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

STRUCTURE-SECTION SHEET

CALIFORNIA
SONORA QUADRANGLE

LEGEND
(continued)

BED-ROCK SERIES

Dikes of various rocks *(soda-syenite, sy; diorite, di; granite, gr; quartz-porphyry, qp; and undetermined rocks)*

Hornblende-pyroxene-rock (hpy)

Diorite (di)

Soda-syenite *(and other related rocks rich in soda; contains gold in some places)* (sy)

Granodiorite and granite (grd)

Serpentine *(derived from peridotite and pyroxenite)* (sp)

Diabase (db)

Gabbro (gb)

Porphyrite *(augite-porphyrite with some quartz-porphyrite)* (pt)

Hornblende-porphyrite (hpt)

Amphibolite *(schistose and massive, derived from porphyrite and other igneous rocks)* (am)

EARLIER THAN THE LATE CRETACEOUS, CHICO FORMATION

- Dip and strike of stratified rocks
- Vertical dip and strike of stratified rocks
- Dip and strike of schistosity
- Vertical dip and strike of schistosity
- Gold quartz veins

Known productive formations

- Auriferous gravels
- Limestone

LEGEND

SURFICIAL ROCKS — PLEISTOCENE

Alluvium (Pal)

Shore and river gravels *(in part auriferous)* (Pgv)

SEDIMENTARY ROCKS

SUPERJACENT SERIES — NEOGENE

Andesitic gravel and sandstone *(with some tuff)* (Nas)

Ione formation *(sandstone used for building clay, conglomerate, and rhyolite-tuff)* (Ni)

Auriferous river gravels (Ng)

EOCENE

Tejon formation *(sandstone and conglomerate used for building)* (Et)

BED-ROCK SERIES — JURATRIAS

Mariposa formation *(clay-slates and sandstone; contains rich gold quartz veins)* (Jm)

Mariposa formation *(mica- and andalusite-schists, contact metamorphic rocks)* (Jms)

JURATRIAS?

Cherty beds *(enclosed in the porphyrite rocks)* (ch)

CARBONIFEROUS

Calaveras formation *(argillite, limestone, quartzite, and mica-schist; contains gold quartz veins)* (Cc)

Limestone lenses *(in Mariposa and Calaveras formations)* (ls)

IGNEOUS ROCKS

SUPERJACENT SERIES — NEOGENE

Basalt (Nb)

Andesitic tuffs and breccias (Nat)

Legend is continued on the left margin.

A. H. Thompson, Geographer.
E. M. Douglas, Topographer in charge.
Triangulation by H. E. C. Feusier.
Topography by R. H. Chapman.
Surveyed in 1891.

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

Edition of July 1897.

Turner
Ransome
Turner

Geology by H. W. Turner.
Assisted by F. L. Ransome.
Surveyed in 1895.