

summer of 1894, on the Frederick quadrangle, accompanied by Mr. L. M. Prindle.

In 1895 it was arranged that Mr. Arthur Keith should continue the work on the crystalline rocks of the Piedmont area for the purpose of completing the Washington, Frederick and other folios, which had been mapped preliminarily by Dr. Williams. This work was carried forward during 1895 and 1896, and a wide area has been mapped in detail. The Washington folio is now ready for publication, and the Frederick and Patapsco folios are nearly completed.

The survey has done considerable chemical work in connection with rocks and minerals of the Piedmont region in Maryland.

In October, 1883, Dr. F. W. Clarke visited the mica mines in Montgomery county, and in March, 1884, examined a mica mine near Laurel in Howard county. The mineral gahnite was collected at Gilmore's mica mine in Montgomery county, and an analysis of this material by T. M. Chatard is given by Dr. Clarke in Bulletin No. 9 of the United States Geological Survey.¹

In the following year Mr. J. E. Whitfield made an analysis of brown iron ore from near Timonium, Maryland, which is recorded in Bulletin No. 27 of the Survey.²

In 1886 Dr. F. W. Clarke made analyses of Triassic sandstones from Maryland.³

In 1887 Dr. T. M. Chatard and Mr. J. E. Whitfield made analyses of rocks from Baltimore county,⁴ and in 1888 Dr. Chatard made further analyses of minerals and rocks from Maryland.⁵

In 1889 Dr. Chatard made analyses of websterite and associated minerals from Maryland.⁶

In 1890 there were analyzed in the chemical laboratory of the Survey nine rocks collected in the Piedmont region of Maryland by Dr. G. H. Williams.⁷

¹ Bull. U. S. Geol. Survey No. 9, 1884, p. 9.

² Bull. U. S. Geol. Survey No. 27, 1886, p. 72.

³ Bull. U. S. Geol. Survey No. 55, 1889, p. 80.

⁴ Bull. U. S. Geol. Survey No. 60, 1890, pp. 4-159.

⁵ Bull. U. S. Geol. Survey No. 64, 1890, pp. 41-42.

⁶ Bull. U. S. Geol. Survey No. 78, 1891, p. 122.

⁷ Bull. U. S. Geol. Survey No. 90, 1892, pp. 66-67.