J. Ernest Carman

U.S. GEOLOGICAL SURVEY
J.W. POWELL, DIRECTOR

STRUCTURE SECTIONS

VIRGINIA-WEST-VIRGINIA-MARYLAND
HARPERS FERRY SHEET

78° 50' 40' 77°30' 39°30' 20' 10'

Sea Level

(Winchester) (Frederick) (Luray) (Warrenton) (Mt. Vernon)

LEGEND

SEDIMENTARY

- Nl — Lafayette formation — NEOGENE
- Jnc — Newark formation including limestone-conglomerate — JURATRIAS
- Smb — Martinsburg shale — SILURIAN
- Ss — Shenandoah limestone — SILURIAN
- €a — Antietam sandstone — CAMBRIAN
- €h — Harpers shale — CAMBRIAN
- €w — Weverton sandstone — CAMBRIAN
- €l — Loudoun formation — CAMBRIAN

IGNEOUS

- Jd — Diabase — JURATRIAS

CRYSTALLINE

- Ac — Catoctin schist — ALGONKIAN
- Acg — Catoctin schist and granite — ALGONKIAN

Faults

⚒ Quarries

Known productive formations

Variegated marble

Henry Gannett, Chief Geographer.
Gilbert Thompson, Geographer in charge.
Triangulation by the U.S. Coast & Geodetic Survey.
Topography by the U.S. Coast & Geodetic Survey & W.T. Griswold.
Surveyed in 1884

U.S.C. & G.S.
Griswold.

Scale 1/125,000
0 1 2 3 4 5 6 Miles
Contour Interval 100 feet
Edition of July 1893.

G.K. Gilbert, Chief Geologist.
Bailey Willis, Geologist in Charge.
Geology by Arthur Keith.
Surveyed in 1890 & 1891.