COLUMNAR SECTIONS

GENERALIZED SECTION FOR THE ACCIDENT AND GRANTSVILLE QUADRANGLES.

SCALE: 1 INCH = 500 FEET.

System.	Series.	Formation Name.	Symbol.	Columnar Section.	Thickness in Feet.	Character of Rocks.
CARBONIFEROUS	PERMIAN?	Washington formation (of the Dunkard group).	(Cd)		180	Shale with thin sandstones, local fresh-water limestones, and several small coal beds.
	PENNSYLVANIAN	Monongahela formation.	Cm		240–270	Shale with a few sandstone beds, several fresh-water limestones, and six coal beds.
		Conemaugh formation.	Ccm		570–635	Shale and sandstone, the latter in places conglomeratic; several limestones (fresh-water in the upper part of the formation and marine in the lower part) and many thin coal beds.
		Allegheny formation.	Ca		260–350±	Shale and sandstone with several coal beds.
		Pottsville formation.	Cpv		325–375	Sandstone and conglomerate with some shale, coal, and fire clay.
		UNCONFORMITY				
	MISSISSIPPIAN	Mauch Chunk formation.	Cmc		650	Red and green shale with some sandstone.
		Greenbrier limestone.	Cgr		225	Massive limestone at top; red and green shales with thin limestones in middle; calcareous cross-bedded sandstone (Loyalhanna or "Siliceous" limestone) at base.
		Pocono sandstone.	Cpo		450	Sandstone and conglomerate, with some gray shale, especially near base.
DEVONIAN		Catskill formation.	Dck		1200–2200	Red and green shale and sandstone.
		Jennings formation.	Dj		3500±	Olive-green to brownish-red shale and sandstone, with two thin conglomerates; approximately equivalent to the Chemung formation. Olive-green to gray shale alternating with thin fine-grained micaceous sandstones. Probably not exposed at the surface in these quadrangles. Black fissile shale, representative of the Genesee shale. Not exposed in these quadrangles.

DETAILED SECTION OF THE COAL-BEARING ROCKS OF THE ACCIDENT AND GRANTSVILLE QUADRANGLES.

SCALE: 1 INCH = 100 FEET.

Formation.	Names of Members.	Columnar Section.	Thickness in Feet.	Character of Rocks.
WASHINGTON	Washington coal.		3½	Usually not opened or exposed.
	Waynesburg "A" coal.		1½	Thin and not well known.
MONONGAHELA	Waynesburg coal.		2–6	Persistent and important.
	Waynesburg limestone.		5½	Fresh-water fauna.
	Uniontown coal.		1	Generally thin.
	Sewickley sandstone.		15	
	Upper Sewickley coal.		5½	Gas coal; important.
	Lower Sewickley coal.		2½	Sometimes mined.
	Fishpot limestone.		5½	Fresh-water fauna.
	Redstone coal.		3–7	Persistent, but variable and not mined.
	Pittsburg coal.		9–15	Very persistent; most important coal of region.
CONEMAUGH	Little Pittsburg coal.		2–4	Thin and variable.
	Pittsburg limestone (lower).		3	
	Connellsville sandstone.		50	Massive and persistent.
	Franklin coal.		4–9	Persistent but variable. Not often mined.
	Clarksburg limestone.		6–14	Fresh-water fauna; very persistent.
	Morgantown sandstone.		20–50	Massive; locally conglomeratic.
	Elklick coal.		½–2	Thin and variable.
	Ames limestone.		2	Marine fauna; very characteristic.
	Harlem coal.		2	Thin but regular.
	Maynardier coal.		2–3	Restricted to Castleman Valley.
	Saltsburg sandstone.		30	Massive and regular.
	Bakerstown coal.		2–4	Variable in thickness but persistent; mined at many places.
	Grantsville coal.		2–5	Restricted to Castleman Valley.
				Red shale.
	Upper Cambridge limestone.		1	Marine fauna.
	Buffalo sandstone.		10–40	Massive.
	Lower Cambridge limestone.		1–3	Marine fauna.
	Brush Creek coal.		2	Thin but regular and persistent.
	Mahoning sandstone (upper part).		0–50	Massive but variable in thickness.
	Mahoning coal.		2	Usually thin and variable.
	Mahoning sandstone (lower part).		25–50	Massive and persistent.
ALLEGHENY	Upper Freeport coal.		3–5	Very regular and persistent.
	Bolivar fire clay.		4	Flint clay. Limestone occupies this position at some places.
	Roaring Creek sandstone.		20–30	Massive; locally conglomeratic.
	Lower Freeport coal.		1–8	Variable; absent in some places.
	Lower Freeport sandstone.		25	Massive but variable.
	Upper Kittanning coal.		1–3	Variable and of local occurrence.
	Lower and Middle Kittanning coals.		4–6	Persistent and regular.
	Split-six coal.		2–5	Variable.
	Vanport limestone.		3	Marine fauna in places; fresh-water elsewhere.
	Clarion sandstone.		25–70	Very massive; conglomeratic in many places.
	Clarion coal.		2½	Persistent but not valuable.
	Brookville coal.		1–4	Irregular and of local occurrence.
POTTSVILLE	Homewood sandstone.		30–100	Massive and persistent.
	Mount Savage coal.		2–4	Persistent but irregular.
	Mount Savage fire clay.		5–12	Flint and plastic clays.
	Connoquenessing sandstone (upper part).		75	Massive and conglomeratic.
	Quakertown coal.		1	Thin and irregular.
	Connoquenessing sandstone (lower part).		75	Massive and conglomeratic.
	Sharon coal.		1–2	Thin and irregular.