STRUCTURE AND ECONOMIC GEOLOGY

U.S. GEOLOGICAL SURVEY
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STATE OF PENNSYLVANIA
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COMMISSIONERS

PENNSYLVANIA
CLAYSVILLE 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** (sand and silt in flood plains of the larger streams)

Pleistocene

Qlt — **Lower terrace deposits** (sand, silt, clay, and partly rounded pebbles of local derivation on low terraces)

Kansan?

Qcm — **Carmichaels formation** (high terrace sand, silt, clay, and deeply decayed, partly rounded, pebbles of local derivation)

CARBONIFEROUS

Permian

Dunkard group

Cg — **Greene formation** (shale and sandstone with thin limestones and beds of coal)

Cw, wht — **Washington formation** (sandy shale and coarse sandstone with limestone and beds of coal, Washington coal near middle)

Pennsylvanian

Cm, wb — **Monongahela formation** (limestone, shale, and sandstone with Waynesburg coal at top)

ECONOMIC AND STRUCTURE DATA

Coal outcrops
wht, *Washington coal*
wb, *Waynesburg coal*

Structure contours on the limestone at the top of the Washington formation (contour interval is 10 feet; datum is mean sea level)

⚒ *Coal mine*
X *Country coal banks*

Note: *The Pittsburg coal at the base of the Monongahela formation does not outcrop, but in general lies at a depth below the surface of 200 to 700 feet throughout the quadrangle; other coals, clay and shale for brick and tile, limestone for cement materials, and building stone occur throughout all the consolidated formations; the stream and terrace deposits yield gravel, sand, and clay. Distribution of oil and gas wells and pools shown on separate map.*

H. M. Wilson, Geographer.
Robt. D. Cummin, in charge of section.
Topography by M. J. Munn, Assistant, E. W. McCrary.
Control by D. H. Baldwin and B. J. Green.
Surveyed in 1904 and 1905.

SURVEYED IN COOPERATION WITH THE STATE OF PENNSYLVANIA.

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 20 feet.
Datum is mean sea level.
Edition of Mar. 1911

Pre-Quaternary geology by M. J. Munn;
Quaternary geology by E. W. Shaw;
under the supervision of George H. Ashley.
Surveyed in 1905, 1908–1910.

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