AREAL GEOLOGY

STATE OF ILLINOIS

U.S. GEOLOGICAL SURVEY
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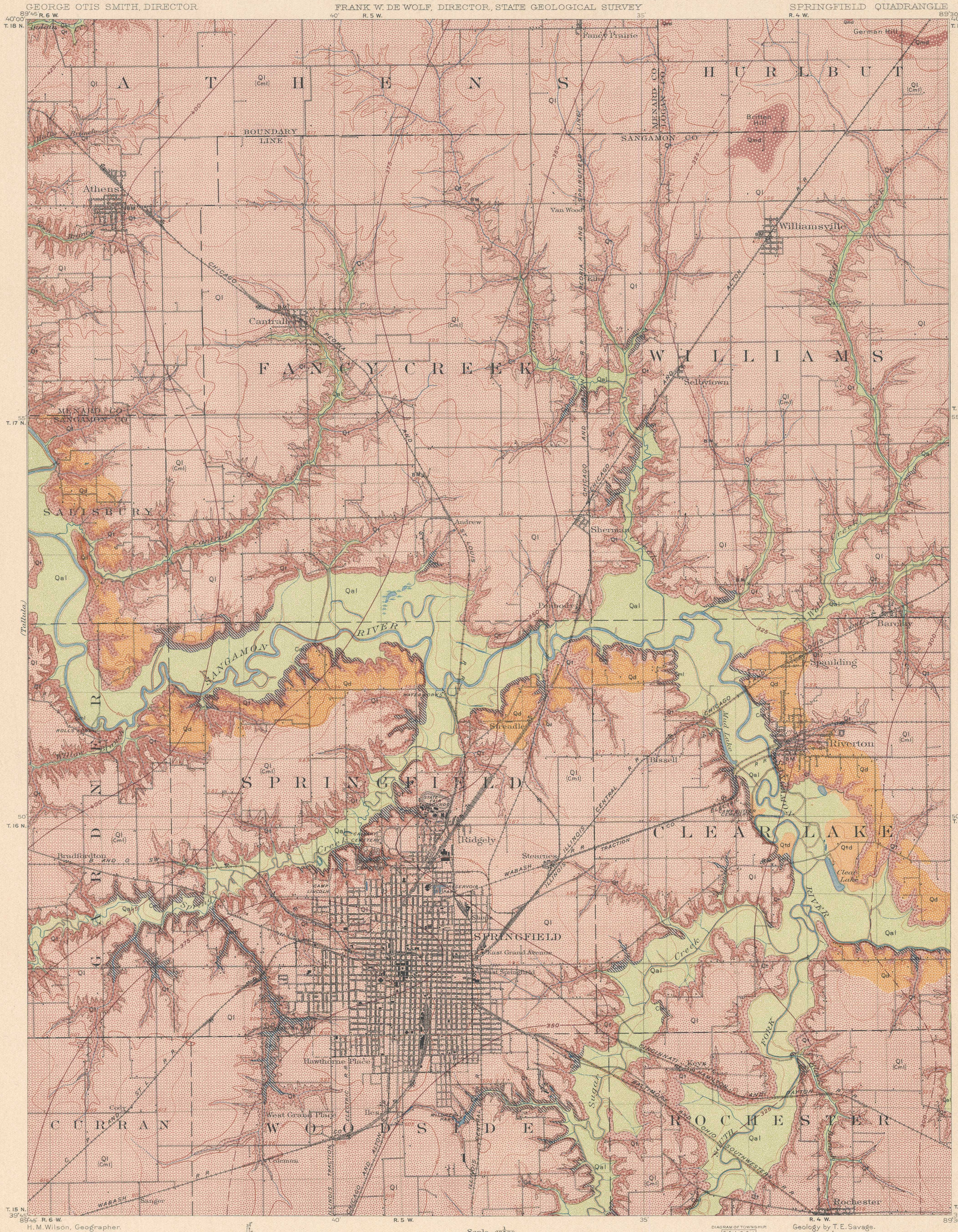
ILLINOIS
SPRINGFIELD QUADRANGLE



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
(in flood plains of present streams; generally sandy in Sangamon Valley)

Qd — Dune sand
(wind blown sand, coarse to very fine, on upland bordering the river; probably derived from the flood plain)

Pleistocene

Qtd — Terrace deposits
(sand and silt with a little gravel, forming terraces along Sangamon River about 30 feet above the flood plain)

Ql — Loess
(buff to gray very fine sand and clay on uplands; thin and discontinuous loess on valley sides mapped with glacial till)

Illinoian stage

Qmd — Morainal drift
(ridges and hills composed of sand and gravel and unassorted till)

Qt — Glacial till
(gravelly and sandy clay overlain on valley sides by thin loess which is either in place or has crept down from the upland)

CARBONIFEROUS

Pennsylvanian

Cml — McLeansboro formation
(shale, sandstone, and limestone with several thin coal beds; underlies all Quaternary deposits in the quadrangle)

ECONOMIC AND STRUCTURE DATA

Structure contours on the base of Springfield (No. 5) coal
(doubtful position of coal indicated by dashed lines; contour interval 25 feet; datum, mean sea level)

Coal mines (shafts)

Note: *The most valuable coal is the Springfield (No. 5) in the upper part of Carbondale formation, which underlies the McLeansboro formation throughout the quadrangle; other coals occur in the Carbondale and McLeansboro formations; shale for brick and tile and limestone for cement material and building stone occur in the McLeansboro formation; loess and glacial till yield clay for brick and tile; sand dunes, terrace deposits, and alluvium have workable deposits of sand.*

H. M. Wilson, Geographer.
Chas. E. Cooke, in charge of section.
Topography by Albert Pike.
Control by Coast and Geodetic Survey, Geo. T. Hawkins, and E. L. McNair.
Surveyed in 1905.

SURVEYED IN COOPERATION WITH THE STATE OF ILLINOIS.

TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION 1905.

Scale $\frac{1}{62500}$

1 ½ 0 1 2 3 4 Miles

1 ½ 0 1 2 3 4 5 Kilometers

Contour interval 10 feet.
Datum is mean sea level.

Edition of June 1912.

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 T. E. Savage.
Glacial till-Loess boundary by E. W. Shaw.
Surveyed in 1906 and 1911.

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