

cultivation of his youth awoke in him the speculative love of symmetry and system; but a singular clearness and precision of the classifying power, which he possessed as a native talent, was exercised and developed by exactly those geological facts among which his philosophical task lay. Some of the advances which he made had been entered upon by others who preceded him; but of all this he was ignorant, and perhaps went on more steadily and eagerly to work out his own ideas from the persuasion that they were entirely his own." In what he did and published, beginning with the year 1790, "we see great vividness of thought and activity of mind unfolding itself exactly in proportion to the facts with which it had to deal."¹

About the same time that geological studies received a great impetus in this country from two distinct centres—the philosophical teaching in the Scotch metropolis, and the more empirical labours of the Geological Society—a signal discovery in another line marked a great step in anatomy and physiology. This was Charles Bell's discovery, in the year 1807, of the difference between sensory and motor nerves, "doubtless the most important accession to physiological knowledge since the time of Harvey."²

52.
Charles Bell.

¹ Whewell, *loc. cit.*, p. 423.

² This statement, taken from Dr Henry's 'Report of the British Association,' vol. vi., and repeated by Whewell (*loc. cit.*, vol. iii. p. 352), probably requires a correction, since Du Bois-Reymond and others have placed in their true historical position the great merits of Descartes, who by the discovery of the principle of "reflex action" "did for the physiology of motion and sensation that which Harvey had done for

the circulation of the blood, and opened up that road to the mechanical theory of these processes which has been followed by all his successors" (Huxley in his address to the British Association at Belfast, 1874; reprinted in 'Science and Culture, &c.,' p. 200, &c.) The first enunciation of the principle of reflex action had been variously ascribed to Joh. Müller, Prochaska, Willis, till Du Bois-Reymond in his most interesting 'Gedächtnissrede