January 1, 1902 - November 20, 1902.

Assistant Draftsman on plans, profiles, estimates and topographer on locating parties of F. Lavis and D. T. MacDonough, running preliminary lines and locations in Oklahoma, Indian Territory and Texas, for the Choctaw Oklahoma & Gulf R. R.

November 20, 1902 - March 15, 1903.

Topographer on locating parties of the Little Rock and Southern R. R. (C.R.I. & P.R.R) under D. T. MacDonough and H. A. Paine, Loc. Engrs. work in southern Arkansas.

March 15, 1903 - September 1, 1903.

Topographer on location, instrument man on construction Midland Valley R. R. lines south of Fort Smith, Ark., under D. T. MacDonough, Loc. Angr., and C. E. Meyers, Res. Engr.

October 1903 - June 1904.

Jacob Tome Institute (graduated in June 1904, in the Scientific Course), receiving the Lehigh University Scholarship on graduation.

July 12 - September 2, 1904.

Foreman of Topographic party under J. W. Donn, Asst. U. S. Coast and Geodetic Survey. In charge of plane table party on revision of shore line work lower Potomac River.