AREAL GEOLOGY

STATE OF PENNSYLVANIA
TOPOGRAPHIC AND GEOLOGIC SURVEY COMMISSION
JOSEPH N. PEW, CHAIRMAN

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

PENNSYLVANIA
EBENSBURG QUADRANGLE

(Barnesboro) (Patton) (Hollidaysburg) (Everett)

78°45' 40°30' 40' 35' 78°30' 40°30'

25' 20' 15'

A B

LEGEND

SEDIMENTARY ROCKS

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

Recent — QUATERNARY

Qal — **Alluvium** *(in flood plains of present streams)*

Pennsylvanian — CARBONIFEROUS

Cm — **Monongahela formation** *(shale and thin sandstone)*

Cw, Csh, Ccm, Ce, Csb — **Conemaugh formation with Saltsburg, Ebensburg, Summerhill, and Wilmore sandstone lentils** *(principally gray sandy shale with sandstone beds, Csb, Ce, Csh, and Cw respectively)*

Ca — **Allegheny formation** *(chiefly gray and dark clay shale with beds of coarse gray sandstone, locally developed, and several valuable coal beds; Upper Freeport coal at the top)*

Mississippian — CARBONIFEROUS

Cpv — **Pottsville formation** *(two beds of thick-bedded sandstone, separated by shale, bearing locally a thin coal bed)*

Cmc — **Mauch Chunk formation** *(soft red shale in upper part, greenish to gray heavy-bedded sandstone in lower part)*

Cpo — **Pocono formation** *(principally grey sandy shale and coarse gray sandstone, with several bands of red clay shale)*

Devonian — DEVONIAN

Dck — **Catskill formation** *(predominatingly red shale and red sandstone, with some bands of grey and green shale)*

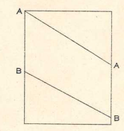
Dch — **Chemung formation** *(gray and green shale with sandstone layers in lower part; chocolate shale and sandstone in upper portion; fossiliferous throughout)*

Dn — **Nunda formation** *(thinly laminated, drab, clay shale at bottom, merging into gray sandy shale containing thin, gray and bluish sandstone layers and a few bands of reddish rock; fossils rare)*

Dg — **Genesee shale** *(soft, black, clay shale with limestone nodules; sparingly fossiliferous)*

Dh — **Hamilton formation** *(mostly olive and dark-green clay shale and sandy shale, with a few thin bands of gray sandstone; fossils abundant)*

Sections



H. M. Wilson, Geographer in charge.
Control by S. S. Gannett and H. B. Paige.
Topography by Frank Sutton, R. D. Cummin, T. G. Basinger, and J. S. B. Daingerfield.
Surveyed in 1901–1902.

SURVEYED IN COOPERATION WITH THE STATE OF PENNSYLVANIA.

TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION 1902.

Scale 1/62500

1 0 1 2 3 4 Miles
1 0 1 2 3 4 5 Kilometers

Contour interval 20 feet.
Datum is mean sea level.

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Geology by Charles Butts, assisted by W. C. Phalen, under the direction of Marius R. Campbell.
Surveyed in 1903.

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