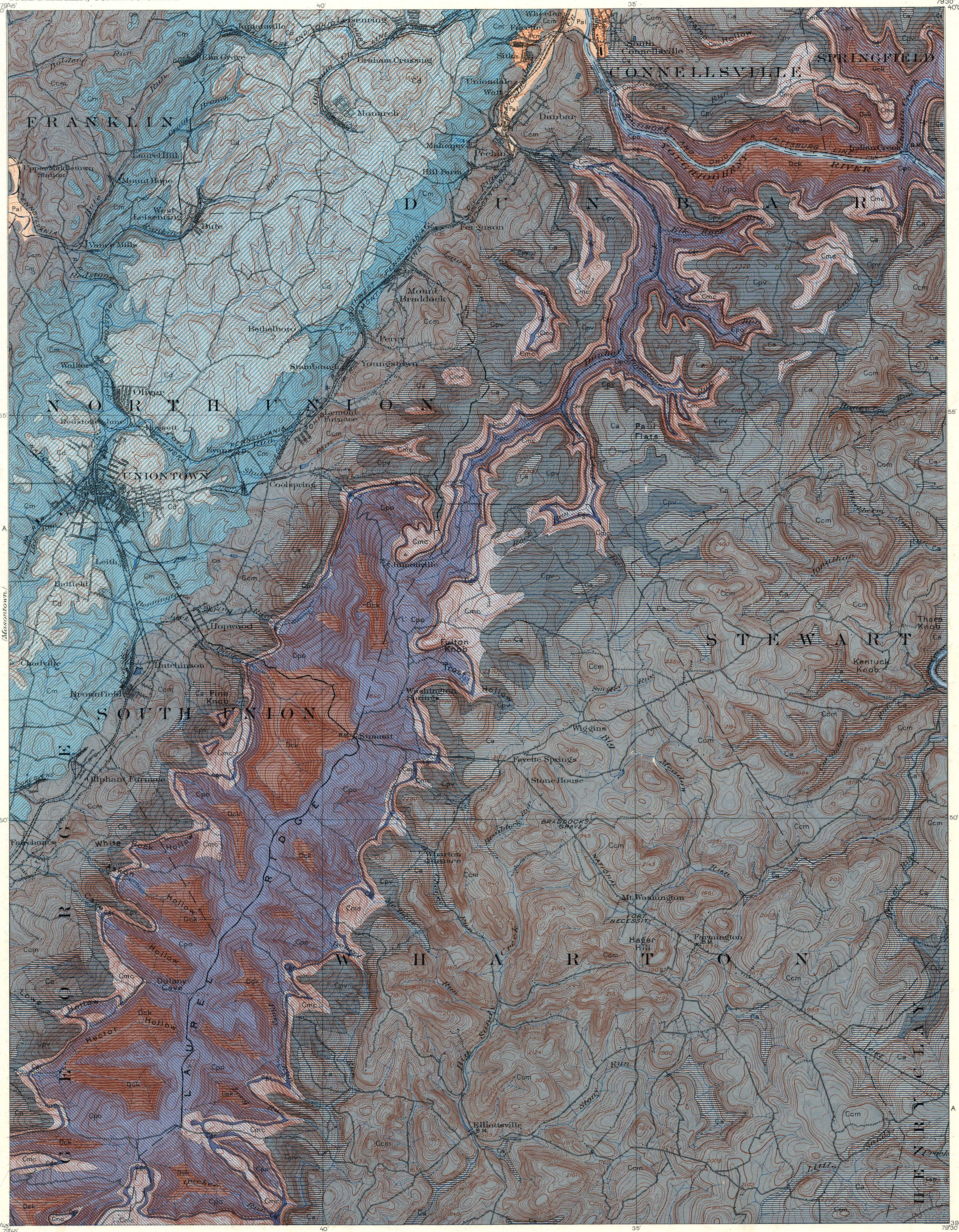
U. S. GEOLOGICAL SURVEY
CHARLES D. WALCOTT, DIRECTOR

STATE OF PENNSYLVANIA
GEORGE W. MC NEES, SIMON HARROLD
FRED. D. BARKER, COMMISSIONERS

AREAL GEOLOGY SHEET

PENNSYLVANIA
(FAYETTE COUNTY)
UNIONTOWN QUADRANGLE



LEGEND

SURFICIAL ROCKS

(Areas of Surficial rocks are shown by patterns of dots and circles.)

PLEISTOCENE

- **Pal** — Alluvium *(in flood plains of present streams)*
- **Pcm** — Carmichael clay *(clay, sand, and bowlders on terraces and in abandoned channels of the larger streams)*

SEDIMENTARY ROCKS

(Areas of Sedimentary rocks are shown by patterns of parallel lines.)

CARBONIFEROUS

Pennsylvanian series

- **Cd** — Dunkard formation *(sandy shale and coarse sandstone with thin limestone and beds of coal, many of workable size)*
- **Cm** — Monongahela formation *(shale, limestone, and occasionally coarse sandstone; Pittsburg coal at the bottom, Waynesburg coal at the top, and coal beds of local importance between)*
- **Ccm** — Conemaugh formation *(sandstone, shale, and limestone with a few small coal beds)*
- **Ca** — Allegheny formation *(shale, sandstone, and clay with several workable coal beds; Upper Freeport coal at the top)*
- **Cpv** — Pottsville sandstone *(coarse massive white sandstone or conglomerate with some shale and usually a coal bed at the middle)*

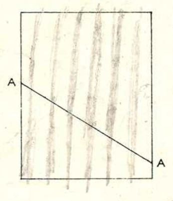
Mississippian series

- **Cmc** — Mauch Chunk shale *(red and green shale and thin-bedded green sandstone)*
- **Cgr** — Greenbrier limestone lentil *(thin blue fossiliferous limestone in the Mauch Chunk shale)*
- **Cpo** — Pocono sandstone *(coarse sandstone grading into very sandy limestone at the top and usually containing sandy shale)*

DEVONIAN

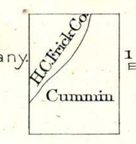
- **Dck** — Catskill formation *(green and red shale and green sandstone)*

Section

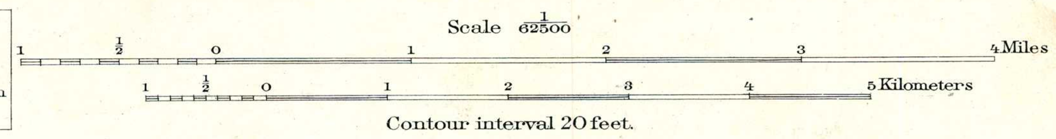


HOTTA Formation
Coprolitic Shale

H. M. Wilson, Geographer in charge.
Control by S. S. Gannett, A. C. Roberts, Sledge Tatum, and W. R. Harper.
Topography by Frank Sutton, R. D. Cummin, and H. C. Frick Coke Company.
Surveyed in 1899 in cooperation with the State of Pennsylvania.



Scale $\frac{1}{62500}$



Contour interval 20 feet.
Datum is mean sea level.

Edition of Mar. 1902.

Geology by Marius R. Campbell.
Assisted by John D. Irving
and Myron L. Fuller.
Surveyed in 1900.