

APPENDIX D. (Page 196, Vol. I.)

ON THE NOMENCLATURE OF THE PALÆOZOIC FORMATIONS INTRODUCED BY WILLIAM B. AND HENRY D. ROGERS.

SIXTY years ago, when the Geological Surveys of Virginia and Pennsylvania were first organized, the true correlation or equivalence of the Palæozoic terranes of the Eastern United States was only very imperfectly known, and a great diversity of nomenclature was the inevitable result. The young geologists of Virginia and Pennsylvania, the brothers William B. and Henry D. Rogers, in order to avoid the use of names which implied precise correspondence, not yet established, with European or other formations, adopted a system of their own, consisting of numbers. Later they proposed names to correspond with these numbers, the whole period being conceived of as a kind of geological day, and the terms applied varying accordingly, from the earliest formations upwards; viz.: No. 1, *Primal*; No. 2, *Auro-ral*; No. 3, *Matinal*; No. 4, *Levant*; No. 5, *Scalent*; No. 6, *Pre-meridian*; No. 7, *Meridian*; No. 8, *Cadent*; No. 9, *Ponent*; No. 10, *Vespertine*; No. 11, *Umbral*; No. 12, *Seral*.

Some of these names still survive in common use, and it is interesting to note that the Rogers system of numbers was retained in the Second Survey of Pennsylvania made by Professor Lesley, while the United States Geological Survey has recently adopted these numbers for the folios or final reports of the Appalachian region.¹ The equivalents of the Rogers numbers and names are shown in the following table, which is slightly modified, in the first and second columns only, from the tables in Macfarlane's Geological Railway Guide, prepared for Virginia by William B. Rogers:—

¹ See, also, Major Jed. Hotchkiss in *The Virginias*, vol. i. pp. 96, etc.

CLASSIFICATION AND NOMENCLATURE OF THE PALÆOZOIC FORMATIONS.

General Groups.	Subdivisions in Virginia and Pennsylvania.	Rogers Numbers.	Rogers Names.
Carboniferous.	Upper Barren Group. Upper Coal Group. Lower Barren Group. Lower Coal Group.	XVI., XVII. XV. XIV. XIII.	Seral. Seral. Seral. Seral.
Millstone Grit.	Great or Pottsville Conglomerate.	XII.	Seral.
Sub-Carboniferous.	Greenbriar Shales. (Mauch Chunk Red Shale.)	XI. ^b	Umbral.
	Greenbriar Limestone. Pocono Gray Sandstone.	XI. ^a X.	Umbral. Vespertine.
Devonian.	Catskill. Chemung. Portage. Genesee. Hamilton. Marcellus. Corniferous.	IX. VIII. ^c VIII. ^o VIII. ^d VIII. ^o VIII. ^b VIII. ^a	Ponent. Vergent. Vergent. Cadent. Cadent. Cadent. Cadent.
Silurian.	Oriskany. Lower Helderberg. Salina. Niagara. Clinton. Medina. Oneida.	VII. VI. V. ^c V. ^b V. ^a IV. IV. ^a	Meridian. Pre-meridian. Scalent. Scalent. Surgent. Levant. Levant.
Lower Silurian. (Ordovician.)	Hudson River. Utica. Trenton. Chazy. Calciferous.	III. ^o III. ^b III. ^a II. ^b II. ^a	Matinal. Matinal. Matinal. Austral. Austral.
Cambrian.	Upper Cambrian. (Potsdam.) Middle Cambrian. Lower Cambrian.	I.	Primal.