

# COLUMNAR SECTION

GENERALIZED SECTION OF THE ROCKS EXPOSED IN THE JOHNSTOWN QUADRANGLE.  
SCALE: 1 INCH = 200 FEET.

SYMBOL	SERIES	FORMATION	SYMBOL	COLUMNAR SECTION	THICKNESS IN FEET	MEMBERS	GENERAL CHARACTER OF ROCKS	GENERAL CHARACTER OF TOPOGRAPHY AND SOIL					
C A R B O N I F E R O U S	PENNSYLVANIAN	Conemaugh formation	Ccm		850-960±	Wilmore sandstone.	Shale and heavy sandstones, with a few beds of coal, locally workable, thin limestones, and an occasional bed of red shale. The sandstones are not persistent but are lenticular, being very massive in some localities and pinching out entirely and being replaced by shales in others. The limestones also are lenticular.	Rolling country cut here and there by deep valleys. Surface is generally smooth, free from rock, and in large part cultivated. The sandstone outcrops form uncultivated rocky regions.					
						Summerhill sandstone.							
						Morgantown ("Ebensburg") sandstone. Ames limestone. Harlem (?) coal. Red shale.							
						Saltsburg sandstone. Bakerstown coal.							
						Buffalo sandstone. Gallitzin coal. Upper sandstone. Mahoning coal. Flint clay. } Mahoning sandstone. Lower sandstone.							
A L L E G H E N Y	Allegheny formation.	Ca		220-390	Upper Freeport coal and limestone. Butler sandstone. Lower Freeport coal and limestone.	Chiefly gray and dark shale, with local beds of heavy sandstone. This is the coal bearing formation of the quadrangle and contains at least five coals that are workable in different parts of the area.	Slopes and valleys of the larger rivers and streams. Surface smooth, with few sandstone breaks.						
					Upper Kittanning coal. Johnstown limestone (cement bed). Middle Kittanning coal.								
					Lower Kittanning coal and clay Kittanning sandstone. Brookville and Clarion coals.								
P O T T S V I L L E	Pottsville formation.	Cpv		175-250	Homewood sandstone. Mercer shale. Connoqueeness sandstone.	Characterized by two heavy sandstones, separated by a comparatively thin shale. Contains a valuable bed of flint clay and an unimportant coal.	Ridges and steep valley slopes, with rocky uncultivated surfaces.						
					UNCONFORMITY								
M I S S I S S I P P I A N	Mauch Chunk shale.	Cmc		175-200		Red and green shale, with a 40-foot red and green sandstone member near the middle.	Chiefly stream valleys with smooth surface; red soil, susceptible of cultivation.						
					Pocono formation.			Cpo		1000-1100	Loyalhanna limestone.  Burgoon sandstone.  Patton shale.	Grayish-green sandy shale and sandstone, with several bands of red shale.	Rocky slopes and bottoms of stream gorges where it is exposed.
											D E V O N I A N		