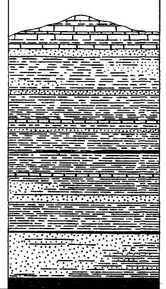
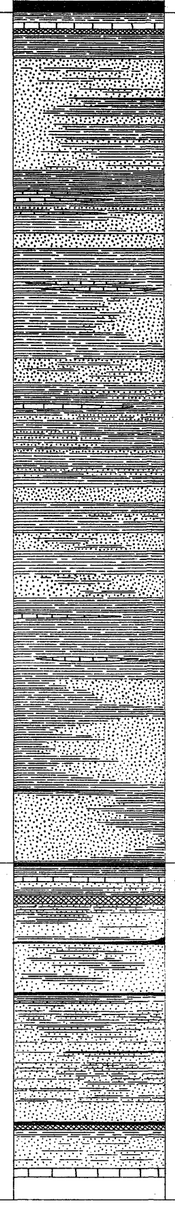
COLUMNAR SECTION

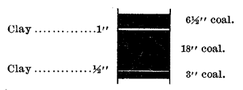
GENERALIZED SECTION FOR THE ELDERS RIDGE QUADRANGLE.
SCALE: 1 INCH=100 FEET.

System.	Series.	Formation Name.	Symbol.	Columnar Section.	Thickness in Feet.	Names of Members.	Character and Distribution of Members.	General Character of Formations.
CARBONIFEROUS	PENNSYLVANIAN	Monongahela formation.	Cm		200±	Benwood limestone.	Blue limestone with calcareous shale beds. Outcrops at the top of a number of hills near Elders Ridge.	The most important coal-bearing formation of southwestern Pennsylvania. Composed chiefly of shales, but contains also thin limestones and locally developed sandstone. Only a portion of the Benwood limestone is present.
						Sewickley coal.	Persistent bed, but too thin and broken by partings to be of value.	
						Redstone coal.	Thin bed, of no value in this quadrangle.	
						Pittsburg sandstone.	Locally developed as massive sandstone. Sometimes represented by sandy shale.	
						Pittsburg coal.	Bed of coal, 6 to 10 feet thick, of great value.	
		Conemaugh formation.	Ccm		650±	Pittsburg limestone.	One to 6 feet of limestone of good quality. Burned into lime for fertilizing purposes.	Chiefly shales of various colors, green, drab, and red the most pronounced, interstratified with beds of coarse sandstone which are fairly persistent, but which occasionally lose their distinctive character. Contains also a few thin beds of limestone and coal.
						Connellsville sandstone.	Variable bed of coarse sandstone 40 to 60 feet below the Pittsburg coal.	
						Morgantown sandstone.	Massive sandstone about 180 feet below the Pittsburg coal.	
						Ames limestone.	Thin and inconspicuous; green, full of crinoid stems and brachiopods.	
						Saltsburg sandstone.	Coarse sandstone, massive in southern part of quadrangle, but often replaced by shale and shaly sandstone in northern part. Outcrops near Ebenezer and Salina.	
						Mahoning sandstone.	Coarse sandstone. Generally present, but occasionally replaced by sandy shale.	
		Allegheny formation.	Ca		240±	Upper Freeport coal.	Exposed in many places. Generally about 4 feet thick.	Sandstone and shale, with several beds of limestone and fire clay and four beds of coal locally of value.
						Bolivar fire clay.	Excellent hard clay, averaging 5 feet thick at Salina, where it is mined.	
						Lower Freeport coal.	Generally present, but thin. It thickens locally north of Kent and is mined at Neal Run.	
						Upper Kittanning coal.	Generally thin, but has been mined at the mouth of Cherry Run.	
						Middle Kittanning coal.	Extremely thin and valueless, sometimes absent.	
						Lower Kittanning coal.	About 3 feet thick, and outcrops on Crooked Creek near Girty.	
						Vanport limestone.	Eight to 10 feet of gray, fossiliferous limestone. Outcrops on Crooked Creek near Girty.	

SECTION OF COAL SEAMS IN ELDERS RIDGE QUADRANGLE AND VICINITY.
SCALE: 1 INCH=5 FEET.

LOWER KITTANNING COAL.

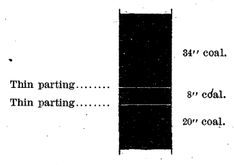
SECTION 1.
GIRTY.



Total, 2′ 5½″.

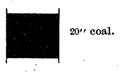
LOWER FREEPORT COAL.

SECTION 2.
NEAL RUN.



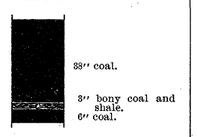
Total, 5′ 2″.

SECTION 3.
REEDS RUN.



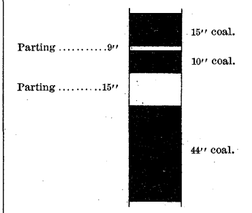
UPPER FREEPORT COAL.

SECTION 4.
COAL RUN.



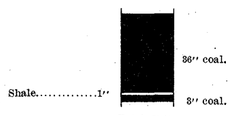
Total, 3′ 11″.

SECTION 5.
GRAY FARM, NEAR LONG RUN.



Total, 7′ 2″.

SECTION 6.
WILKETT, PLUM CREEK.



Total, 3′ 4″.

PITTSBURG COAL.

SECTION 7.
WEST LEBANON.

Total, 7′ 1½″.

SECTION 8.
HARPER RUN, JOHN HART MINE.

Total, 9′ 3″.

SECTION 9.
PITTSBURG GAS COAL COMPANY, HARPER RUN.

Total, 9′.

SECTION 10.
BIG RUN.

Total, 8′.

SECTION 11.
LONG RUN.

Total, 7′ 10″.

SECTION 12.
KISKIMINITAS RIVER.

Total, 6′ 8½″.

RALPH W. STONE,
Geologist.

WELL SECTIONS

SECTIONS OF DEEP WELLS IN THE ELDERS RIDGE QUADRANGLE AND VICINITY.

SCALE: 1 INCH=400 FEET.

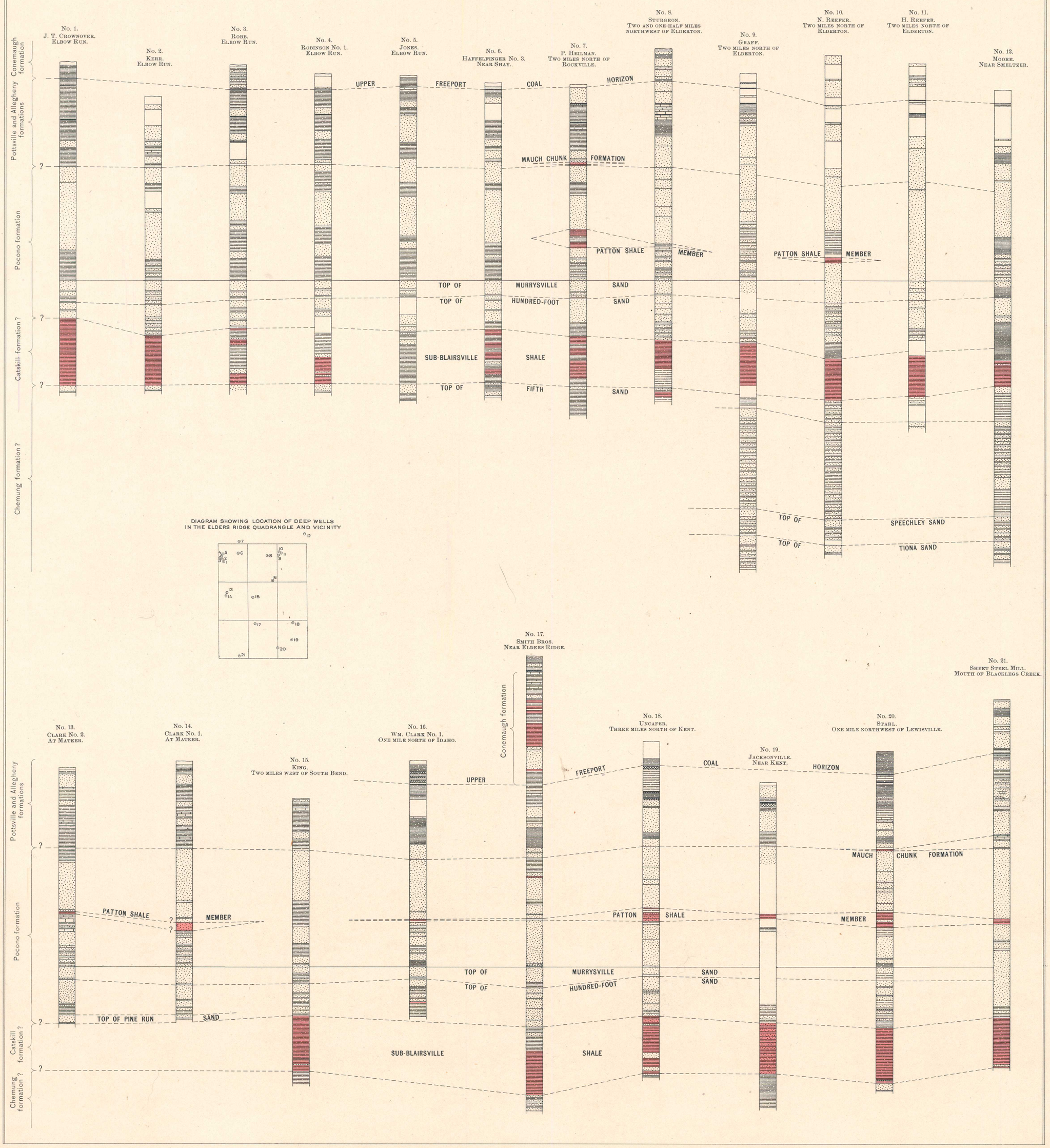


DIAGRAM SHOWING LOCATION OF DEEP WELLS IN THE ELDERS RIDGE QUADRANGLE AND VICINITY

RALPH W. STONE,
Geologist.

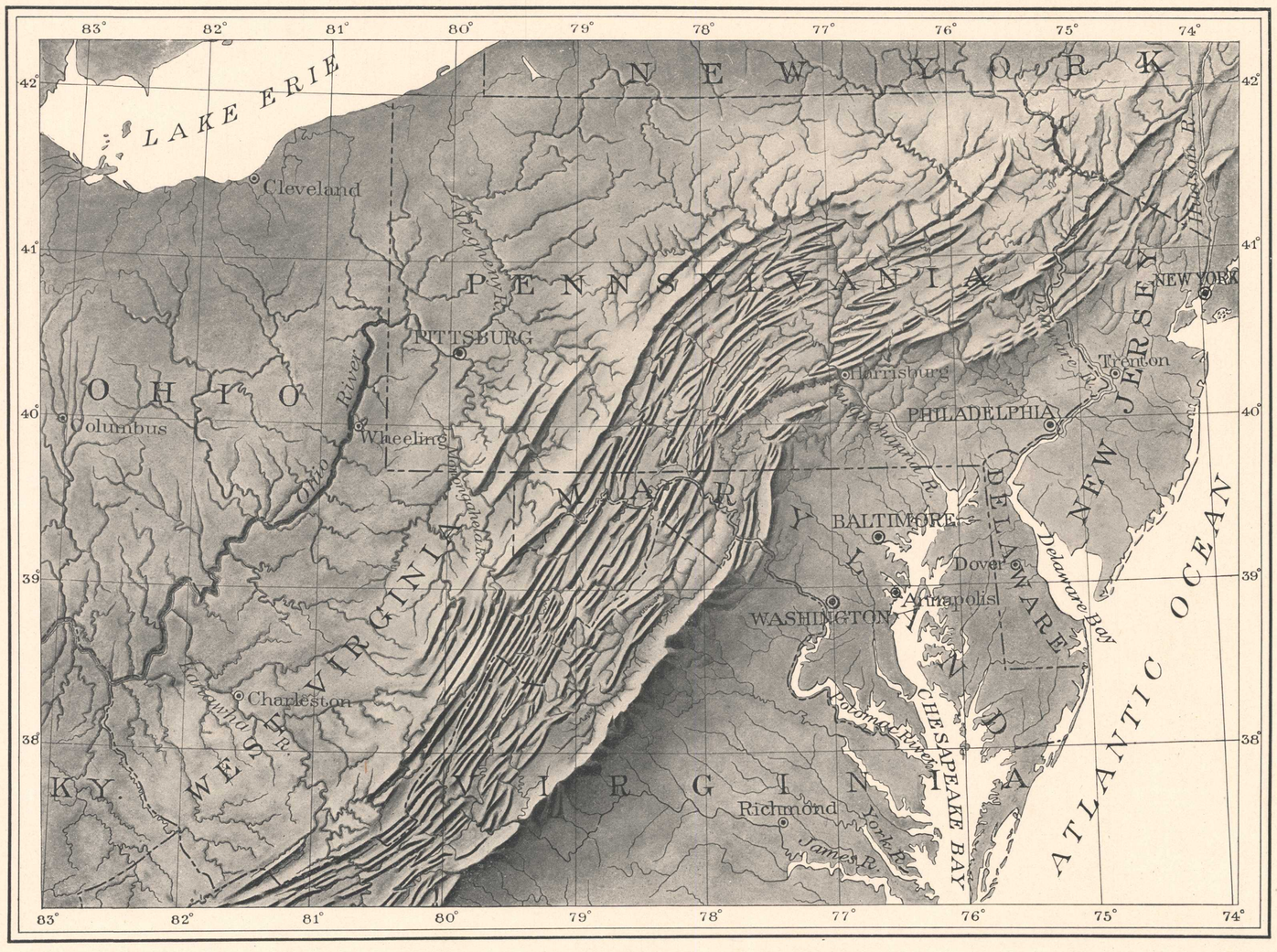


FIG. 3.—RELIEF MAP OF THE NORTHERN APPALACHIAN MOUNTAINS.

The Elders Ridge quadrangle is situated on the plateau west of the belt of valley ridges, in the west-central part of Pennsylvania.

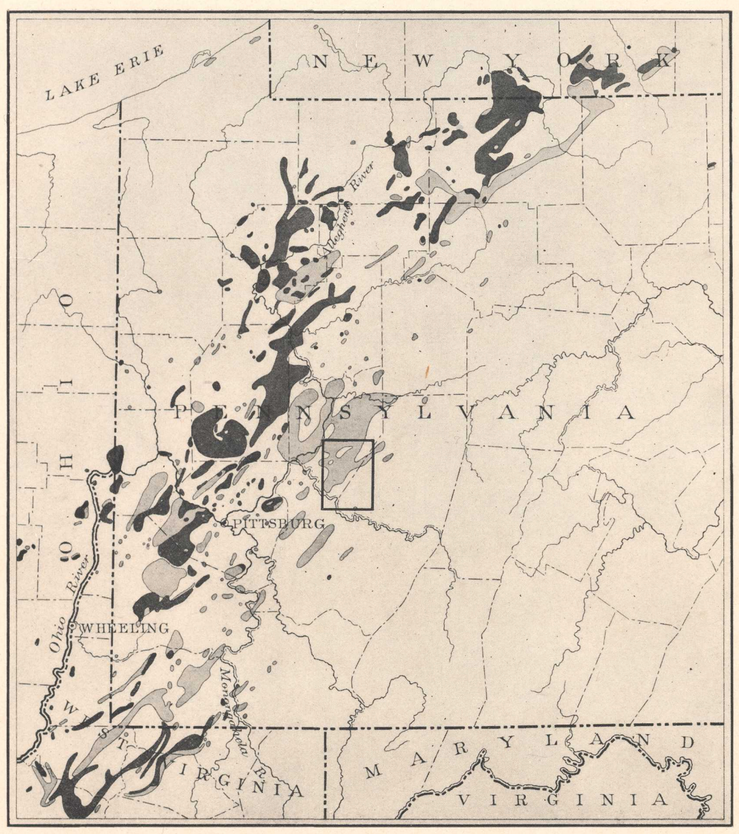


FIG. 4.—MAP SHOWING THE DISTRIBUTION OF THE GAS AND OIL POOLS IN WESTERN PENNSYLVANIA.

Compiled from map by the Second Geological Survey of Pennsylvania, and from maps by the United States Geological Survey. Dark areas, oil; lighter areas, gas. The location of the Elders Ridge quadrangle is shown by the rectangle.

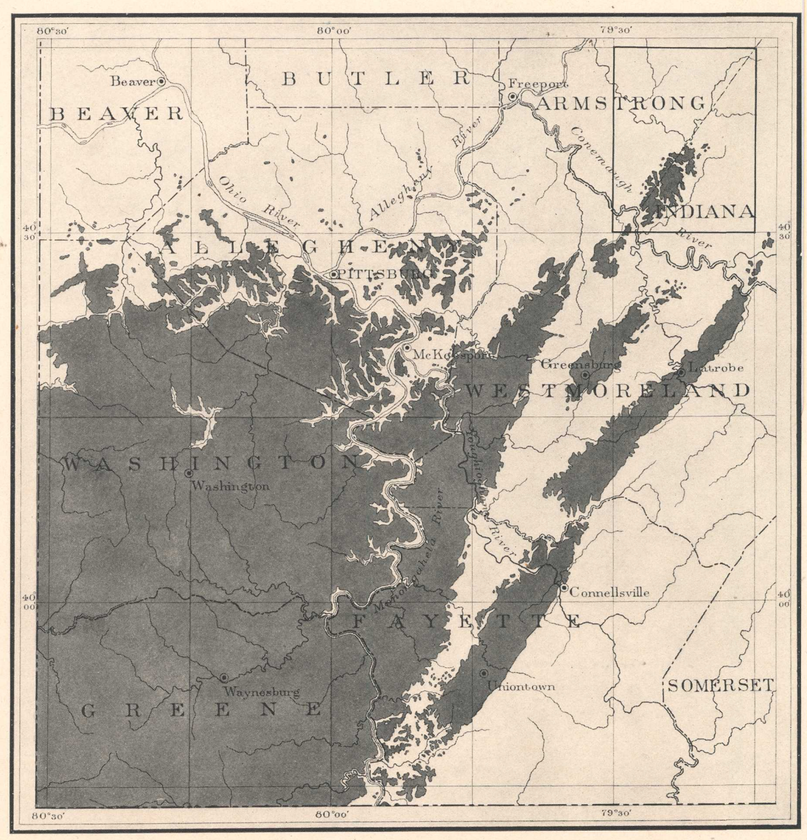


FIG. 5.—MAP SHOWING THE AREA OF THE PITTSBURG COAL IN PENNSYLVANIA.

The Elders Ridge quadrangle is at the northeastern extremity of the field, as indicated by the rectangle.