for the spark spectra of these metals by previous observers. For tin, lead and thallium, Saunders has given measurements between about $\lambda 2400$ and $\lambda 1800$, which correspond fairly well with these results. Several new lines have been observed and measured between $\lambda 1800$ and $\lambda 1400$. For the arc spectra of iron, cobalt, nickel and carbon, several lines were obtained, and measured, some of which corresponded with results given in previous work.

This work was begun by Mr. Ainslie under the direction of Professor J. C. McLennan and continued by the joint authors under the direction of Professor E. F. Burton.