U. S. GEOLOGICAL SURVEY
CHARLES D. WALCOTT, DIRECTOR

HISTORICAL GEOLOGY SHEET

COLORADO
WALSENBURG QUADRANGLE

LEGEND

SEDIMENTARY ROCKS
(Areas of Sedimentary rocks are shown by patterns of parallel lines.)

NEOCENE

- Nn — **Nussbaum formation** *(sandstone and conglomerate)*

EOCENE ?

- Ech — **Cuchara formation** *(cavernous variegated sandstone, brown clay and sand at base)*
- Epc — **Poison Canyon formation** *(conglomerate and sandstone with beds of yellow clay)*

CRETACEOUS

- Kl — **Laramie formation** *(sandstone and shale containing seams of coal)*
- Krd — **Trinidad formation** *(massive and shaly sandstone)*
- Kp — **Pierre shale** *(shale of various shades of gray with concretions)*
- Ka — **Apishapa formation** *(coarsely laminated shale often bituminous; paper shale at base)* — *Subdivisions of the Niobrara formation*
- Kt — **Timpas formation** *(calcareous shale with thin-bedded limestone)*
- Kcr — **Carlile shale** *(gray shale capped by soft sandstone)*
- Kgn — **Greenhorn limestone** *(thin-bedded limestone with shale partings)*
- Kgs — **Graneros shale** *(gray and dark-colored shale with concretions)*
- Kd — **Dakota sandstone** *(fine-grained massive sandstone, flinty, coarse sandstone, and conglomerate)*

JURATRIAS

- Jm — **Morrison formation** *(variegated shale and clay, limestone, and sandstone)*

CARBONIFEROUS ?

- Cb — **Badito formation** *(fine-grained red sandstone and coarse conglomerate)*

IGNEOUS ROCKS
(Areas of igneous rocks are shown by patterns of triangles and rhombs.)

EOCENE and NEOCENE

- an — **Andesite** *(lava flow)*
- llp, bs, gr — **Late lamprophyre, basalt, and granite-felsophyre** *(dikes and sheets)*
- smp, elp, emp — **Silver Mt. monzonite-porphyry, early lamprophyre, and early monzonite-porphyry** *(stocks, dikes, and sheets)*

UNCLASSIFIED CRYSTALLINE ROCKS
(Areas of Archean rocks and metamorphic rocks of unknown origin are shown by patterns of short dashes.)

ARCHEAN

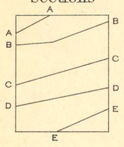
- Ars — **Granite and schist**

Faults

Legend is continued on the left margin.

LEGEND
(continued)

Sections



Henry Gannett, Chief Topographer.
E. M. Douglas, Topographer in charge.
Triangulation by A. H. Thompson.
Topography by R. O. Gordon and W. J. Lloyd.
Surveyed in 1894.

Scale 1/125000
1 0 1 2 3 4 5 Miles
1 0 1 2 3 4 5 Kilometers

Contour interval 50 feet.
Datum is mean sea level.
Edition of Sept. 1900.

Geology by R. C. Hills.
Surveyed 1895-1896.