STRUCTURE SECTIONS

U.S. GEOLOGICAL SURVEY
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STATE OF NEW JERSEY
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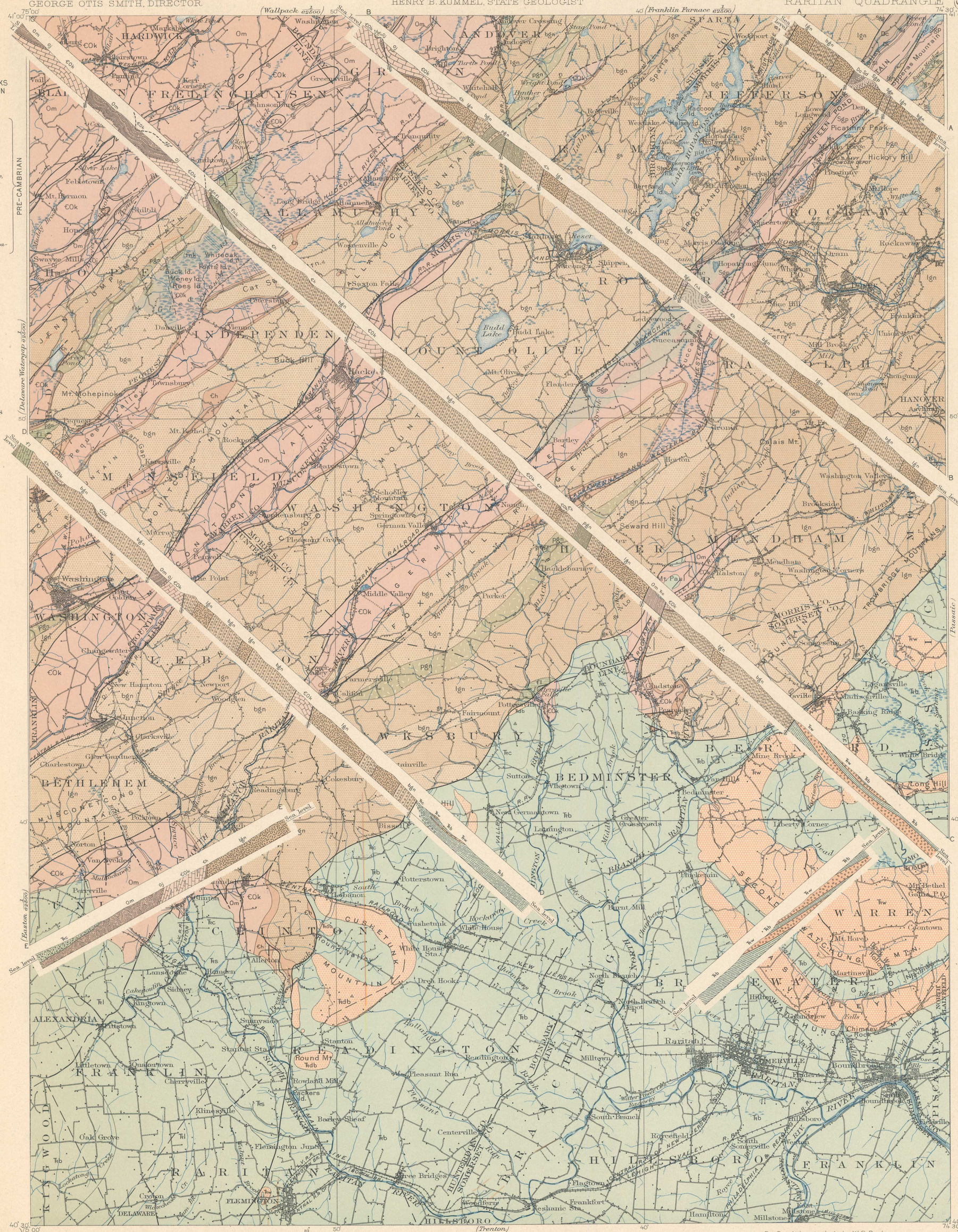
NEW JERSEY
RARITAN QUADRANGLE



LEGEND

(continued)

METAMORPHIC ROCKS OF UNKNOWN ORIGIN

SHEET SYMBOL	SECTION SYMBOL	
pgn	pgn	**Pochuck gneiss** *(dark gneisses composed of pyroxene, hornblende, oligoclase, and magnetite, partly igneous in origin)*
gs		**Graphite schist** *(including garnetiferous graphite schist and mica-graphite schist)*
fnk	fnk	**Formation not known** *(deeply covered by drift)*

PRE-CAMBRIAN

Faults

Concealed faults *(covered by younger deposits)*

LEGEND

SEDIMENTARY ROCKS

SHEET SYMBOL	SECTION SYMBOL		
Ꞧb	Ꞧb	**Brunswick shale** *(soft red shale with few beds of sandstone)*	Newark group; TRIASSIC
Ꞧl		**Lockatong formation** *(dark argillite and fine-grained slabby sandstone)*	Newark group; TRIASSIC
Ꞧs		**Stockton formation** *(gray sandstone, arkose, and red shale)*	Newark group; TRIASSIC
Ꞧc	Ꞧc	**Conglomerates in the Brunswick, Lockatong and Stockton formations**	Newark group; TRIASSIC
		UNCONFORMITY	
Dc	Dc	**Cornwall ("Pequanac") shale** *(black fissile shale and slate)*	DEVONIAN
Dk	Dk	**Kanouse sandstone** *(light-colored sandstone or quartzite)*	DEVONIAN
Sd	Sd	**Decker limestone** *(dark-gray impure limestone)*	SILURIAN
Sl	Sl	**Longwood shale** *(red shale)*	SILURIAN
Sgp	Sgp	**Green Pond conglomerate** *(conglomerate and quartzite)*	SILURIAN
		UNCONFORMITY	
Om	Om	**Martinsburg shale** *(shale, slate, and sandstone)*	ORDOVICIAN
Oj	Oj	**Jacksonburg limestone** *(dark-blue or black massive and shaly limestone with conglomerate at base)*	ORDOVICIAN
		UNCONFORMITY	
€Ok	€Ok	**Kittatinny limestone** *(blue limestone, often magnesian, with occasional cherty layers)*	CAMBRIAN
€h	€h	**Hardyston quartzite** *(vitreous, ferruginous, calcareous quartzite, in part feldspathic)*	CAMBRIAN
		UNCONFORMITY	
fl	fl	**Franklin limestone** *(white and mottled marble, containing pyroxene, chondrodite, and serpentine, in places includes slaty rocks resembling sheared volcanics)*	Metamorphic; PRE-CAMBRIAN

IGNEOUS ROCKS

SHEET SYMBOL	SECTION SYMBOL		
Ꞧdb		**Diabase** *(sheets and basaltic dikes intrusive in the Newark group)*	TRIASSIC
Ꞧw	Ꞧw	**Watchung basalt** *(three successive lava flows interbedded in the Brunswick shale)*	Included in Newark group; TRIASSIC
bgn	bgn	**Byram gneiss** *(gray granitoid gneiss composed of microcline, microperthite, quartz, and hornblende, with a little pyroxene and biotite)*	PRE-CAMBRIAN
lgn	lgn	**Losee gneiss** *(white granitoid gneiss composed of quartz, oligoclase, pyroxene, and some hornblende and biotite)*	PRE-CAMBRIAN

Legend is continued on the left margin.

Henry Gannett, Chief Topographer.
George H. Cook, Geographer in charge.
Triangulation by U.S. Coast and Geodetic Survey and C.C. Vermeule.
Topography by Geological Survey of New Jersey.
Surveyed in 1881-86.
Revised in 1903 under the direction of H.M. Wilson, Geographer, and Hersey Munroe, Topographer in charge; by Robert Coe, J.M. Whitman, Jr., J.I. Gayetty, A.T. Fowler, B.B. Alexander, Ira M. Flocker, and J.P. Gardner.

TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION 1902.

Scale 1/125000
1 ½ 0 1 2 3 4 5 Miles
1 ½ 0 1 2 3 4 5 Kilometers

Edition of Feb. 1912.

Pre-Cambrian geology by W.S. Bayley.
Paleozoic geology by H.B. Kümmel and Stuart Weller.
Triassic geology by H.B. Kümmel.
Surveyed in 1895 to 1909.

SURVEYED IN COOPERATION WITH THE STATE OF NEW JERSEY.