

LXXX. *The High-Frequency Spectra of the Elements.*
Part II. By H. G. J. MOSELEY, M.A.*

THE first part † of this paper dealt with a method of photographing X-ray spectra, and included the spectra of a dozen elements. More than thirty other elements have now been investigated, and simple laws have been found which govern the results, and make it possible to predict with confidence the position of the principal lines in the spectrum of any element from aluminium to gold. The present contribution is a general preliminary survey, which claims neither to be complete nor very accurate.

A somewhat different method of photographing these spectra has been developed independently by de Broglie ‡ and by Herveg §. The latter closely confirms the angles given by Moseley and Darwin || for reflexion of Pt rays from selenite. De Broglie finds less satisfactory agreement for the reflexion from rocksalt. De Broglie has also examined the spectra of W and Au, and has obtained for Cu and Fe results similar to those given in Part I.

The general experimental method has remained unaltered, and need not be again described. The same crystal of potassium ferrocyanide has been used as analyser throughout. The sharpness of the lines of short wave-length has

* Communicated by the Author.

† Moseley, *Phil. Mag.* xxvi. p. 1024 (1913).

‡ De Broglie, *C. R.* 17 Nov., 22 Dec., 1913, 19 Jan., 2 Feb., 2 March, 1914.

§ Herveg, *Verh. d. D. Phys. Ges.* xvi. p. 73, Jan. 1914.

|| Moseley & Darwin, *Phil. Mag.* xxvi. p. 210 (1913).