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

ECONOMIC GEOLOGY

TENNESSEE-NORTH CAROLINA
KNOXVILLE SHEET

(Briceville) — (Maynardville) — (Morristown)

(Murphy) — (Nantahalah) — (Cowee)

LEGEND
(continued)

AGE UNKNOWN

- cl — Clingman conglomerate *(Gray sandstone and coarse and fine conglomerate)*
- h — Hazel slate *(Black slate with sandstone and conglomerate layers)*
- t — Thunderhead conglomerate *(Gray sandstone and fine conglomerate with sandy slate)*
- cd — Cades conglomerate *(Interbedded gray sandstone, sandy slate, and fine conglomerate)*
- Pg — Pigeon slate *(Bluish gray, argillaceous slate with sandy upper layers)*
- c — Citico conglomerate *(Coarse and fine quartz conglomerate and sandstone)*
- wi — Wilhite slate *(Bluish, black argillaceous and calcareous slate with lenses of limestone and limestone-conglomerate near the top)*

Faults

Sections

⚒ Mines and Quarries

Known productive formations

- *Marble*
- *Slate*
- *Brown hematite iron ore*

LEGEND

SEDIMENTARY

CARBONIFEROUS
- Cn — Newman limestone *(Bluish, shaley and massive limestone)*

DEVONIAN
- Dg — Grainger shale *(Greenish and bluish gray, sandy shale)*
- Dc — Chattanooga black shale *(Black, calcareous shale)*

SILURIAN
- Sb — Bays sandstone *(Red, calcareous sandstone)*
- Ssv — Sevier shale *(Bluish, calcareous shale)*
- Ssvs — Lentil in Sevier shale *(Gray, calcareous sandstone and sandy shale)*
- St — Tellico sandstone *(Bluish gray, calcareous sandstone and shale)*
- Sa — Athens shale *(Light blue, calcareous shale, with black shale at the base)*
- Shl — Holston marble *(Lentils of variegated marbles of many colors in blue and gray limestone)*
- Sc — Chickamauga limestone *(Blue and gray, argillaceous limestone)*
- Sk — Knox dolomite *(Magnesian limestone with chert nodules)*
- Sks — Knox formation. Shore deposit of Knox dolomite *(Red, yellow and brown shale and thin sandstone)*

CAMBRIAN
- Cn — Nolichucky shale *(Calcareous shale with thin limestone beds)*
- Cm — Maryville limestone *(Massive, blue limestone)*
- Crg — Rogersville shale *(Greenish clay shale with limestone layers)*
- Cc — Connasauga shale *(Brown, green & yellow calcareous shale with thin limestone beds)*
- Crt — Rutledge limestone *(Massive, dark blue limestone)*
- Cr — Rome formation *(Red, green, and brown sandy shale)*
- Crs — Lentils in Rome formation *(Red, white, and brown sandstone)*
- Cb — Beaver limestone *(Massive, blue limestone)*
- Ca — Apison shale *(Red, green, and brown sandy shale)*
- Ch — Hesse sandstone *(Fine, white, massive sandstone)*
- Cmr — Murray shale *(Grayish blue, sandy shale)*
- Cnb — Nebo sandstone *(Massive white sandstone, coarse and fine)*
- Cnc — Nichols shale *(Grayish blue, sandy shale)*
- Cch — Cochran conglomerate *(Massive sandstone and conglomerate)*
- Cs — Sandsuck shale *(Grayish blue, argillaceous shale)*

Henry Gannett, Chief Topographer.
Gilbert Thompson, Chief Geographer.
Triangulation by S.S. Gannett.
Topography by F.M. Pearson and C.G. Van Hook.
Surveyed in 1884-85-90.

Scale 1/125,000
0 1 2 3 4 5 6 Miles
Contour Interval 100 feet.
Datum is mean Sea level

Edition of Jan. 1895.

G.K. Gilbert, Chief Geologist.
Bailey Willis; Geologist in charge.
Geology by Arthur Keith.
Surveyed in 1889-90-91.