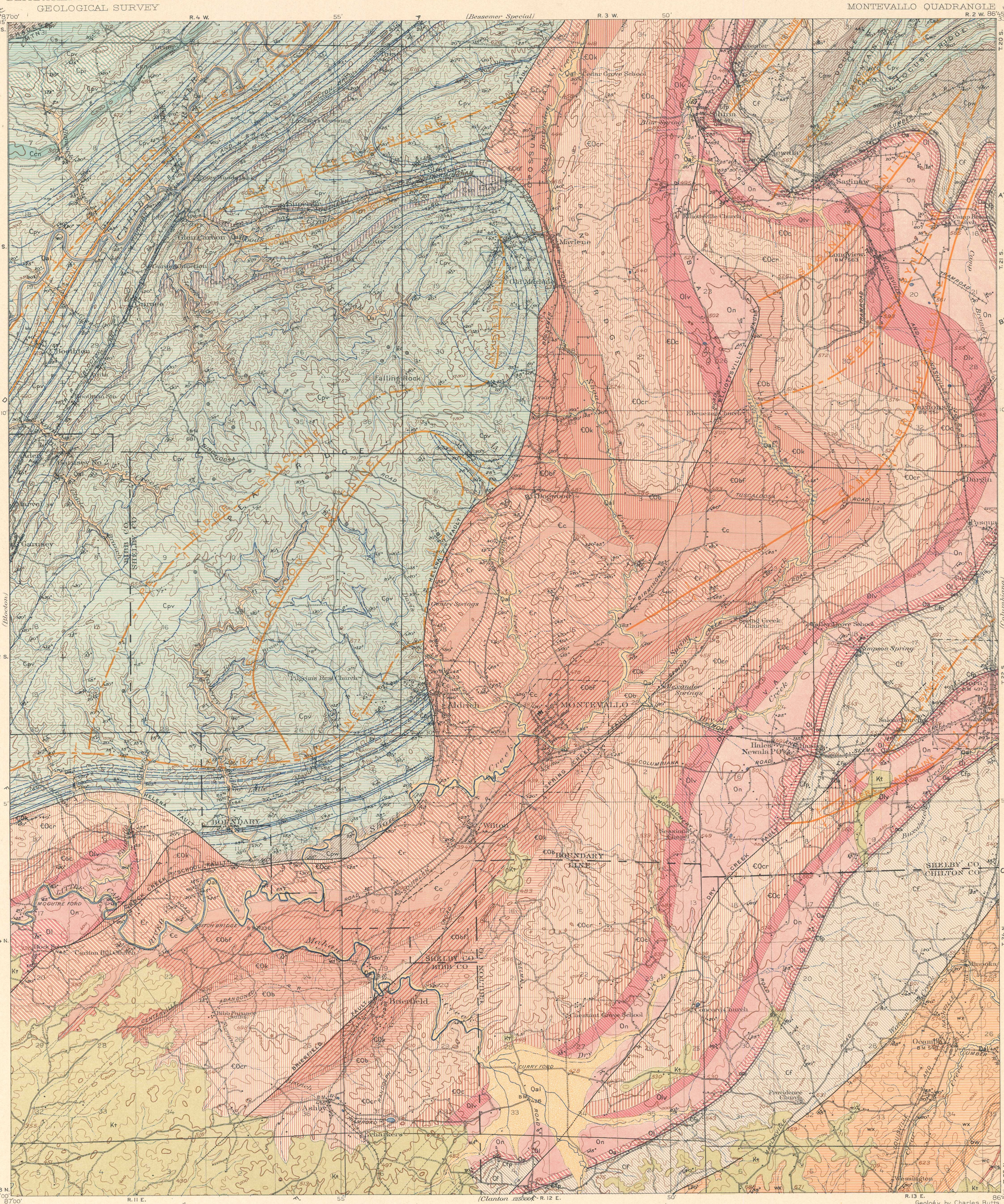
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ECONOMIC GEOLOGY

ALABAMA
MONTEVALLO QUADRANGLE



EXPLANATION

SEDIMENTARY ROCKS

(Subaqueous deposits are shown by patterns of parallel lines; subaerial deposits by patterns of dots and circles)

Qal — **Alluvium**
(flood-plain deposits of present streams)

QUATERNARY

CRETACEOUS

Kt — **Tuscaloosa formation**
(varicolored sand, clay, and gravel)

UNCONFORMITY

Cahaba field	Coosa field
Cpv	Csr
Csn	Cpv
Ccn	Cwr
Cpi	Csn
Cpv	Cpv
Cs	Cs

Pottsville formation
(sandstone, conglomerate, shale, and coal beds; sandstone members—Shades, Cs, Pine, Cpi, Chestnut, Ccn, Wolf Ridge, Cwr, and Straight Ridge, Csr; Straven conglomerate member, Csn)

Pennsylvanian

Cpw — **Parkwood formation**
(gray shale and sandstone)

Cf — **Floyd shale**
(black or gray shale, some gray granular and impure shaly limestone, and much fine-grained gray and green sandstone)

Mississippian

UNCONFORMITY

Cfp — **Fort Payne chert**
(chert and limestone)

UNCONFORMITY

CARBONIFEROUS

DCc — **Chattanooga shale and Frog Mountain sandstone**
(Chattanooga shale, black shale of Upper Devonian or Mississippian age, unconformable on Frog Mountain sandstone, soft gray sandstone of Onondaga (Middle Devonian) age)

Middle to Upper Devonian and possibly Mississippian

UNCONFORMITY

DEVONIAN AND POSSIBLY CARBONIFEROUS

Olo — **Little Oak limestone**
(thick-bedded argillaceous cherty limestone, with irregular nodular chert layers; weathers to earthy network; late Chazy age)

UNCONFORMITY

Oa — **Athens shale**
(dark to black calcareous shale with thin limestone layers; late Chazy age)

UNCONFORMITY

Ol — **Lenoir limestone**
(dark-gray crystalline limestone with a little chert locally; Chazy age; conglomerate locally at bottom; in Cahaba Valley only, where underlying Mosheim limestone is possibly also present)

Lower Ordovician

UNCONFORMITY

On — **Odenville and Newala limestones**
(thick-bedded gray limestone and some dolomite; very pure in upper part; Beekmantown age; absent in Birmingham Valley; Newala burned for lime)

Olv — **Longview limestone**
(cherty limestone and dolomite; some layers with fairly abundant quartz grains; Beekmantown fauna)

UNCONFORMITY

ORDOVICIAN

€Oc — **Chepultepec dolomite**
(dolomite with mealy, cavernous, fossiliferous chert)

€Ocr — **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)

€Ob — **Bibb dolomite**
(thick-bedded blue fine-grained highly siliceous dolomite, weathering to cavernous boulders)

€Ok — **Ketona dolomite**
(thick-bedded light-gray coarse-grained dolomite of great purity; extensively used for flux)

€Obf — **Brierfield dolomite**
(thick-bedded siliceous dolomite)

CAMBRIAN OR ORDOVICIAN *

€c — **Conasauga ("Coosa") limestone**
(medium thick-bedded dark fine-grained limestone, some dolomite, and yellowish-green shale)

Middle Cambrian

€r — **Rome ("Montevallo") formation**
(purple, red, greenish, and grayish shale, calcareous gray sandstone, and a little limestone)

Lower Cambrian

CAMBRIAN

RELATION UNDETERMINED

Equivalent to lower part of Talladega slate of Alabama reports

wc / wcs — **Wash Creek slate**
(sericitic slate, weathering green and gray, and black slate; conglomeratic in upper part; contains quartz veins, probably gold bearing; ferruginous sandstone member, wcs, in lower part)

bw — **Brewer phyllite**
(purplish-gray sericitic schist with silky lustre and some green schist)

wx — **Waxahatchee slate**
(bluish sericitic slate, weathering pink, yellowish, and gray)

PRE-CAMBRIAN OR PALEOZOIC

Known fault
Probable fault
Concealed fault
(covered by younger deposits)
T, Overthrust side of thrust fault
Strike and dip of stratified rocks
Strike of vertical beds
Horizontal beds
Axis of anticline
Axis of syncline

*Ozarkian of E. O. Ulrich

ECONOMIC DATA

Coal mines
A, Abandoned
Coal prospects and country banks

LIST OF ACTIVE MINES IN 1930
1. Boothton, No. 1
2. Boothton, No. 2
3. Boothton, No. 3
4. Sicard
5. Straven
6. Peerless
7. Dogwood, No. 1
8. Dogwood, No. 2
9. Aldrich

CAHABA COAL FIELD
pc, *Polecat*
my, *Maylene*
s, *Straven*
m, *Montevallo*
ys, *Yeshic*
h, *Helena*
t, *Thompson*
gs, *Gholson*
cl, *Clark (Little Pittsburgh?)*
y, *Youngblood (Black shale, Coke)*
b, *Buck*
p, *Pump (Alice and Jones)*
bb, *Big Bone (Coke Oven)*
w, *Wadsworth*
hn, *Harkness*
nu, *Nunnally, Upper*
nm, *Nunnally, Middle*
nl, *Nunnally, Lower*
g, *Gould*

COOSA COAL FIELD
n, *Nivens*

Coal outcrops
(dashed lines indicate uncertainty as to position or thickness of beds)

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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.

Geology by Charles Butts.
Surveyed in 1908-1910.

Scale 1/62500
1 0 1 2 3 4 Miles
1 0 1 2 3 4 5 Kilometers
Contour interval 50 feet.
Datum is mean sea level.
Edition of October 1940

APPROXIMATE MEAN DECLINATION 1908.
TRUE NORTH
MAGNETIC NORTH