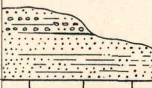
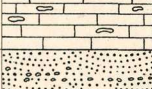
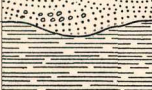
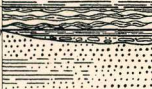
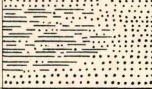
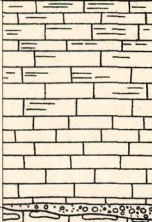
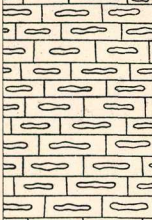
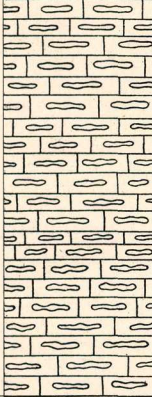
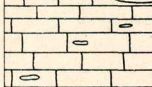
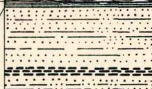
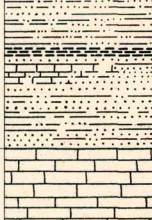
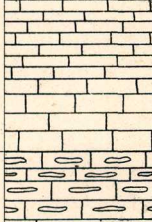
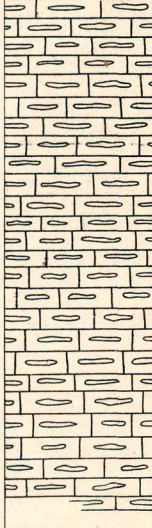
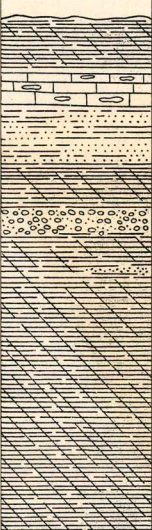
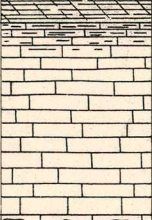
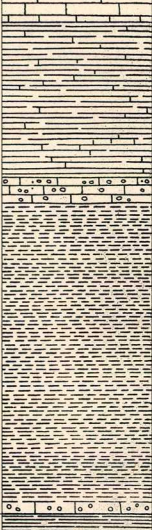
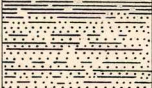
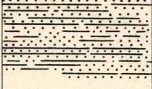


# COLUMNAR SECTION SHEET 1

| GENERALIZED SECTION FOR ROME QUADRANGLE NORTHWEST OF COOSA FAULT. |                                            |         |                                                                                     |                    |                                                                                                                                                   |                                                                                                              |
|-------------------------------------------------------------------|--------------------------------------------|---------|-------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| SCALE: 1 INCH = 1000 FEET.                                        |                                            |         |                                                                                     |                    |                                                                                                                                                   |                                                                                                              |
| PERIOD.                                                           | FORMATION NAME.                            | SYMBOL. | COLUMNAR SECTION.                                                                   | THICKNESS IN FEET. | CHARACTER OF ROCKS.                                                                                                                               | CHARACTER OF TOPOGRAPHY AND SOIL.                                                                            |
| CARBONIFEROUS                                                     | Lookout sandstone.                         | Cl      |    | 320-400            | Conglomerate, sandstone, and sandy shale, with thin irregular beds of coal.                                                                       | Level-topped mesas. Sandy soil.                                                                              |
|                                                                   | Bangor limestone.                          | Cb      |    | 300                | Blue crinoidal limestone with nodules of chert.                                                                                                   | Mesa slopes and valleys. Red clay soil.                                                                      |
|                                                                   | Oxmoor sandstone.                          | Co      |    | 50-550             | White and brown sandstone and conglomerate.                                                                                                       | Narrow ridges. Rocky, sandy soil.                                                                            |
|                                                                   | Floyd shale.                               | Cf      |    | 2000+              | Black carbonaceous shale with occasional beds of crinoidal limestone.                                                                             | "Flatwoods." Thin gray shale soil.                                                                           |
| DEV.                                                              | Fort Payne chert.                          | Cfp     |    | 20-200             | Bedded chert and limestone.                                                                                                                       | Low ridges. Rocky, cherty soil.                                                                              |
|                                                                   | Chattanooga shale.                         | Dc      |    | 0-22               | Black carbonaceous shale.                                                                                                                         |                                                                                                              |
|                                                                   | Armuchee chert.                            | Da      |    | 0-40               | Rusty, sandy chert.                                                                                                                               |                                                                                                              |
| SILURIAN                                                          | Rockwood formation.                        | Sr      |    | 1000-1500          | White, brown, and purple sandstone and sandy shale with beds of red fossiliferous hematite iron ore.                                              | High even-crested ridges. Rocky, sandy soil.                                                                 |
|                                                                   | Chickamauga limestone.                     | Sc      |   | 700-1500           | Blue flaggy limestone, sometimes purple and mottled, earthy toward the top. In places, heavy chert conglomerate at the base.                      | Narrow valleys. Very fertile red and blue clay soil.                                                         |
|                                                                   | Knox dolomite.                             | CSk     |  | 1500-4000          | Magnesian limestone or dolomite, white, gray, or light blue, generally granular and massively bedded, and containing nodules and layers of chert. | Low ridges and irregular rounded hills of residual material. Red clay soil, generally containing much chert. |
| CAMBRIAN                                                          | (Siliceous layers in Conasauga formation.) | (Ccs)   |  |                    | Greenish siliceous shale and micaceous sandstone.                                                                                                 |                                                                                                              |
|                                                                   | Conasauga formation.                       | Cc      |  | 1000+              | Olive clay shale.                                                                                                                                 | Level valleys and "flatwoods." Stiff clay soil.                                                              |

| GENERALIZED SECTION NORTHWEST CORNER OF ROME QUADRANGLE. |                        |         |                                                                                     |                    |                                                                                                                |                                                                                                              |
|----------------------------------------------------------|------------------------|---------|-------------------------------------------------------------------------------------|--------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| SCALE: 1 INCH = 1000 FEET.                               |                        |         |                                                                                     |                    |                                                                                                                |                                                                                                              |
| PERIOD.                                                  | FORMATION NAME.        | SYMBOL. | COLUMNAR SECTION.                                                                   | THICKNESS IN FEET. | CHARACTER OF ROCKS.                                                                                            | CHARACTER OF TOPOGRAPHY AND SOIL.                                                                            |
| CARB.                                                    | Bangor limestone.      | Cb      |  | 800                | Blue crinoidal limestone with chert nodules, and shaly beds toward the base.                                   | Slope of Lookout Mountain. Red clay soil.                                                                    |
|                                                          | Fort Payne chert.      | Cfp     |  | 125                | Bedded chert and limestone.                                                                                    | Low ridges. Rocky, sandy soil.                                                                               |
| DEV.                                                     | Chattanooga shale.     | Dc      |  | 28                 | Black carbonaceous shale with phosphatic concretions.                                                          | Low ridges. Rocky, sandy soil.                                                                               |
| SILURIAN                                                 | Rockwood formation.    | Sr      |  | 1200               | White, brown, and purple sandy shale with some sandstone and beds of red fossiliferous hematite iron ore.      | Even-crested ridges. Rocky, sandy soil.                                                                      |
|                                                          | Chickamauga limestone. | Sc      |  | 1150               | Blue flaggy limestone, thicker beds at the base.                                                               | Narrow valleys. Very fertile red and blue clay soil.                                                         |
|                                                          | Knox dolomite.         | CSk     |  | 3000+              | Magnesian limestone, white, gray, or light blue, massively bedded, and containing nodules and layers of chert. | Low ridges and irregular rounded hills of residual material. Red clay soil, generally containing much chert. |

| GENERALIZED SECTION FOR ROME QUADRANGLE SOUTHEAST OF COOSA FAULT. |                            |         |                                                                                       |                    |                                                                                                                                                 |                                                                                                                                      |
|-------------------------------------------------------------------|----------------------------|---------|---------------------------------------------------------------------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| SCALE: 1 INCH = 1000 FEET.                                        |                            |         |                                                                                       |                    |                                                                                                                                                 |                                                                                                                                      |
| PERIOD.                                                           | FORMATION NAME.            | SYMBOL. | COLUMNAR SECTION.                                                                     | THICKNESS IN FEET. | CHARACTER OF ROCKS.                                                                                                                             | CHARACTER OF TOPOGRAPHY AND SOIL.                                                                                                    |
| SILURIAN                                                          | Rockmart slate.            | Srm     |    | 2500-3000          | Shale, beds of cherty limestone, and some sandy beds.<br><br>Coarse limestone conglomerate.<br><br>Calcareous shale altered to roofing slate.   | Short ridges and narrow valleys. Thin shaly soil.                                                                                    |
|                                                                   | Chickamauga limestone.     | Sc      |    | 800-1200           | Blue flaggy limestone, shaly in upper portion.                                                                                                  | Level valleys. Blue or red clay soil.                                                                                                |
|                                                                   | Knox dolomite.             | CSk     |   | 4000-5000          | Magnesian limestone or dolomite, white, gray, or light blue, generally granular and massively bedded, and containing nodules and beds of chert. | Undulating plateau with low ridges and irregular rounded hills of residual material. Red clay soil, generally containing much chert. |
| CAMBRIAN                                                          | Conasauga formation.       | Cc      |  | 1500-4000          | Blue seamy limestone with heavy beds near top.<br><br>Olive clay shale with beds of oolitic limestone.                                          | Valleys. Red clay soil.                                                                                                              |
|                                                                   | (Shale in Rome formation.) | (Crsh)  |  |                    | Sandy shale in northeastern portion.                                                                                                            |                                                                                                                                      |
|                                                                   | Rome formation.            | Cr      |  | 700-1200           | Purple, white, green, and brown sandstone and interbedded sandy shale.                                                                          | Comby ridges. Rocky, sandy soil.                                                                                                     |



# COLUMNAR SECTION SHEET 2

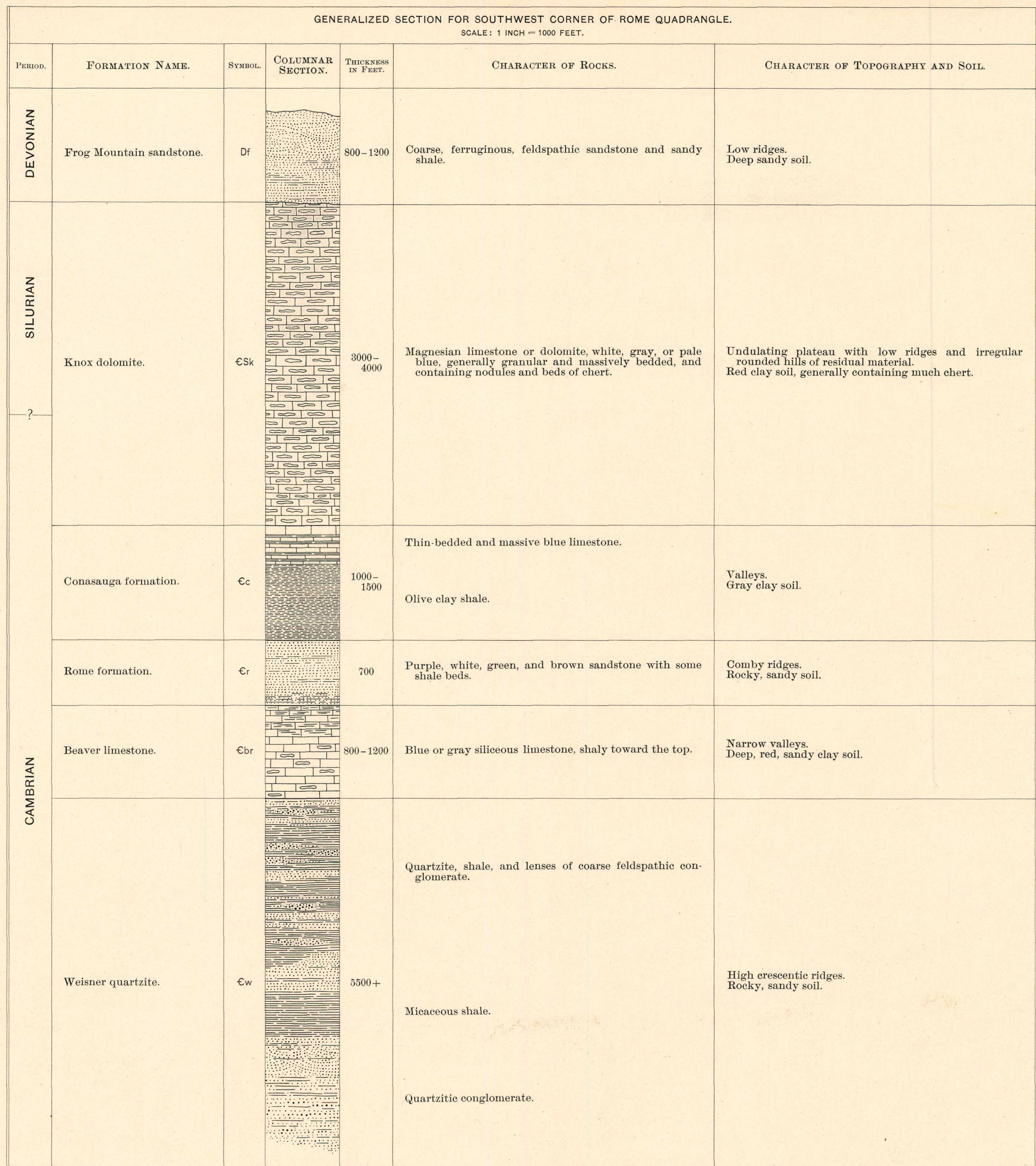


TABLE OF FORMATION NAMES.

| PERIOD.       | NAMES AND SYMBOLS USED IN THIS FOLIO.    | HAYES: U. S. GEOLOGICAL SURVEY, RINGGOLD FOLIO, 1894. | SMITH: GEOLOGY OF THE VALLEY REGION ADJACENT TO THE CARABA COAL FIELD, ALABAMA, 1890. | SAFFORD: GEOLOGY OF TENNESSEE, 1890.             |
|---------------|------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------|
| CARBONIFEROUS | Lookout sandstone.                       | Cl                                                    | Lookout sandstone.                                                                    | Coal Measures.                                   |
|               | Bangor limestone.                        | Cb                                                    | Bangor limestone.                                                                     | Mountain limestone.                              |
|               | Oxmoor sandstone.                        | Co                                                    |                                                                                       |                                                  |
|               | Floyd shale.                             | Cf                                                    | Floyd shale.                                                                          | Oxmoor sandstone and shale.                      |
|               | Fort Payne chert.                        | Cfp                                                   | Fort Payne chert.                                                                     | Fort Payne chert.                                |
| DEVONIAN      | Chattanooga shale.                       | Dc                                                    | Chattanooga black shale.                                                              | Black shale.                                     |
|               | Armuchee chert.                          | Da                                                    |                                                                                       |                                                  |
|               | Frog Mountain sandstone.                 | Df                                                    |                                                                                       |                                                  |
| CAMBRIAN      | Rockwood formation.                      | Sr                                                    | Rockwood formation.                                                                   | Clinton or Red Mountain formation.               |
|               | Rockmart slate.                          | Srm                                                   |                                                                                       | Dyestone group.<br>White Oak Mountain sandstone. |
|               | Chickamauga limestone.                   | Sc                                                    | Chickamauga limestone.                                                                | Trenton or Pelham limestone.                     |
|               | Knox dolomite.                           | €Sk                                                   | Knox dolomite.                                                                        | Trenton, Lebanon, or Maclurea limestone.         |
|               | Siliceous layers in Conasauga formation. | €cs                                                   | Conasauga shale.                                                                      |                                                  |
|               | Conasauga formation.                     | €c                                                    |                                                                                       | Knox shale.                                      |
|               | Shale in Rome formation.                 | €rsh                                                  | Rome formation.                                                                       |                                                  |
|               | Rome formation.                          | €r                                                    | Rome sandstone.                                                                       | Knox sandstone.                                  |
|               | Beaver limestone.                        | €br                                                   |                                                                                       |                                                  |
|               | Weisner quartzite.                       | €w                                                    | Weisner quartzite.                                                                    | Chilhowee sandstone.                             |

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