

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

# ECONOMIC 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)

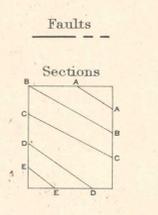
- Csh  
Shady marble  
(white and blue marble)
- Ce  
Erwin quartzite  
(white quartzite)
- Chr  
Hampton shale  
(black and gray shale)
- Cby  
Brevard schist  
(fine-grained black schist and quartz plus graphite)
- cg  
Conglomerate and graywacke  
(with beds of mass schist)

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)
- Rh  
Henderson granite  
(porphyritic granite and gneiss)
- Rcb  
Cranberry granite  
(massive granite and gneiss)
- Rg  
Soapstone, dunitite, and serpentine  
(altered from peridotite and pyroxenite)
- Rr  
Roan gneiss  
(chiefly hornblende-gneiss and diorite)

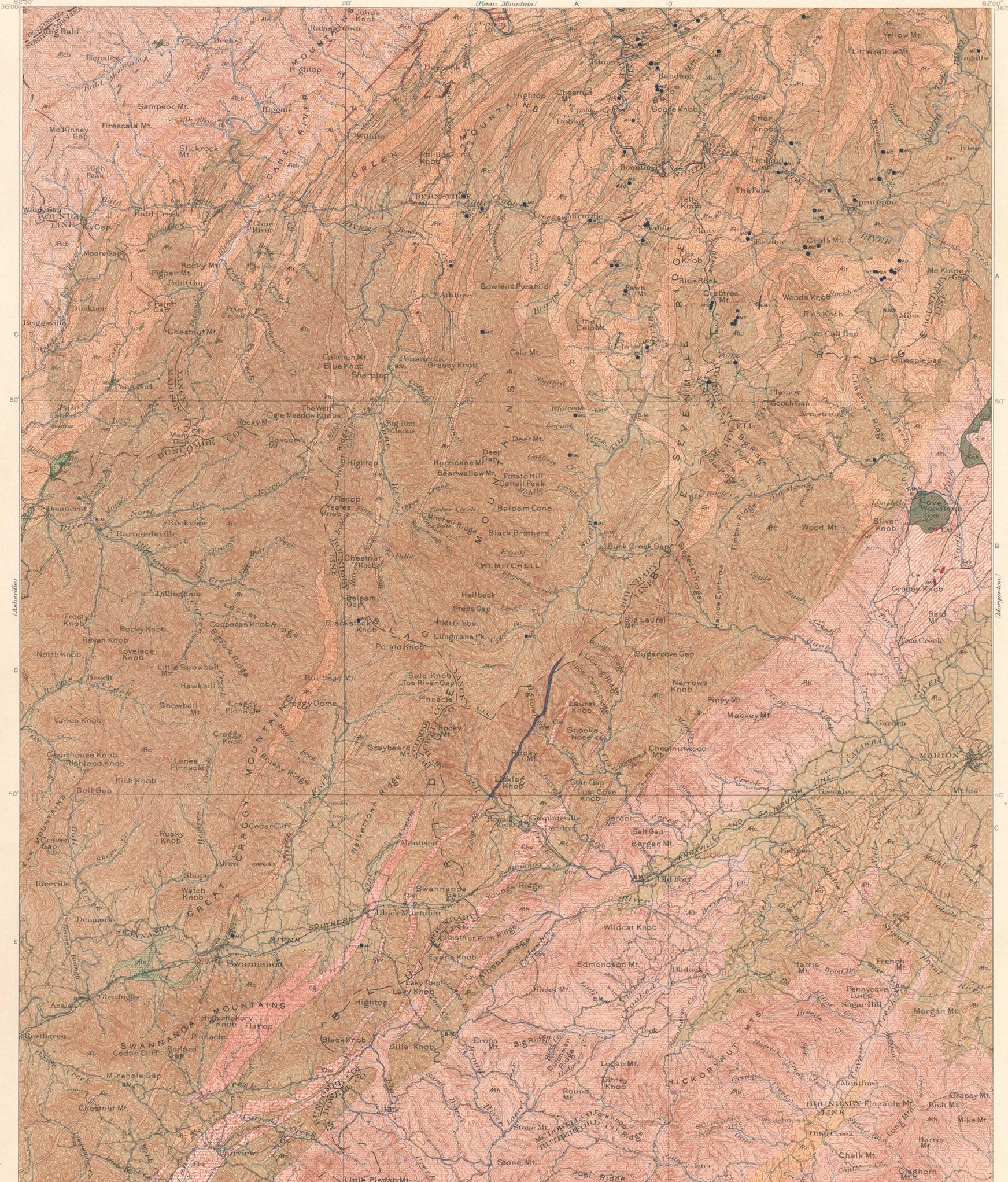
METAMORPHIC ROCKS OF UNKNOWN ORIGIN  
(Areas of metamorphic rocks of unknown origin are shown by hachures)

- Rc  
Carolina gneiss  
(chiefly mica-gneiss and mica-schist, including quartz-gneiss, mica-schist, and small lenses of marble)



Mines and quarries  
x Prospects

- Known productive areas
- Graphite  
(black schist containing graphite)
- Marble
- Soapstone
- Emerald and aquamarine
- Mica  
(in pegmatite veins)
- Corundum-bearing veins
- Talc
- Magnesite  
(including steatite, oris, iron, etc.)
- Chromite  
(deposits in diorite)
- Brown hematite or limonite
- Asbestos



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. Gate.  
Surveyed in 1897-1901.

APPROXIMATE MEAN  
DECLINATION 1905.