

LEGEND

SURFICIAL ROCKS

- SUPERJACENT SERIES**
- Pal Alluvium (bottom lands and meadows)
- Pm Moraines
- Pl Lake beds (sands and gravels)

PLEISTOCENE

SEDIMENTARY ROCKS

- BED-ROCK SERIES**
- sl (detached masses of slate, quartzite and porphyrite, but included in granitic rocks probably equivalent to the Sutter Canyon formation)
- slm (contact metamorphic schists chiefly mica, some derived from the above described rocks)
- Cc Calaveras formation (slates and quartzites)
- Ccm Calaveras formation (contact metamorphic rocks chiefly mica, andalusite-schist)

JURATRIAS ?

CARBONIFEROUS (and perhaps older)

IGNEOUS ROCKS

- SUPERJACENT SERIES**
- Pb Basalt
- Na Andesite (tuffs and breccias with subordinate areas of massive rock)
- Nb Basalt
- Nr Rhyolite (chiefly tuffs in places with intercalated gravel beds)

PLEISTOCENE

NEOCENE

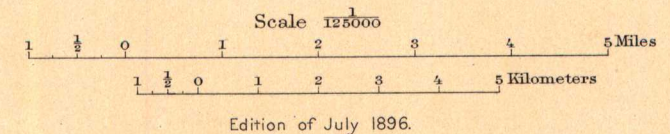
- BED-ROCK SERIES**
- gr Granite (granite)
- grd Granodiorite
- di Diorite (with transition to gabbro)
- gb Gabbro
- apt Augite-porphyrite (with some andalusite porphyrite)

AGE OF PROBABLE JURATRIAS ROCKS, OR YOUNGER

Probable fault

- 1/20° Dip and strike of stratified rocks
- Vertical dip and strike of stratified rocks
- 1/40° Dip and strike of schistosity
- Vertical dip and strike of schistosity
- 1/20° Dip and strike of joint structure
- Vertical dip and strike of joint structure

A.H. Thompson, Geographer.
E.M. Douglas, Topographer in charge.
Triangulation by H.E.C. Feuser.
Topography by R.H. Mc Kee.
Surveyed in 1889.



Geology by W. Lindgren.
Assisted by H.C. Hoover.
Surveyed in 1894.