TENTATIVE CORRELATION OF THE NAMED GEOLOGIC UNITS OF WEST VIRGINIA

Compiled by M. Grace Wilmarth, Secretary of Committee on Geologic Names, United States Geological Survey. April 1, 1929.
(Based chiefly on the later reports of West Virginia Geological Survey.)

West Virginia chart I

1. Southern half of West Virginia

Quaternary — Recent: Alluvium
Quaternary — Pleistocene: Teay fm. 0-60

Carboniferous system — Permian series — Dunkard group — Washington fm.
- Hundred ss.
- Upper Marietta ss. 20-30
- Creston red sh. 20-30
- Lower Marietta ss. 25-30
- Washington coal
- Washington fire clay sh. 2-3
- Washington ss. 0-
- Little Washington coal 0-
- Mannington ss. 30
- Waynesburg A coal 0-
- Waynesburg ss. 40-60
- Cassville plant sh. 1-10

Pennsylvanian (upper part) — Monongahela fm.
- Waynesburg coal
- *** 5-10
- Gilboy ss. 20-40
- *** 10-20
- Uniontown ss
- *** 1-10
- Uniontown coal 0-3
- *** 40-50
- Arnoldsburg ss. 40
- ***
- Sewickley ss. 20-45
- Sewickley coal 0-
- Raymond ls. (Raymond City ls.) 5 In Putnam Co.; lies 180-190 ft. above Pittsburgh coal
- *** 170
- Upper Pittsburgh (Pomeroy) ss. of some repts 25-60
- Redstone coal 0-
- Pittsburgh coal 1-11

Conemaugh fm. 0-600
- fire clay and sh. 5-15
- Lower Pittsburgh ss. 10-50
- Little Pittsburgh coal 2
- *** 1-5
- Little Pittsburgh ls. 1½
- Connellsville ss. 30-50
- *** 1-15
- Little Clarksburg coal 1-2
- Clarksburg ls. 1-2
- *** 10-30
- Morgantown ss. 20-60
- *** 1-15
- Elk Lick coal 0-1½
- *** 15-40
- Elk Lick ls. 1-2
- Birmingham sh. 5-40
- Grafton ss. 10-60
- *** 5-35
- Two-Mile ls. 5 (Ames ls.) — ls. 1'8" to 3'; sh. 6-20'; ls. 1'4" to 2'
- *** 1-10
- Harlem coal 2 (Crinoidal or Friendsville)
- *** 1-10
- Ewing ls. 1-5
- Pittsburgh red sh. 5-100
- Saltsburg ss. 20-40
- *** 1-10
- Bakerstown coal 0-4
- Bakerstown fire clay 2-6
- *** 3-5
- Pine Creek ls. 0-30
- Buffalo ss. 20-80
- Brush Creek ls. and sh. 0-9 ("= Hughes River flint")
- Brush Creek sh.
- Brush Creek coal 0-2
- Elk fire clay 0-10
- Mahoning ss. memb. 30-141:
  - ss. 25-75 ("Upper Mahoning ss." of repts)
  - *** 0-
  - Sutton ls. 0-
  - sh. 0-10
  - ss. ("Middle Mahoning ss." of repts)
  - Mahoning coal 0-
  - Thornton fire clay 0-5
  - ss. ("Lower Mahoning ss." of repts) 25-60
- Uffington sh. 0-10

Continued in column 4

Vertical labels: Carboniferous system; Permian series; Dunkard group; Washington fm.; Pennsylvanian (upper part); Monongahela fm.; Conemaugh fm. 0-600; Charleston ss. (upper part).

2. Northern half of West Virginia

Recent: Alluvium

Dunkard group — Greene fm. 520
- Upper Proctor ss. 30-40
- Middle Proctor ss. 25
- *** 10
- Lower Proctor ss. 10-25
- *** 35-55
- Windy Gap ls. 0-40
- *** 25-30
- Windy Gap coal 0-1 | St. Cloud ss. 15-20; *** 4-5; Windy Gap coal
- *** 0-74
- Gilmore ss. 25-50 ("Fox Rocks," "Pethtle Rocks," "Efaw Rocks")
- fire clay 0-
- Gilmore coal 0-1
- *** 0-10
- Gilmore ls. 0-1
- *** 100-150
- Taylor ss. 20-165 [In some repts is put below Upper Rockport ls. and in some below Lower Rockport ls.] | *** 93; Upper Rockport ls. 0-7; *** 30; Middle Rockport ls. 5; *** 30 (Including Nineveh A coal.); Lower Rockport ls. 5-8; *** 0-15
- *** 40-50
- Nineveh ss. 10-75
- *** 5-20
- Nineveh coal 1
- *** 0-35
- Nineveh ls. 1-20
- *** 20-35
- Burton ss. 20-40
- Hostetter coal 0-2
- *** 15-59
- Fish Creek ss. 11-35
- Fish Creek coal 0-1 | Fish Creek coal; Fish Creek sh. 5-8; ***; Rush Run ss.
- *** 1-40
- Rush Run ss. 10-50
- *** 0-20
- Dunkard coal 0-18"
- *** 30-50
- Jollytown ss. (so-called) 5-60 [True Jollytown ss. of Pa. lies 70 ft. below true Jollytown coal.]
- *** 5-10
- Jollytown coal (so-called) 1-2 [True Jollytown coal of Pa. lies below Upper Washington ls.]
- *** 0-50

Bellton stage 200 to 300

Washington fm. 525

Upper Washington ls. 0-12; *** 25-30; Jollytown coal 1-2; *** 125; Washington A coal 0-5	Upper Washington ls.; *** 0-10; Hundred ss. 20-41; *** 0-5; Hundred coal 0-1; *** 35; Upper Marietta ss. of some repts 20-100; *** 0-15; Washington A coal 0-1	Washington ls.
***; Middle Washington ls. 0-20 / Creston red sh. 40-60	Creston red sh. of some repts 35-60; *** 0-; Middle Marietta ss. 20-30; ***; Creston red sh.; Middle Washington ls. 0-10; Creston red sh. of some repts 40-60	
*** 155; Lower Washington ls. 2-20	Lower Marietta ss. 15-50; *** 0-5; Lower Washington ls. 0-5	
*** 4-45; Washington coal 3-10; Washington ss. 0-18; Little Washington coal 0-1; ss. 18; Waynesburg B coal 0-1; *** 38; Waynesburg A coal 0-4; ls. 1; sh. 5	*** 0-10; Washington coal 4-10; *** 5-10; Washington fire clay sh. 0-10; Bristol ls. 0-4; Washington ss. 0-15; Little Washington coal 0-1; *** 0-5; Mannington ss. 10-60; Waynesburg B coal 0-2; *** 0-30; Waynesburg A coal 0-5; *** 1-5; Mount Morris ls. 0-3; *** 0-20	Washington Stage 180-200
Waynesburg ss. 5-100; Elm Grove ls. 0-10; Cassville plant sh. 0-20		

Monongahela fm. 182-425
- Waynesburg coal 0-9
- *** 0-40
- Gilboy ss. 0-55 ("Browntown" ss)
- Little Waynesburg coal 0-1
- Waynesburg ls. 4
- *** 0-20
- Uniontown ss. 6-60
- Annabelle sh. 0-12
- Uniontown coal 0-3
- *** 0-10
- Ritchie red beds 20
- Uniontown ls. 0-118 ("Great" ls. of some repts.); Fulton sh. 0-19; Benwood ls. 0-60 | Uniontown ls. 0-15; *** 40-50; Arnoldsburg ss. 10-45; Lower Uniontown coal 0-2; *** 5-33; Fulton sh. | "Great" ls. (Also been called Uniontown ls. in some repts.)
- Upper Sewickley coal (?)
- Sewickley ss. 0-75 (Upper Sewickley ss. of some repts) | Tyler red beds *** 18-46
- Sewickley coal 0-10 | Upper Sewickley coal 2-4; *** 12-18; Lower Sewickley coal 0-3 (Rock Creek)
- *** 0-40
- Lower Sewickley ss. 25-40
- Sewickley ls. — ls. 10; sh 12; ls. 18
- sh. 7-40
- Cedarville ss. 25-41
- *** 0-5
- Redstone coal 0-20
- sh. 0-5
- Weston ss. 0-50
- Redstone ls. 0-29
- Weston sh. 0-12
- Pittsburgh ss. 0-70 (Upper Pittsburgh ss. = Pomeroy ss.
- *** 0-20 (including Pittsburgh rider coal 0-2'4")
- Pittsburgh coal 6-20

Conemaugh fm. 72-700
- fire clay 0-5; *** 3-7 | *** 5; Fairfax ls. 2; *** 3; Morantown coal 1-5; *** 35
- Lower Pittsburgh ss. 0-65 ("= Bellaire ss. of Ohio.")
- *** 0-3
- Upper Pittsburgh ls. 0-6
- Upper Little Pittsburgh coal 3½
- *** 30-40
- Lower Little Pittsburgh coal
- Lower Pittsburgh ls. 8-10 ("= Summerfield ls. of Ohio.")
- *** 0-58
- Connellsville ss. 0-50 (Upper Connellsville ss.)
- *** 8½
- Franklin rider coal 0-1
- *** 0-13
- Little Clarksburg coal 0-7
- Clarksburg fire clay sh. 0-6
- Clarksburg ls. 2 (true Clarksburg ls.)
- Clarksburg red sh. 0-70
- Lower Connellsville ss. 25-50
- *** few inches
- Mona ls. 0-30 (Clarksburg ls. of some repts.)
- Normantown coal 0-1
- Clarksburg red sh. 23-50
- ss. 10 (Lower Connellsville ss. of some repts.)
- *** few ft. to 70
- (Clarksburg red sh. 25-40)
- Morgantown ss. 20-100
- *** 10-30
- Orlando ls. 0-10 ("May = Wellersburg ls. of Md.") (Nonmarine.)
- *** 0-3½
- Elk Lick coal 0-6
- *** few ft. to 45
- Elk Lick ls. 0-15
- West Milford coal 0-1
- Birmingham sh. 1-50
- Often replaces Birmingham sh. almost entirely
- Grafton ss. 10-56
- *** 0-30
- Ames ls. 0-12 (Marine.) | Upper Ames ls. 0-1; Ames sh. 10-15; Lower Ames ls. 0-5 | Two-Mile lss. 9'
- *** 0-10
- Crinoidal coal 0-2½ (Harlem)
- *** 0-10
- Ewing ls. 0-8½
- Pittsburgh red sh. 30-140 ("= Round Knob of Ohio") | red sh. 10-60; Jane Lew ss. 0-40; red sh. 5-42
- Saltsburg ss. 15-57
- *** 0-8'3"
- Portersville ls. and sh. 0-2'4"
- *** 0-2
- Bakerstown coal 0-5 (Anderson)
- *** 3-4
- Cambridge red bed 10'2"
- ***
- Cambridge ls. and sh. 3-30 (Upper Cambridge; Pine Creek. Marine.)
- fire clay 0-6'4"
- sh. 0-40
- Buffalo ss. 0-90
- Brush Creek ls. 0-5 (Lower Cambridge). (Marine.)
- Mason sh. 3-58 (Brush Creek sh)
- Brush Creek coal 0-4 (Mason coal)
- Brush Creek fi
- Irondale ls. and ore 0-2
- Hughes River flint 5-15
- Mahoning ss. memb. 60-190:
  - ss. 0-90 ("Upper Mahoning ss.")
  - Irondale ls. 0-2
  - Mahoning red beds 11
  - *** 20
  - Mahoning coal 0-4'3"
  - Thornton fire clay 0-15 (Mahoning fire clay)
  - Mahoning ls. 13
  - Mahoning red beds 13
  - ss. 15-85± ("Lower Mahoning ss.")
  - *** 0-24; Sutton ls. 0-3; *** 0-15; "Middle Mahoning ss." 0-110; *** 7; Mahoning coal 0-2; *** 7-
- Uffington sh. memb. 0-40

Continued in column 5.

Vertical labels: Greene fm. 520; Washington fm. 525; Monongahela fm. 182-425; formation 800; Conemaugh fm. 72-700; Braxton formation; Charleston ss. (upper part); Upshur ss. 350 to 500 (upper part); Charleston ss. (upper part) 420 (all) (?).

3. Northeastern West Virginia

- Alluvium
- Absent
- Absent
- Absent

Monongahela fm. 0-268
- Sewickley ss. 30-40
- *** 1-4
- Sewickley coal 4-6
- *** 0-5
- Sewickley ls. 0-2
- *** 40
- Cedarville ss. 2-10
- Redstone coal 2-4
- *** 12
- Pittsburgh ss. 5-36 (Upper
- *** 0-18
- Pittsburgh rider coal 0-3
- *** 0-5'3"
- Pittsburgh coal 10-20 (Elk Garden coal)

Conemaugh fm. 550 to 838
- fire clay and sh. 2-5
- Fairfax ls. 0-2
- sh. 3-8
- Morantown coal 1-5
- *** 35
- Lower Pittsburgh ss. 10-20
- *** 4 (horizon of Upper Pittsburgh ls.)
- Little Pittsburgh coal 6
- Lower Pittsburgh ls.
- Connellsville ss. 10-30 (Upper Connellsville ss. of some repts.)
- *** 8½
- Franklin rider coal 0-1
- *** 0-13
- Little Clarksburg coal 0-7 (Franklin; "Dirty Nine-foot")
- red sh. 2-4
- Lower Connellsville ss. 25-50 "Probably = Hoffman ss. of Md."
- *** few inches
- Clarksburg ls. of some repts 0-30 (Mona ls.)
- Normantown coal 0-1 (Upper Hoffman of Md.)
- red sh. 23-24
- Middle Hoffman coal 2
- *** 8
- Hoffman ls. 2
- ***
- Lower Hoffman coal 0-1
- *** 9
- Upper Clarysville coal 0-1
- *** 14-20
- Lower Clarysville coal 0-1
- *** 40
- (Clarysville ss 66-) (Clarksburg red sh.)
- Morgantown ss. 20-40
- sh. 0-4
- Wellersburg rider coal 0-1
- sh. 9
- Wellersburg coal 0-1
- sh. 4
- Barton rider coal 0-1
- Barton ss. 0-30
- sh. 0-6
- Elk Lick coal 1-4 (Barton, "4-foot" of Md.)
- sh. few ft.
- Birmingham sh. 20-67 [Corresponds to Birmingham sh. memb. and underlying "Washington Reds" of Pa.] | sh. 39 (variegated); Upper Grafton ss. 10-38; Federal Hill coal 0-1; sh. 9 (variegated); Duquesne coal 0-1; sh. 10 (variegated)
- Grafton ss. 4-60
- Ames ls. 8-20
- Harlem coal ½-2
- sh. 10
- Ewing ls. 0-6
- Pittsburgh red sh. | red sh. 20-30; Jane Lew ss. 10-50; red sh. 20-37
- Saltsburg ss. 10-50 ("= true Thomas ss. at Thomas, Md.")
- sh. 0-10
- Upper Bakerstown coal 1-5
- sh. 10-25
- ss. 10-20 ("Erroneously called Thomas ss. and = Thomas ss. as defined in Md. Better been called Lower Saltsburg ss.")
- sh. 0-5
- Bakerstown (Thomas) coal 3-8
- sh. 0-5
- Albright ls. 0-6 = Thomas ls. of Md. as defined
- sh. 5-20
- Pine Creek ls. 0-3 ("= Cambridge ls. of Md. Surv.")
- Meyersdale red sh. 3-10
- Buffalo ss. 5-45
- Brush Creek sh. and ls. 5-32
- Brush Creek coal 0-2
- Mahoning ss. memb.:
  - ss. 5-65
  - Sutton ls. 0-3
  - Mahoning red sh. 0-5
  - dark sh. 0-5½
  - Mahoning coal 0-6 ("Probably = Piedmont coal of Md.")
  - Thornton fire clay or sandy sh. 5-20
  - Mahoning ls.
  - ss. 5-60
  - *** (short distance); Irondale ls. 0-2; Corinth ss.; ***
- Uffington sh. memb. 5-30

Continued in column 6.

Vertical labels: Monongahela fm. 0-268; Braxton formation 750±; Elk River series; Conemaugh fm. 550 to 838; "Elk Garden" fm. 280; Fairfax fm. 300±; Bayard formation 400-475.

4. Southern half of West Virginia — Continued

Carboniferous — Pennsylvanian — Pottsville series (lower part) 1850 to 3270 — Allegheny fm. 0-350
- Upper Freeport coal 0-
- Bolivar fire clay of some repts. 0-6
- Upper Freeport ls. and iron ore 0-7
- Bolivar fire clay 0-6
- Upper Freeport ss. 18-83
- *** 0-65
- Lower Freeport coal 0-8
- Lower Freeport fire clay and sh. 5-15 | Ruffner fire clay 5-7
- Lower Freeport ls. and iron ore 10-15
- Lower Freeport ss. 20-56 ("= Lower Freeport ss. of Freeport, Pa.", Reger, 1919)
- Upper Kittanning rider coal 0-3
- *** 0-30
- Upper Kittanning coal 0-6 (North Coalburg coal)
- Upper Kittanning fire clay 0-10
- *** 0-10
- Upper East Lynn ss. 5-90 (East Lynn ss. as originally defined, 50-100)
- sh. 0-32
- Middle Kittanning coal 0-16 (so-called No. 5 Block coal, but Reger (1921) says Lower Kittanning is No. 5 Block)
- *** 0-
- East Lynn ss. of Hennen and others 0-90
- *** 0-10
- Lower Kittanning coal 2-10 (Roaring Creek; No. 5 Block coal)
- Lower Kittanning fire clay 0-5
- *** 60-75
- Vanport ls. 0-5
- Kittanning ss. 0-40
- Clarion coal 0-5
- *** 0-
- Brookville coal 0-
- fire clay 0-

Kanawha formation 25-2100
- Homewood ss. memb. 25-175 ("Roaring Creek" ss. memb.; "Falls ss."; "Kanawha Falls rock")
- Stockton A coal 0-5 (Upper Mercer)
- *** 0-75 (Lower Homewood ss.)
- Kanawha black flint 0-10 (= ? Mercer ls. of Pa., Price, 1919)
- Stockton sh. 0-50
- Stockton coal 0-10 (Lower Mercer; Lewiston; Belmont)
- *** 0-50
- Upper Coalburg ss. 10-100 (= Coalburg ss. of I.C. White, 1908)
- *** 0-15
- Coalburg A coal 0-1
- Coalburg sh. 0-5 (black, marine)
- Coalburg coal 0-10
- Quakertown sl. or sh. 0-20
- Little Coalburg coal 0-3
- *** 0-22
- Lower Coalburg ss. 0-50
- *** 5-
- Buffalo Creek coal 0-6
- *** 35-80
- Buffalo Creek ls. 0-2
- Upper Winifrede ss. 10-100
- *** 0-5
- Winifrede coal 0-12
- *** 0-50
- Lower Winifrede coal 0-2
- Lower Winifrede ss. 10-60
- *** 0-
- Chilton A coal 0-7
- *** 0-10
- Winifrede ls. 0-10
- Upper Chilton ss. 5-85 (Chilton ss. of I.C. White, 1908)
- Chilton rider coal 0-4
- *** 0-20
- Chilton coal 0-11 | *** 5-10; Indian Gap ls. 1-2; *** 20; Chilton coal
- *** 0-5
- Lower Chilton ss. 0-70
- Little Chilton coal 0-2
- Hernshaw ss. 0-50
- *** 0-15
- Hernshaw coal 0-8
- *** 0-10
- Naugatuck ss. 10-40
- *** 0-3
- Dingess coal 0-4
- *** 0-5
- Williamson ss. 0-50
- *** 0-30
- Dingess ls. 0-6
- Dingess sh. 0-30
- Dingess ss. 0-30
- *** 0-1
- Williamson coal 0-8 | *** 15-25 | Thacker coal of some repts 2½-3½
- *** 1-25
- Upper Cedar Grove ss. 0-90 | Seth ls. 0-3 | ***; Malden ss. of Krebs (1914) 60
- *** 20-50
- Cedar Grove rider coal 0-5 | *** 0-2 | *** 5-10
- *** 0-20
- Malden ss. as originally defined by I.C. White 200-350
- Cedar Grove coal 0-5 (= Upper Thacker of Mingo Co.[?])
- *** 0-10
- Middle Cedar Grove ss. 0-60
- *** 0-8
- Lower Cedar Grove coal 0-9 (Lower Thacker coal of some repts)
- *** 0-10±
- Thacker coal 0-3½
- Peerless ss. (typical) 20-70 ("Lower Cedar Grove" ss.)
- Alma A coal 0-10
- *** 0-9
- Alma coal 0-5 = Draper coal
- *** 0-5
- Monitor ss. 0-85 ("Logan" ss.)
- *** 0-10
- Little Alma coal 0-3
- Lower Monitor ss. 0-29 (Malden ss. of Hennen, 1914, and Krebs, 1915; and = so-called Peerless ss. of some repts.)
- *** 0-5
- Campbell Creek ls. 0-2
- *** 0-40
- Peerless ss. as originally defined 80-150
- Campbell Creek coal (upper bench = Peerless; "Freeburn"; "Burnwell"; "Upper War Eagle"; lower bench, 0-45' lower, = No. 2 Gas)
- *** 1-10
- Lower Malden ss. 0-30 (Lower Campbell Creek ss.; Lower Peerless ss.)
- *** 1-5
- Lower Campbell Creek coal 1-3
- *** 0-10
- Brownstown ss. 10-93
- Powellton A coal 0-2
- *** 0-40
- Powellton (Brownstown) coal 0-5
- *** 0-20
- Stockton ls. 0-4 (Cannelton ls.) | Stockton sl. 5-15; *** 0-2 | Cannelton sh. 15-34; *** 0-2
- *** 0-34
- Bald Knob sh. 0-8
- *** 0-3
- Matewan coal 0-9 (= Clintwood coal)
- *** 5
- Matewan ss. 0-60
- Eagle A coal 0-2
- Eagle ss. 2-60
- Newlon ls. and sh. 0-25 (Nonmarine.)
- Eagle coal 1-15 ("Middle War Eagle"; Mohawk)
- fire clay 0-5
- Bens Creek ss. 0-34
- *** 5-10
- Bens Creek coal 0-4
- *** 0-10
- Decota ss. 0-63
- *** 0-10
- Little Eagle coal 0-4
- *** 0-81
- Cedar coal 0-4
- Grapevine ss. 0-40
- Eagle sh. 6-24 (Also called Eagle sl.)
- Eagle ls. 0-3 ("Black Marble")
- Eagle sh. 5-25 (Also called Eagle sl.)
- Little Cedar coal 0-1
- *** 0-20
- Lower War Eagle ss. 5-55
- *** 0-14
- Lower War Eagle coal 0-12
- *** 1-10
- Upper Gilbert ss. 0-100
- *** few ft.
- Oceana ls. 0-2
- *** 5-35
- Glenalum Tunnel coal 0-15
- Lower Gilbert ss. 15-100
- Gilbert A coal 0-1
- Dorothy ls. and sh. 0-2 "= 'Marsh Fork' and probably lies at horizon of Gilbert sh."
- Gilbert sh. 0-40
- Gilbert coal 0-5 (Lower Banner)
- *** 0-19
- Dotson ss. 20-125 (typical Dotson and = typical Bearwallow cgl.)
- *** 10-24
- Douglas A coal 0-1
- *** 0-50
- Douglas coal 0-5 ("Kidd")
- *** 0-10
- Lower Dotson ss. 0-100 (= McClure ss. memb. of Norton fm. of Wise and Scott counties, Va.; called Lower Nuttall ss. in Wyoming-McDowell rept.)
- Douglas sh. 0-15
- Lower Douglas coal 0-5
- *** 0-15

New River fm. 57-1050
- Upper Nuttall ss. 20-105 (= Panther ss. or cgl.) | "Fayette ss." | Wharncliffe ss. 75-130
- *** 0-10
- Sh. (and Iaeger B coal, 0-3), 0-85
- Lower Nuttall ss. 25-110 (= Upper Iaeger ss.)
- *** 0-70
- Iaeger A coal 0-1½
- Upper Iaeger sh. 0-85
- Iaeger coal 0-5 (Hughes Ferry; Jawbone)
- *** 0-25
- Middle Iaeger ss. 0-40
- *** 0-3
- Lower Iaeger coal 0-2
- fire clay and sh. 0-5
- Lower Iaeger ss. 0-30
- Lower Iaeger sh. 0-40
- [As defined lies 5 to 10 ft. below Gilbert coal, but is said to be top memb. of "Middle Pottsville or New River series".]
- Harvey cgl. lentil 10-125 = Dismal cgl. lentil (?) 100-200
- *** 0-42
- Sandy Huff sh. 0-70
- Castle coal 0-3
- *** 0-3
- Guyandot ss. lentil 0-100
- *** 0-45
- Sewell B coal 0-10 | Skelt sh. 0-7 (Greasy Creek coal)
- *** 0-2
- Sewell A coal 0-1
- Lower Guyandot ss. 0-70 | *** 38
- Hartridge black sh. 0-33 (Nonmarine.)
- Sewell (Nuttall) coal 0-10 (= Sharon of Pa., Reger, 1919; = Davy coal; Lower Seaboard)
- *** 0-40
- Welch ss. 0-70
- *** 0-8
- Welch coal 0-5 (Upper Horsepen coal)
- *** 0-60
- Upper Raleigh ss. 10-137 (Sharon) | Upper Piney Creek cgl. of D. White (1894) according to I.C. White (1903) | Raleigh ss. 40-226
- Little Raleigh A coal 0-3
- *** 0-25
- Little Raleigh coal 0-4
- Lower Raleigh ss. 0-117
- *** 0-22
- Beckley rider coal 0-3
- *** 0-20
- Beckley coal 0-10 (War Creek coal)
- *** 0-5
- Quinnimont ss. 0-100 | Quinnimont sss. and shales of I.C. White, 1908
- Quinnimont sh. 0-75±
- Fire Creek ("Quinnimont") coal 0-8
- *** 0-40
- Little Fire Creek coal 0-2
- Pineville ss. 0 to nearly 100
- *** 0-8
- No. 9 Pocahontas coal 0-5
- *** 0-28
- No. 8 Pocahontas coal 0-2
- I.C. White in 1908 put these below Flattop Mountain ss., but later repts place them above Flattop M. ss.

Pocahontas group of I.C. White 0-720
- Flattop Mountain ss. 17-50
- Rift sh. 0-80
- No. 7 Pocahontas coal 0-6
- *** 0-17
- Pierpont ss. 10-80
- *** 0-40
- Royal sh. 0-25
- No. 6 Pocahontas coal 0-5
- *** 0-5
- Eckman ss. 0-106
- No. 5 Pocahontas coal 0-5
- *** 0-20
- No. 4 Pocahontas coal 0-8
- *** 0-5
- Upper Pocahontas ss. 25-75
- No. 3 Pocahontas rider coal 0-2
- *** 0-10
- No. 3 Pocahontas coal 0-15
- *** 0-10
- Lower Pocahontas ss. 0-50
- No. 2A Pocahontas coal 0-2
- *** 0-8
- No. 2 Pocahontas coal 0-3
- *** 0-5
- Vivian ss. 0-35
- No. 1 Pocahontas coal 0-1
- Landgraff ss. 0-25
- Landgraff coal 0-1
- Keystone ss. 0-30
- *** 0 to few ft.
- Keystone coal 0-1
- *** 0-15
- North Fork sh. 0-55
- *** 0-10
- Simmons coal 0-1
- *** 0-122
- Squire Jim coal 0-2
- *** 0-50
- Pocahontas sss. of I.C. White

Vertical labels: Charleston ss. (lower part) — 320 to; Kanawha fm. of U.S. Geological Survey folios and some other reports; Tellowa fm. 500; Seguoyah fm. 450; Dotson ss., some areas; Dotson ss. of some areas; Dismal fm. of some areas 490; Sewell fm. 280-650; Sewell fm. as originally defined; Nuttall ss. memb. 180-220; Quinnimont sh. 180-300; Welch fm. 700; Clark fm. 430-440; Thurmond fm. 450-725; Royal fm. 960-1020; Pocahontas fm. as originally defined by M.R. Campbell 360.

Mississippian
- Mauch Chunk group (or "series") 0-2500
- Greenbrier ls. 160-1225 | Greenbrier "series"
- Pocono ss. 190-600
- For the numerous subdivisions see chart II.
- Bluestone fm. (Blue-stone fm.) / Bluestone fm. (or "group") 800±
- Princeton cgl. 0-80
- Hinton fm. 1050-1100
- Bluefield sh. 1250-1350

Pre-Carboniferous names on chart II.

5. Northern half of West Virginia — Continued

Allegheny fm. 0-600±
- Freeport group:
  - Upper Freeport coal 0-15
  - Bolivar fire clay of many W.Va. repts. 0-25
  - Upper Freeport ls. 0-14½
  - Bolivar fire clay 0-15 = Bolivar fire clay of Pa.
  - Upper Freeport ss. 15-75
  - *** 0-4±
  - Lower Freeport coal 0-10
  - Lower Freeport ls. of some repts. 2-6
  - Lower Freeport fire clay 0-13
  - Lower Freeport ls. of some repts 0-6
  - Freeport ss. 25-100 (Lower Freeport ss.)
  - Upper Kittanning rider coal 0-3
  - *** 0-26
- Kittanning group:
  - Upper Kittanning coal 0-5
  - Upper Kittanning fire clay 0-5 | Piney Mtn coal; fire clay; Westernport ss. 40
  - Johnstown cement ls. 0-4
  - Hardman fire clay 0-9
  - Upper East Lynn ss. 0-97
  - *** 0-9
  - Middle Kittanning coal 0-8 (Darlington) | Luke coal
  - fire clay and sh. 2-12
  - East Lynn ss. 13-70
  - *** 12
  - Lower Kittanning coal 0-9'6" (No. 5 Block)
  - Lower Kittanning fire clay 0-15
  - Lower Kittanning ss. 29-80 (Kittanning ss.)
- Clarion group:
  - Vanport ls. 0-1½ (Ferriferous ls.)
  - Clarion ss. 0-36
  - *** 0-
  - Clarion coal 0-3
  - Clarion clay
  - ***
  - Brookville coal 8
  - Clarion coal of some repts 9'1"
  - *** 1½-11 (Clarion clay of some repts, 8-15)

Kanawha fm. 500-900
- Homewood ss. 10-125
- *** 20-68 | Mount Savage fire clay; Mount Savage coal; ***
- Upper Mercer coal 0-10 (Stockton A)
- *** 0-85
- Kanawha black flint 0-5. Marine.
- Stockton coal 0-10 (Lower Mercer; Lewiston)
- *** 0-29
- Upper Coalburg ss. 0-100 (Upper Connoquenessing ss.)
- *** | Quakertown rider coal 0-1; *** 0-7; Quakertown black sl. 0-4; Quakertown coal 0-2 (Coalburg ? or Winifrede ?); *** 0-10
- Coalburg coal 1-15 (Quakertown ?)
- *** 0-12
- Little Coalburg coal 0-3
- Lower Coalburg ss. 20-98
- *** 0-
- Upper Winifrede ss. 20-65
- Winifrede coal 0-5
- Lower Winifrede ss. 30-75 (Lower Connoquenessing ss.) [?]
- Chilton A coal 0-5
- ***
- Winifrede ls. 0-10
- Upper Chilton ss. 0-25 (= ? Cleveland ss. 45-55)
- Chilton coal 0-7
- *** 2
- Lower Chilton ss. 0-50
- Hernshaw ss. 25-30
- Hernshaw coal 0-1
- *** 15-20
- Holly coal 0-5 (= ? Williamson coal 0-5'7½")
- *** 0-1½
- Upper Cedar Grove ss. 0-46
- *** 0-5
- Cedar Grove coal 0-5 (= Marpleton ? coal, 0-3)
- Middle Cedar Grove ss. 4
- *** 7
- Lower Cedar Grove coal 1½
- Peerless ss. 6-65 ("Lower Cedar Grove" ss.)
- *** 0-
- Alma A coal
- ***
- Alma coal 0-3
- *** 0-5
- Monitor ss. 0-30
- Little Alma coal
- *** 0-35
- ss. 25 (called Peerless in some repts.)
- *** 0-30
- Campbell Creek coal 2-6 (Marpleton; Peerless)
- fire clay 6
- Campbell Creek coal 2± (No. 2 Gas)
- *** 10-20
- Brownstown ss. 10-65
- ***
- Powellton coal 0-4
- Stockton ls. 0-
- *** 30-45
- Eagle ss. 12-50
- Newlon sh. and ls. 0-25
- Eagle coal 0-4
- *** 0-5
- Decota ss. 10-50
- Little Eagle coal 0-2'3½"
- Cedar coal 1
- Grapevine (?) ss. 20
- Eagle sh. and ls. 10-38
- Little Cedar coal 0-1½
- Lower War Eagle coal
- ***
- Upper Gilbert ss. 5-35
- *** 0-
- Lower Gilbert ss. 0-35
- Gilbert sh. 0-35
- Gilbert coal 2½-10
- ***
- Lower Douglas coal 0-

New River fm. 200-450
- Upper Nuttall ss. 40-65
- *** 5-100
- Lower Nuttall ss. 15-100
- *** 1-
- Hughes Ferry coal 0-5
- *** 5-10
- Middle Iaeger ss. 15-25
- ***
- Lower Iaeger coal 0-2
- *** 5-10
- Harvey ss. 20-40
- ***
- Castle coal 0-2½
- *** 0-10
- Guyandot ss. 25-50
- Skelt sh. 0-28
- Sewell B coal 0-2
- *** 0-10
- Lower Guyandot ss. 10-65
- Hartridge black sh. 3-20
- Sewell coal 0-5'2" ("= Sharon coal of Pa.")
- *** 5-15
- Welch ss. 10-50
- Welch coal 0-3
- *** 10-35
- Upper Raleigh ss. 20-100 (= Sharon cgl.; = Rich Mountain cgl.)
- *** 0-
- Fire Creek coal 0-5
- Pineville ss. 0-20

Absent

Vertical labels: Upshur ss. 350-500 (lower part); Charleston ss. (lower part) — 175-400± in all; Pottsville formation 300-450; Kanawha formation; Pickens ss. 400-500.

Mississippian
- Mauch Chunk sh. ✓ 40-2000
- "Greenbrier" sh. (Also called "Canaan fm.") 600-700
- "Greenbrier series" of some repts; and "Greenbrier group" of some repts.
- Greenbrier ls. ✓ 15-800 ("Mountain" ls.; "Lewisburg" ls.)
- Pocono ss. 50-1200

6. Northeastern West Virginia — Continued

Allegheny fm. 100-268
- Upper Freeport (Davis) coal 4-8
- sh. and Bolivar fire clay of many repts 0-7'7"
- Upper Freeport ls. 0-12
- Upper Freeport ss. 10-40
- Lower Freeport coal 0-2
- Lower Freeport ls. 2-6
- Lower Freeport fire clay 0-7
- Lower Freeport ss. 5-50 | Montell ss.
- Upper Kittanning coal 0-3
- Upper Kittanning fire clay 5
- Johnstown ls. 0-5
- Hardman fire clay 6
- Upper East Lynn ss. 0-8
- Middle Kittanning coal 0-1
- East Lynn ss. 5-30
- Lower Kittanning coal 1-4+ | coal and sh. 2'9"; Canaan Mountain fire clay 5; coal and sl. 3
- Lower Kittanning fire clay 0-10
- ***
- Vanport ls. 0-5
- Kittanning ss. 0-35 (Clarion ss. of some repts)
- Clarion coal 0-1
- Sh. 5-10 (horizon of Clarion fire clay)

Kanawha formation 250-385
- Homewood ss. 50-125 (= Mount Savage ss.; = "Piedmont" ss.)
- Tionesta coal 1-2
- Hammond fire clay 1-4 || Mount Savage fire clay 5-13
- Upper Mercer coal 1-5 (Stockton A)
- sh. 10-25 (horizon of Kanawha black flint of southern Va.)
- Lower Mercer coal 0-1'2½" (Stockton)
- sh. 8
- Upper Connoquenessing ss. 65-140 (= Sampson Rock cgl. of Md.)
- *** 40
- Quakertown rider coal 0-1
- Quakertown black sh. 2-14
- Quakertown coal 0-2 (Coalburg ? or Winifrede ?)
- *** 5-20
- Winifrede ls. 0-20
- sh. 0-50
- Blackwater sh. and ls. 0-15 (Dingess ls. ?)
- sh. 0-20
- Lower Connoquenessing ss. 25-50 ("= Upper Gilbert ss. of Barbour, Upshur, and west part of Randolph Co., and same as Lower Gilbert ss. of southern W. Va.")
- Gilbert sh. 0-35
- Gilbert coal 1-2
- *** 5-0

New River fm. 200-300
- Upper and Lower Nuttall sss. (?) 50-185
- Upper Iaeger sh. 0-24
- Hughes Ferry coal ½-2
- Lower Iaeger sh.; ***; Sandy Huff sh.; Castle coal 0-1 } 10-30
- Guyandot ss. 10; Skelt sh. 0-28; Sewell B coal 0-; ***; Lower Guyandot ss. } 25-50
- Hartridge black sh. 4-20
- Sewell coal 1-5 (Sharon coal)
- sh. 4
- Welch ss. 0-35
- Welch coal 0-1
- Sharon ss. 25-70 (Upper Raleigh)
- *** 0-
- Fire Creek coal 0-5
- *** 0-
- Pineville ss. 0-20

Absent

Vertical labels: Savage fm. 130-160; Pottsville formation 260-645; Blackwater formation; Beaver River fm. of Pa. extends from top of Homewood ss. to base of Sharon cgl. member.

Mississippian
- Mauch Chunk sh. ✓ 300-985
- "Canaan fm." 550-750
- Greenbrier ls. ✓ 100-450
- Pocono ss. ✓ 75-1150 (Also called Pocono "Series") (chiefly sss. and cgls.; some sh.)
- Pinkerton ss. 0-; Myers sh. 0-; Hedges sh. 0-; Purslane ss.; Rockwell fm.
- Montgomery grits and coal measures
- "Montgomery buhr" ***