

ECONOMIC GEOLOGY

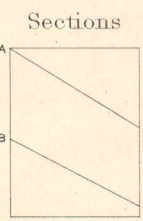
STATE OF PENNSYLVANIA
TOPOGRAPHIC AND GEOLOGIC SURVEY COMMISSION
JOSEPH N. FEW, CHAIRMAN
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PENNSYLVANIA
EBENSBURG QUADRANGLE

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

LEGEND

(continued)



☒ Coal mines
✕ Coal prospects

NAMES OF MINES.

Location indicated on the map by numbers.

1. Reed and Bradley.
2. Reed and Bradley.
3. Bennington No. 19.
4. Webster No. 11.
5. Taylor and McCoy.
6. Webster No. 10.
7. Webster No. 9.
8. Kokomo.
9. Sonman No. 4.
10. Lilly.
11. Piper.
12. Bear Rock.
13. Moshannon.
14. Metzger.
15. Webster No. 4.
16. Laughman.
17. Sonman Shaft.
18. Piper No. 1.
19. Webster No. 1.
20. Shoemaker.
21. Sonman Shaft.
22. Hopper.
23. Lukens and Haupt.
24. Toy Ridge.
25. Puritan.
26. Excelsior.
27. Pearse and Sons.
28. South Fork.
29. Wintersen.
30. Cambria.
31. Plymouth.
32. N. Y. Coal and Transportation Co.
33. Eleanor.
34. Beaverdam.
35. Logan.
36. Beaverdam No. 15.
37. Wagner.
38. Alton.
39. Cambria.
40. Loyal Hanna.
41. Yellow Run Shaft.
42. Mountain Coal Co.
43. Dunlo Slope.
44. Henrietta No. 1.
45. Henrietta No. 2.



LEGEND

SEDIMENTARY ROCKS

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

- | | | |
|---------------|---|---------------|
| Recent | Qal | QUATERNARY |
| | Alluvium
(in flood plains or present streams) | |
| | Cm | |
| | Monongahela formation
(shale and thin sandstone) | |
| | Cw
Ccm
Csb | |
| | Conemaugh formation with Saltsburg, Ebensburg, Summerhill, and Wilmore sandstone lentils
(principally gray sandy shale with sandstone beds Csb, Ccm, and Cw respectively) | |
| Pennsylvanian | Ca | CARBONIFEROUS |
| | Allegheny formation
(shaly gray and dark clay shale with beds of coarse gray sandstone, locally developed and several valuable coal beds. Upper Freeport coal at the top) | |
| | 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) | |
| Mississippian | Cpo | MISSISSIPPIAN |
| | Pocono formation
(principally gray sandy shale and coarse gray sandstone with several bands of red clay shale) | |
| | Dck | |
| | Catskill formation
(predominantly red shale and red sandstone, with some bands of gray and green shale) | |
| | Dch | |
| | Chemung formation
(gray and green shale with sandstone lenses in lower part; shaly shale and sandstone in upper part; fossiliferous throughout) | |
| | Dn | |
| | Nunda formation
(thinly laminated, drab, clay shale in bottom, massive red and gray sandy shale in upper part; thin bands of reddish rock; fossils rare) | |
| | Dg | DEVONIAN |
| | Genesee shale
(soft, drab, clay shale with limestone nodules, sparingly fossiliferous) | |
| | Dh | |
| | Hamilton formation
(mostly clay and dark green clay shale and sandy shale, with a few thin bands of gray sandstone; fossils abundant) | |
| | Economic and structural data | |
| | Coal
(areas underlain by Allegheny formation which contains several beds of coal of workable thickness) | |
| | Coal outcrops
(coal beds of probably workable thickness) | |
| | of Upper Freeport coal
of Upper Bituminous coal
of Lower Bituminous coal | |
| | Structure contours
(showing the elevation above sea and the top of the Upper Freeport coal; contour interval is 50 feet up to 3000 feet and 100 feet above 3000 feet; is 200 feet) | |
| | Legend is continued on the left margin. | |

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.



Geology by Charles Butts,
assisted by W. C. Phalen,
under the direction of Marius R. Campbell.
Surveyed in 1903.
SURVEYED IN COOPERATION WITH THE STATE OF PENNSYLVANIA.

Edition of Dec. 1905