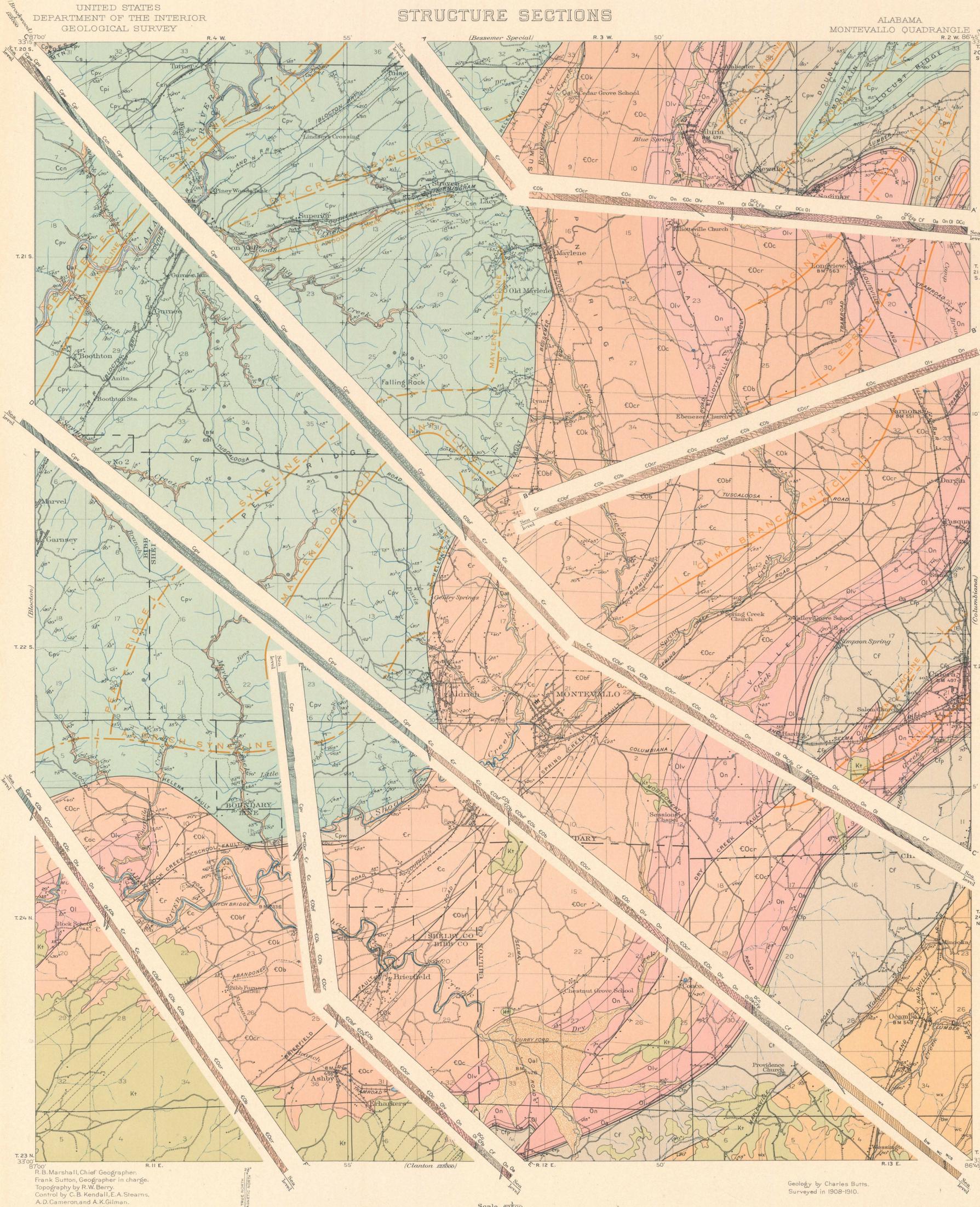


STRUCTURE SECTIONS

ALABAMA
MONTEVALLO QUADRANGLE



EXPLANATION

- SEDIMENTARY ROCKS**
- QUATERNARY**
- Aluvium (flood-plain deposits of present streams)
 - Tuscaloosa formation (varicolored sand, clay, and gravel)
- CRETACEOUS**
- Pottsville formation (sandstone, conglomerate, shale, and coal beds; sandstone members—Shades, C, Pine, C1, Chestnut, C2, Wolf Ridge, C3, and Straight Run; C4, Strawn conglomerate member, C4n)
 - Parkwood formation (gray shale and sandstone)
 - Floyd shale (black or gray shale, some gray granular and impure shaly limestone, and much fine-grained gray and green sandstone)
- CARBONIFEROUS**
- Fort Payne chert (chert and limestone)
 - Chattanooga shale and Frog Mountain sandstone (Chattanooga shale, black shale of Upper Devonian or Mississippian age, unconformable with gray Mountain sandstone; soft gray sandstone of Onondaga (Middle Devonian) age)
 - Little Oak limestone (thick-bedded argillaceous cherty limestone, with irregular cherty layers; weathers to earthy network; late Chazy age)
 - Athens shale (dark to black colorous shale with thin limestone layers; late Chazy age)
- DEVONIAN AND POSSIBLY CARBONIFEROUS**
- Lenoir limestone (dark-gray crystalline limestone with a little chert locally; Chazy age; conglomerate locally at bottom; in Cahaba Valley only, lower underlying Moxham limestone is possibly also present)
 - Odenville and Newala limestones (thick-bedded gray limestone and some dolomite; very pure in upper part; Beckmantown age; absent in Birmingham Valley; Newala burned for lime)
 - Longview limestone (cherty limestone and dolomite; some layers with fairly abundant quartz grains; Beckmantown fauna)
 - Chepultepec dolomite (dolomite with much, colorous, fossiliferous chert)
 - Copper Ridge dolomite (gray crystalline dolomite with much very dense, tough, angular chert at base; pure limestone may represent pre-Copper Ridge rocks in Tennessee)
 - Bibb dolomite (thick-bedded blue fine-grained highly siliceous dolomite, weathering to cavernous boulders)
 - Ketona dolomite (thick-bedded light-gray coarse-grained dolomite of great purity; extensively used for flux)
 - Brierfield dolomite (thick-bedded siliceous dolomite)
- ORDOVICIAN**
- Conasauga ("Coosa") lime (medium thick-bedded dark fine-grained limestone, some dolomite, and yellowish-green shale)
 - Rome (Montevallo) formation (purple, red, greenish, and grayish shale, colorous gray sandstone, and a little limestone)
- CAMBRIAN**
- Wash Creek slate (sericitic slate, weathering green and gray, and black silty concretion in upper part; contains quartz veins, probably gold-bearing; ferruginous sandstone member, WCS, in lower part)
 - Brewer phyllite (purplish-gray sericitic schist with silty (later and some green schist))
 - Waxahatchee slate (bluish sericitic slate, weathering pink, yellowish, and gray)
- PRE-CAMBRIAN OR PALEOZOIC**
- Known fault
 - Probable fault
 - Concealed fault (covered by younger deposits)
 - Overthrust side of thrust fault
 - Strike and dip of stratified rocks
 - Strike of vertical beds
 - Horizontal beds
- Geology by Charles Butts. Surveyed in 1908-1910.

R. B. Marshall, Chief Geographer.
Frank Sutton, Geographer in charge.
Topography by R. W. Berry.
Control by C. B. Kendall, E. A. Stearns,
A. D. Cameron, and A. K. Gilman.
Surveyed in 1907-1908.



Edition of October 1940