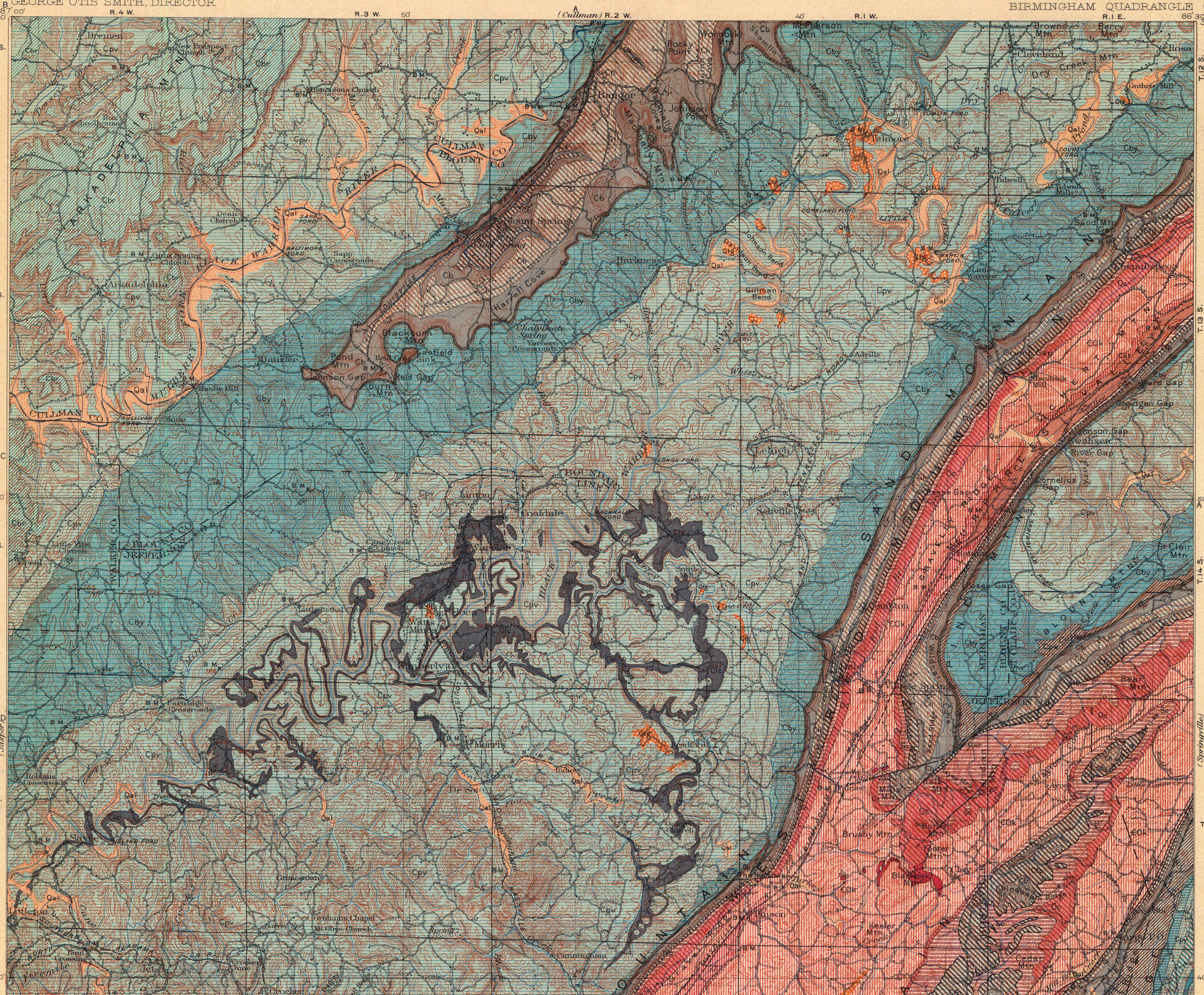
U.S. GEOLOGICAL SURVEY
GEORGE OTIS SMITH, DIRECTOR

AREAL GEOLOGY

ALABAMA
BIRMINGHAM QUADRANGLE


87°00'
34°00'
86°30'
33°30'
R.4 W.
R.3 W.
R.2 W.
R.1 W.
R.1 E.
T.12 S.
T.13 S.
T.14 S.
T.15 S.
T.16 S.
T.17 S.
T.18 S.
50'
40'
(Cullman)
(Gadsden)
(Jasper)
(Springville)
(Bessemer)
(Brookwood)
A
B
C
D
E
ARKADELPHIA MTN
BLACK WARRIOR RIVER
MULBERRY FORK
LITTLE WARRIOR RIVER
SAND MOUNTAIN
BLOUNT MTN
SHADES MOUNTAIN
OAK MTN
OWENS RIVER
BIRMINGHAM
North Birmingham
Woodlawn
Avondale
Bangor
Blount Springs
Leeds
Trussville
Cpv
Cby
Cbr
Qal
Qtg
Cb
Ch
Cp
Cpw
Clc
Cpi
Ccn
Cs
Oc
€Ok
Sc

LEGEND

SEDIMENTARY ROCKS

(Areas of subaqueous deposits are shown by patterns of parallel lines, subaerial deposits by patterns of dots and circles)

QUATERNARY

Recent

Qal
Alluvium
(flood plain deposits of present streams)

Pleistocene

Qtg
Terrace gravels
(gravel and sand of probable Pleistocene age on terraces or hills 100 to 300 feet above present streams)

CARBONIFEROUS

Pennsylvanian

Cpv Cbr Cby | Cr Ccb Clc Cpv Cby | Cpv Ccn Cpi Cs
Pottsville formation
(sandstone, shale, and coal beds, and Shades, Cs, Boyles, Cby, Pine, Cpi, Chestnut, Ccn, Bremen, Cbr, Lick Creek, Clc, Camp Branch, Ccb, and Razburg, Cr, sandstone members)

Cpw
Parkwood formation
(gray shale and sandstone)

Mississippian

Cp
Pennington shale
(gray, green, red, and black shale, some sandstone, conglomerate, and chert)

Cf Ch
Floyd shale
(black carbonaceous shale, greenish and gray shale, and thin Hartselle sandstone member, Ch)

Cb Ch
Bangor limestone
(thick-bedded gray crystalline limestone with Hartselle sandstone member, Ch, and a little shale and chert)

Cfp
Fort Payne chert
(chert and limestone)

DEVONIAN

Dc
Chattanooga shale and Frog Mountain sandstone
(black shale and sandstone below, too thin to separate on map)

SILURIAN

Sc
Clinton ("Rockwood") formation
(shale and sandstone with beds of iron ore)

ORDOVICIAN

Oc Oa
Chickamauga ("Pelham") limestone
(thick to thin-bedded, dove and blue fossiliferous limestone; Attalla conglomerate member, Oa, chiefly chert pebbles, locally at base)

€Ok €kt
Knox dolomite
(heavy bedded cherty dolomite with chert-free Ketona dolomite member, €kt, at base)

CAMBRIAN

€c
Conasauga ("Coosa") limestone
(thin-bedded blue limestone with shale and some chert)

€r
Rome ("Montevallo") formation
(variegated shale with some limestone and sandstone)

25° *Strike and dip of stratified rocks*
Strike of vertical beds

Faults

H. M. Wilson, Geographer.
H. B. Blair, in charge of section.
Topography by H. B. Blair, Oscar Jones, and C. D. S. Clarkson.
Assistants, R. L. Harrison and Carroll Caldwell.
Control by Coast and Geodetic Survey, Oscar Jones, and C. B. Kendall.
Surveyed in 1904-1905.

TRUE NORTH
MAGNETIC NORTH
3°
APPROXIMATE MEAN DECLINATION 1905.

Scale $\frac{1}{125000}$

1 ½ 0 1 2 3 4 5 Miles

1 ½ 0 1 2 3 4 5 Kilometers

Contour interval 50 feet.
Datum is mean sea level.

Edition of Apr. 1910.

DIAGRAM OF TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Geology by Charles Butts,
assisted by E. F. Burchard,
C. W. Washburne, E. M. Dawson,
and William F. Prouty.
Surveyed in 1905-6.