbes (1828–76), a younger brother of Edward Forbes. He, however, appears not to have made any direct communication of his results to the Society, for he refers only to megascopic study even in his classic paper on 'Bolivia and Southern Peru,' published in the *Quarterly Journal* for 1860. He contributed a valuable essay on 'The Microscope in Geology' to the *Popular Science Review* for 1867, and his studies enabled him to make, in the debates at our evening meetings and elsewhere, incisive criticism on any inexactness in the work of others.² Meanwhile, as early as 1865, with the aid of the micro-

¹ A Memoir of H. C. Sorby, by T. Sheppard, with portrait and list of published papers, appeared in the *Naturalist*, 1906.

² For most of the above particulars relating to the work of Dr. Sorby and D. Forbes we are indebted to Professor Bonney.