

LEGEND

SEDIMENTARY ROCKS  
(Areas of ambiguous deposits are shown by patterns of parallel lines, subhorizontal deposits by patterns of dots and circles)

- QUATERNARY**
  - Qal Alluvium (gravel and silt in valley bottoms)
- TERTIARY**
  - Dc Terrace gravels (coarse gravel and sand on steep terraces and elevated alluvial fans)
- DEVONIAN**
  - Chemung formation (gray green and dark-red shale and micaceous sandstone)
  - SEQUENCE CONCEALED
  - Oriskany formation (cherty limestone, sandstone, and conglomerate)
- SILURIAN**
  - Sh Helderberg limestone (massive and thin-bedded dark limestone, upper part cherty)
  - Scy Cayuga formation (red green and yellow shale with thin laminated limestone)
  - Se Clinton shale (drab clay shale with ferruginous sandstone and white quartzite beds)
- ORDOVICIAN**
  - St Tuscarora sandstone (massive hard white quartzose sandstone)
  - Om Juniata formation (red sandstone and shale with some quartz conglomerate)
  - Ob Martinsburg shale (black fissile shale and soft greenish argillaceous sandstone, banded sandstone beds, Om, locally at the top)
  - Oc Chambersburg limestone (rather pure thin bedded fossiliferous limestone with argillaceous partings)
  - Osr Stones River limestone (very pure even grained limestone with magnesian beds)
  - Ob Beekmantown limestone (thin bedded pure and magnesian limestone, "shellflower" chert in lower part)
- CAMBRIAN**
  - Cc Conococheague limestone (dense dark limestone with numerous conoidal sandy laminae)

Faults  
Concealed faults (covered by stratified deposits)  
A-A' Strike and dip of stratified rocks  
P Strike of vertical strata  
H Horizontal strata

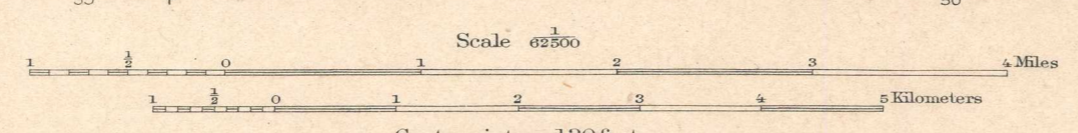
Economic data: Lime for plaster can be obtained from Osr lime for fertilizer chiefly from Osr, Ob, and Oc, cement materials from Oc, Osr, and Om, road material from limestones of the Shenandoah group, Om, Oj, and Sc, flagstones from Oc, St, and Sc, building and foundation stone from limestones of the Shenandoah group, and St, shale and clay for brick from Om, Sc, and residual from weathered limestones, building sand from St and Oal, Ob, Osr, and Oc furnish the best soils for farm land, Om and slopes of mountains mantled by wash furnish poor soils adapted to fruit culture, farming and grazing mountain areas mantled largely by sandstone debris adapted chiefly to woodland, grazing, and fruit culture.

Quarries, chiefly limestone for foundations, flagstones and road material  
Quarries with limekilns only the larger ones shown  
Abandoned iron mines and prospects

H.M. Wilson, Geographer in charge.  
Control by Sledge Tatum and J.H. West.  
Topography by Robt. D. Cummin.  
Surveyed in 1900.

SURVEYED IN COOPERATION WITH THE STATE OF PENNSYLVANIA.

APPROXIMATE MEAN DECLINATION 1900.



Scale 1:62,500  
Contour interval 20 feet.  
Datum in mean sea level.  
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Geology by George W. Stose.  
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