U.S. GEOLOGICAL SURVEY
CHARLES D. WALCOTT, DIRECTOR

STRUCTURE SECTIONS

TENNESSEE
BRICEVILLE SHEET

Henry Gannett, Chief Topographer.
Gilbert Thompson, Chief Geographer in charge.
Triangulation by S. S. Gannett.
Topography by J. F. Knight and E. C. Barnard.
Surveyed in 1888–91.

Geology by Arthur Keith.
Assisted by H. B. Goodrich.
Surveyed in 1893.

LEGEND

SEDIMENTARY ROCKS

CARBONIFEROUS

- **Can** — Anderson sandstone (sandstone with argillaceous and sandy shale and thin coal beds)
- **Csc** — Scott shale (argillaceous and sandy shales with some sandstone and thin coal seams)
- **Cwb** — Wartburg sandstone (interbedded sandstone, sandy shale, argillaceous shale, and coal beds)
- **Cbv** — Briceville shale (dark-gray argillaceous shale with sandy beds and thick coal beds)
- **Cle** — Lee conglomerate (massive sandstone and conglomerate with thin coal seams)
- **Cpn** — Pennington shale (calcareous shale, sandstone, and limestone)
- **Cn** — Newman limestone (massive, blue limestone, cherty at the base)

DEVONIAN

- **Dc** — Chattanooga shale (black, carbonaceous shale)

SILURIAN

- **Sr** — Rockwood formation (reddish, calcareous shale with white sandstone and iron beds near the top)
- **Sb** — Bays limestone (red, argillaceous and sandy limestone)
- **Sc** — Chickamanga limestone (blue and gray, shaly limestone and massive limestone)
- **Sk** — Knox dolomite (light and dark, magnesian limestone with chert nodules)

CAMBRIAN

Subdivisions of the Conasauga shale

- **Ꞓn** — Nolichucky shale (brown, calcareous shale with thin limestone beds)
- **Ꞓm** — Maryville limestone (massive, dark-blue limestone)
- **Ꞓc** — Conasauga shale (reddish, calcareous shale with thin beds of limestone)
- **Ꞓr** — Rome formation (reddish and green sandy shale with thin sandstone)
- **Ꞓrs** — Rome sandstone lentil (red, yellow, and brown sandy shale, with thick beds of sandstone)

Faults

Known productive formations

- *Scott shale* (contains thin coal seams)
- *Briceville shale* (contains thick coal beds)
- *Rockwood formation* (contains beds of red hematite iron ore)