

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

AREAL GEOLOGY

NORTH CAROLINA-TENNESSEE
MOUNT MITCHELL QUADRANGLE

LEGEND

SEDIMENTARY ROCKS

(Areas of subaqueous deposits are shown by patterns of parallel lines; metamorphism is indicated by hachures combined with the line patterns.)

Es Shady marble (white and blue marble)

Et Ewmin quartzite (white quartzite)

Ch Hampton shale (black and gray shale)

Esy Brevard schist (fine-grained black schist and quartzites places graphitic)

cg Conglomerate and graywacke (with beds of mica schist)

IGNEOUS ROCKS

(Areas of igneous rocks are shown by patterns of triangles and rhombs; metamorphism is indicated by hachures.)

fb Bakersville gabbro (massive gabbro and diabase)

Ah Henderson granite (porphyritic granite and gneissoid granite)

Acb Cranberry granite (massive granite and gneissoid granite)

Sp Soapstone, dunit, and serpentine (derived from peridotite and pyroxenite)

Rg Roan gneiss (chiefly hornblende gneiss and diorite)

METAMORPHIC ROCKS OF UNKNOWN ORIGIN

(Areas of metamorphic rocks of unknown origin are shown by hachures.)

Arc Carolina gneiss (chiefly mica-gneiss and mica-schist; includes other gneisses, schists, granite, diorite, and small masses of marble)

FAULTS

Sections

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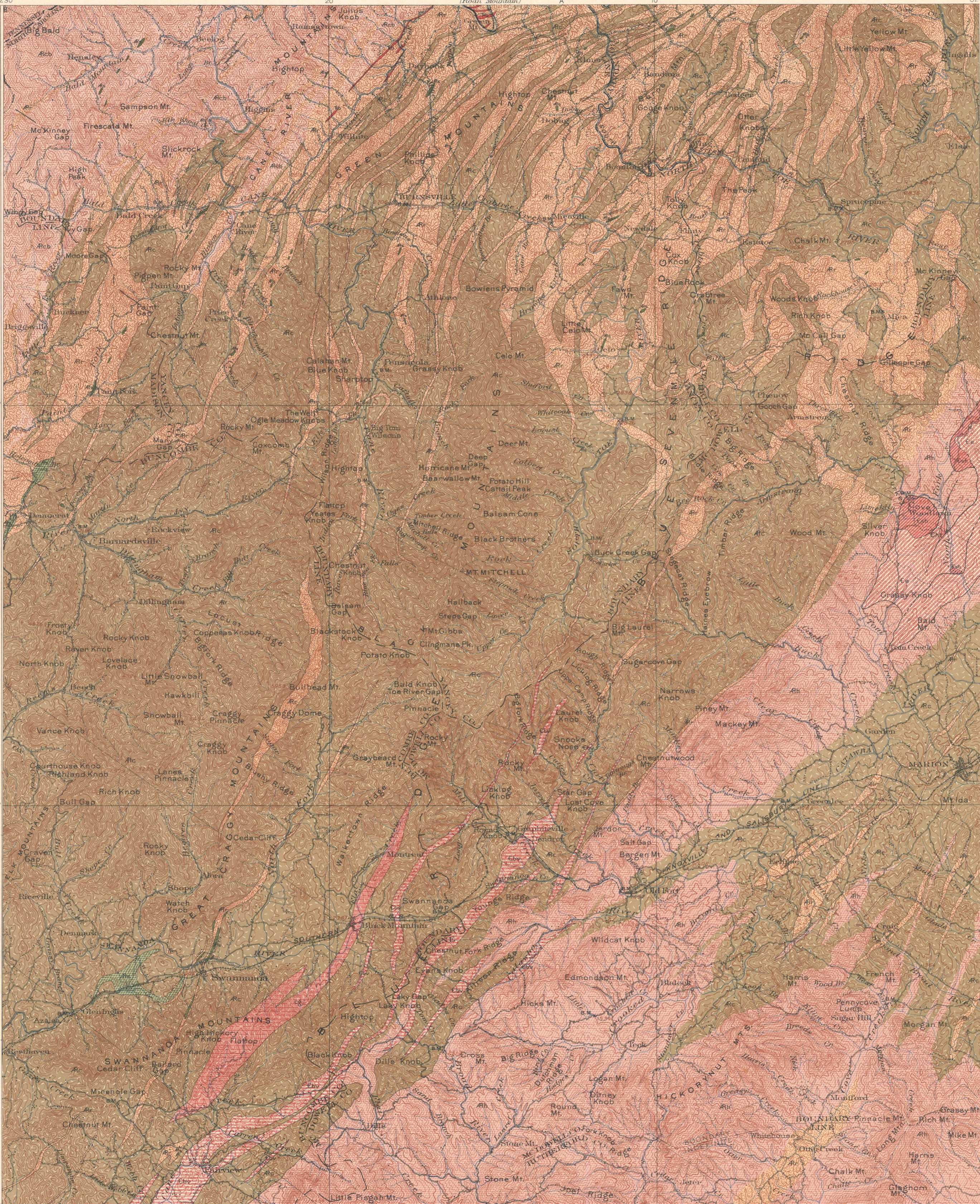
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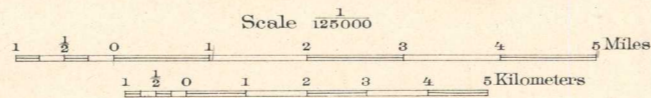
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Scale 1:500000000000000000000000000000000

Scale 1:1000000000000000000000000000000000



H.M. Wilson, Geographer in charge.
Triangulation by W.C. Kern.
Topography by Glenn S. Smith and W.N. Brown.
Surveyed in 1899-1900.



Contour interval 100 feet.
Datum is mean sea level.
Edition of Mar. 1905

Geology by Arthur Keith,
assisted by Hoyt S. Gale.
Surveyed in 1897-1901.