

were contributed to Plate IV in "Correlation Papers, the Newark System," by I. C. Russell.¹

In the summer of 1891 there was issued by the survey a preliminary edition of the Washington sheet, with the geology of the crystalline rocks by Dr. Geo. H. Williams, and of the overlapping sedimentary rocks by N. H. Darton. There was also prepared by Dr. Williams and Mr. Darton, jointly with Messrs. W J McGee and B. Willis, an account of the geology of Washington and vicinity for the "Guide to Washington and its Scientific Institutions," printed for the Fifth Session of the International Congress of Geologists.

During 1891-92 Dr. Williams continued field work in the area of crystalline rocks in Maryland. Work in the Baltimore quadrangle was completed, and in February, 1892, there was published for the American Institute of Mining Engineers a guide-book to Baltimore containing a description of the geology of that region, the crystalline rocks by Dr. Williams, and the sedimentary rocks by Mr. Darton, accompanied by the preliminary map, "The Baltimore Sheet," published by the United States Geological Survey. This map, with somewhat extended area, was republished by Johns Hopkins University as a "Geological Map of Baltimore and Vicinity," by G. H. Williams and N. H. Darton.

In 1892-93 Dr. Williams's studies were mainly directed toward mapping portions of the Ellicott and Laurel quadrangles, the determination of the rocks in Cecil county, an examination of the eruptive rocks in the South Mountain region, and a re-examination of crystalline rocks in the West Washington quadrangle, with a view to the publication of the final Washington folio.

In 1893-94 the time and survey allotment at Dr. Williams's disposal were limited, but considerable progress was made in mapping the crystalline rocks of the Gunpowder, Laurel and West Washington quadrangles. He also prepared a preface on "The general relations of the Granitic Rocks in the Middle Atlantic Piedmont Plateau" for the report by Mr. C. R. Keyes on "The Origin and Relations of Central Maryland Granites."² His last field work for the survey was in the

¹ Bull. U. S. Geol. Survey No. 85, 1892.

² Fifteenth Ann. Rept. U. S. Geol. Survey, 1895, pp. 651-740, pls. 27-48.