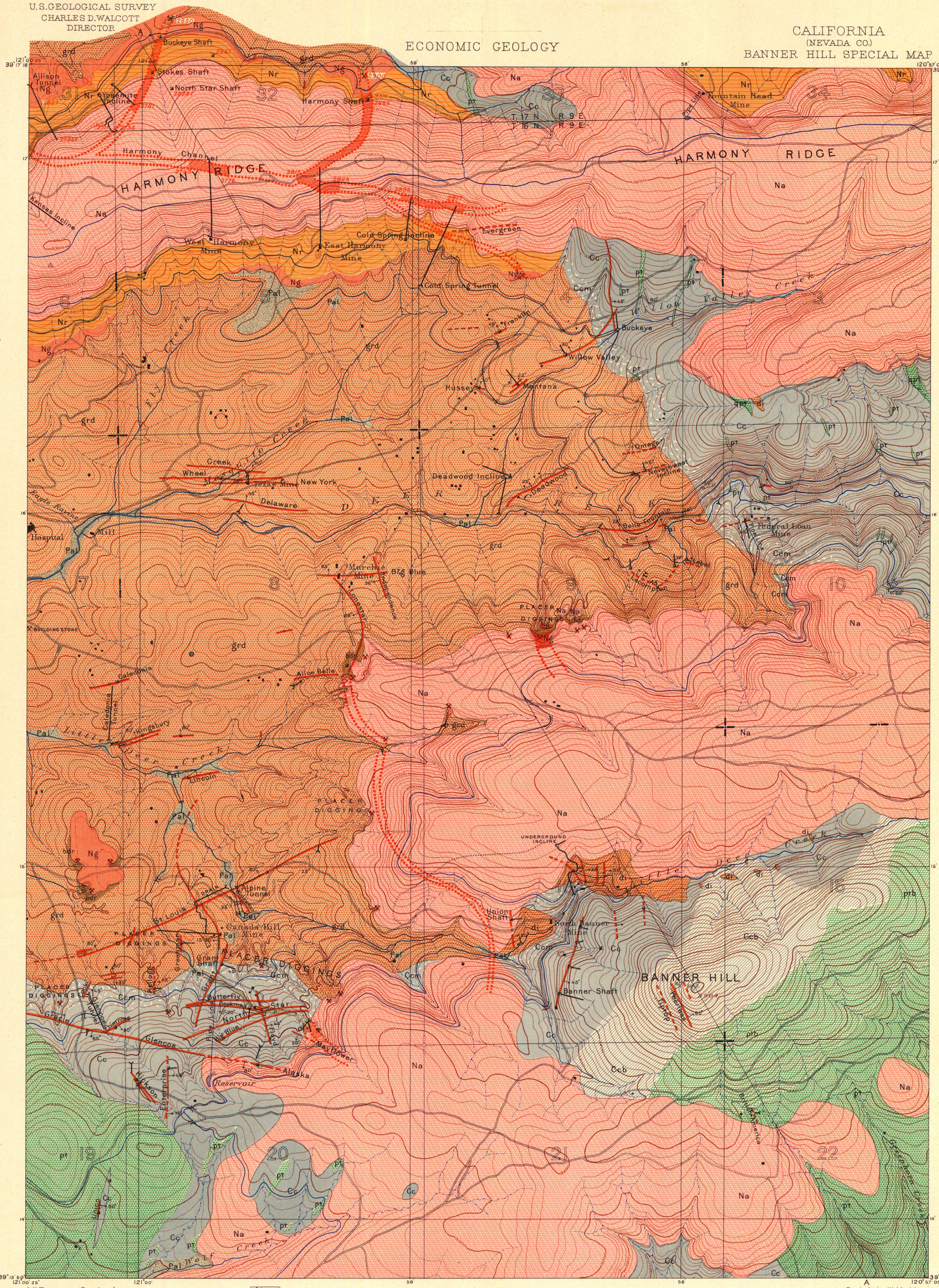
U.S. GEOLOGICAL SURVEY
CHARLES D. WALCOTT
DIRECTOR

ECONOMIC GEOLOGY

CALIFORNIA
(NEVADA CO.)
BANNER HILL SPECIAL MAP



LEGEND

SURFICIAL ROCKS

(Areas of Surficial rocks are shown by patterns of dots and circles.)

PLEISTOCENE

- Pal — **Alluvium** *(mostly debris from hydraulic gravel mines)*

SEDIMENTARY ROCKS

(Areas of Sedimentary rocks are shown by patterns of parallel lines. Metamorphism is indicated by short dashes combined with the parallel lines.)

SUPERJACENT SERIES — NEOCENE

- Ng — **Auriferous river gravels** *(with beds of clay, sand, and some rhyolitic tuff)*
- Nr — **Rhyolite-tuff** *(sandy or clayey, interstratified with gravel)*

BED-ROCK SERIES — CARBONIFEROUS

- Cc — **Calaveras formation** *(Black chert and clay-slate)*
- Ccb — **Calaveras formation** *(contact breccia with some porphyrite-tuff)*
- Ccm — **Calaveras formation** *(micaceous and quartzose schists metamorphosed by contact with granodiorite)*

IGNEOUS ROCKS

(Areas of Igneous rocks are shown by patterns of triangles and rhombs.)

SUPERJACENT SERIES — NEOCENE

- Na — **Andesite** *(tuff and breccia)*

BED-ROCK SERIES — EARLIER THAN THE LATE CRETACEOUS

- grd — **Granodiorite**
- di — **Diorite**
- pt — **Porphyrite** *(hornblendic or augitic with some diabase)*
- ptb — **Porphyrite-breccia**
- qpt — **Quartz-porphyrite**

SPECIAL SYMBOLS

- 20 — *Dip and strike of stratified rocks*
- *Vertical dip and strike of stratified rocks*
- 80 — *Dip and strike of schistosity*
- *Vertical dip and strike of schistosity*
- 70 — *Dip and strike of joint structure*
- *Pits of hydraulic mines*
- *Quarries*
- *Vertical shafts*
- *Inclined shafts*
- *Tunnels*
- *Tunnels of known length but direction doubtful*
- 2850 — *Elevation of the Neocene surface under volcanic capping (bed-rock)*

Known productive formations

- *Quartz veins (direction and dip of known outcrops)*
- *Quartz veins (probable outcrop)*
- *Known course (of auriferous Neocene, drainage channels under volcanic capping)*
- *Probable course (of auriferous Neocene, drainage channels under volcanic capping)*
- *Auriferous gravels*
- bdr — *Bed-rock (exposed by hydraulic mining)*

Section

A — A

A. H. Thompson, Geographer.
E. M. Douglas, Topographer in charge.
Triangulation by E. M. Douglas.
Topography by A. F. Dunnington and R. B. Marshall.
Surveyed in 1892.

Geology by W. Lindgren.
Surveyed in 1893-94.

Scale 1/14400
1000 500 0 1000 2000 3000 4000 Feet
0 1/2 1 Kilometer

Contour Interval 20 feet.
Datum is mean Sea level.

Edition of Mar. 1896.