

NAMES OF MINES.

Location indicated on the map by numbers.

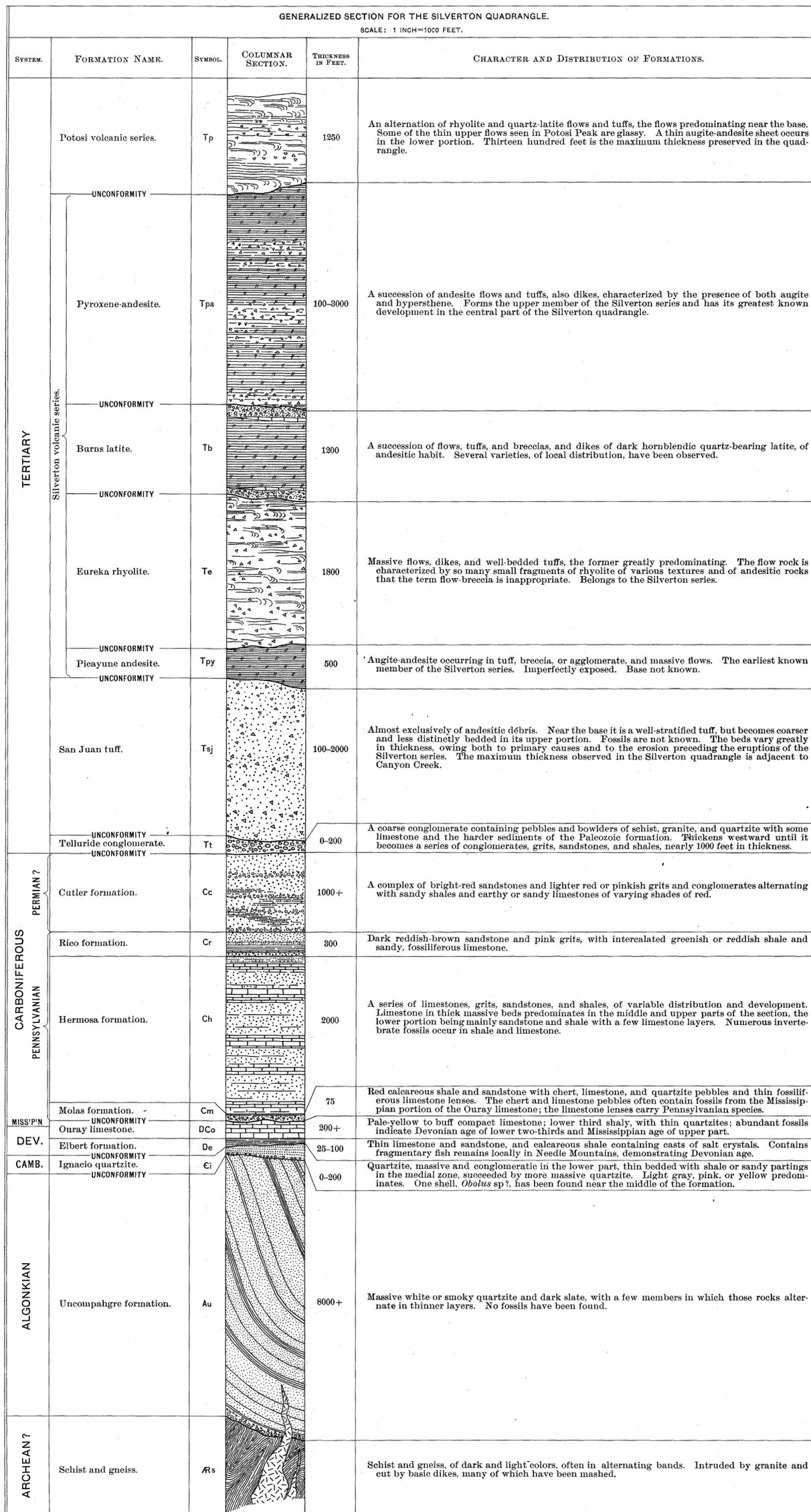
NUMERICAL LIST.

1. Bimetallist.
2. Revenue Tunnel.
3. Wheel of Fortune.
4. U. S. Depository.
5. Camp Bird (main adit).
6. Hidden Treasure.
7. Camp Bird (upper adit).
8. Hancock.
9. Japan.
10. Tomboy (main adit).
11. Tomboy (upper tunnel).
12. North Chicago.
13. Barstow.
14. Little Candies.
15. Meldrum Tunnel.
16. Silver Bell.
17. Paymaster.
18. American Girl.
19. White Cloud.
20. Guston.
21. Hammond Tunnel.
22. Yankee Girl.
23. Robinson.
24. Scotch Girl.
25. Grand Prize.
26. Midnight.
27. Carbonate King.
28. Alexandra.
29. Genesee-Vanderbilt.
30. Summit.
31. Webster.
32. Charter Oak.
33. National Belle.
34. Lake (Red Mountain).
35. Hudson.
36. Galena Queen.
37. Mineral King.
38. Henrietta.
39. Carbon Lake.
40. Congress.
41. St. Paul.
42. Silver Ledge.
43. Silver King.
44. Silver Crown.
45. Bonner.
46. Magnet.
47. Brobdignad.
48. Irene.
49. Zuni.
50. Yukon Tunnel.
51. North Star.
52. Belcher (Sultan Mountain).
53. Montezuma.
54. Empire Tunnel.
55. Idaho.
56. Lackawanna.
57. King.
58. Molas.
59. Mabel.
60. Montana.
61. Little Ray.
62. Titusville.
63. Nevada.
64. Unity Tunnel.
65. Silver Lake.
66. Iowa.
67. Royal Tiger.
68. Buckeye.
69. Highland Mary.
70. Dives.
71. North Star (King Solomon).
72. Green Mountain.
73. Philadelphia.
74. Pride of the West.
75. Big Giant.
76. Little Giant.
77. Aspen.
78. Antiperiodic.
79. Veta Madre.
80. Neigold.
81. Big Ten.
82. Ridgway.
83. Little Maud.
84. Dewey.
85. Gold Nugget.
86. Hamlet.
87. Tom Moore.
88. Toltec.
89. Anaconda.
90. Scotia and Golden Fleece.
91. Sound Democrat.
92. Silver Queen (Placer Gulch).
93. Mastodon.
94. Sunnyside Extension.
95. Ben Franklin.
96. Sunnyside.
97. Belle Creole.
98. Lake.
99. George Washington.
100. Gold King (and Sampson).
101. American.
102. Gold King (lowest tunnel).
103. Red and Bonita.
104. Adams.
105. Queen Anne.
106. Mountain Queen.
107. Columbia.
108. Belcher (Poughkeepsie Gulch).
109. Bonanza.
110. Red Rogers.
111. Seven-Thirty.
112. Alaska.
113. Saxon and Amador.
114. Tempest.
115. Poughkeepsie.
116. Alabama.
117. Red Cloud.
118. Early Bird.
119. Butler.
120. San Juan Chief.
121. Mammoth.
122. Annie Wood.
123. Pride of Syracuse.
124. Polar Star.
125. Mohawk.
126. J. J. Crooke.
127. Dolly Varden.
128. Palmetto.
129. Frank Hough.
130. Sunset.
131. Maid of the Mist.
132. Forest.
133. Old Lout.
134. Old Lout Tunnel.
135. J. I. C.
136. Baltic Group (Mono).
137. Saratoga.
138. Guadalupe.
139. Micky Breen.
140. Silver Link.
141. Silver Queen (Bear Creek).

ALPHABETICAL LIST.

- Adams, 104.
- Alabama, 116.
- Alaska, 112.
- Alexandra, 28.
- American, 101.
- American Girl, 18.
- Anaconda, 89.
- Annie Wood, 122.
- Antiperiodic, 78.
- Aspen, 77.
- Baltic Group (Mono), 136.
- Barstow, 13.
- Belcher (Sultan Mountain), 52.
- Belcher (Poughkeepsie Gulch), 108.
- Belle Creole, 97.
- Ben Franklin, 95.
- Big Giant, 75.
- Big Ten, 81.
- Bimetallist, 1.
- Bonanza, 109.
- Bonner, 45.
- Brobdignad, 47.
- Buckeye, 68.
- Butler, 119.
- Camp Bird (main adit), 5.
- Camp Bird (upper adit), 7.
- Carbonate King, 27.
- Carbon Lake, 39.
- Charter Oak, 32.
- Columbia, 107.
- Congress, 40.
- Dewey, 84.
- Dives, 70.
- Dolly Varden, 127.
- Early Bird, 118.
- Empire Tunnel, 54.
- Forest, 132.
- Frank Hough, 129.
- Galena Queen, 36.
- Genesee-Vanderbilt, 29.
- George Washington, 99.
- Gold King (and Sampson), 100.
- Gold King (lowest tunnel), 102.
- Gold Nugget, 85.
- Grand Prize, 25.
- Green Mountain, 72.
- Guadalupe, 138.
- Guston, 20.
- Hamlet, 86.
- Hammond Tunnel, 21.
- Hancock, 8.
- Henrietta, 38.
- Hidden Treasure, 6.
- Highland Mary, 69.
- Hudson, 35.
- Idaho, 55.
- Iowa, 66.
- Irene, 48.
- Japan, 9.
- J. J. Crooke, 126.
- J. I. C., 135.
- King, 57.
- Lackawanna, 56.
- Lake, 98.
- Lake (Red Mountain), 34.
- Little Candies, 14.
- Little Giant, 76.
- Little Maud, 83.
- Little Ray, 61.
- Mabel, 59.
- Magnet, 46.
- Maid of the Mist, 131.
- Mammoth, 121.
- Mastodon, 93.
- Meldrum Tunnel, 15.
- Micky Breen, 139.
- Midnight, 26.
- Mineral King, 37.
- Mohawk, 125.
- Molas, 58.
- Montana, 60.
- Montezuma, 53.
- Mountain Queen, 106.
- National Belle, 33.
- Neigold, 80.
- Nevada, 63.
- North Chicago, 12.
- North Star, 51.
- North Star (King Solomon), 71.
- Old Lout, 133.
- Old Lout Tunnel, 134.
- Palmetto, 128.
- Paymaster, 17.
- Philadelphia, 73.
- Polar Star, 124.
- Poughkeepsie, 115.
- Pride of Syracuse, 123.
- Pride of the West, 74.
- Queen Anne, 105.
- Red and Bonita, 103.
- Red Cloud, 117.
- Red Rogers, 110.
- Revenue Tunnel, 2.
- Ridgway, 82.
- Robinson, 23.
- Royal Tiger, 67.
- St. Paul, 41.
- San Juan Chief, 120.
- Saratoga, 137.
- Saxon and Amador, 113.
- Scotch Girl, 24.
- Scotia and Golden Fleece, 90.
- Seven-Thirty, 111.
- Silver Bell, 16.
- Silver Crown, 44.
- Silver King, 43.
- Silver Lake, 65.
- Silver Ledge, 42.
- Silver Link, 140.
- Silver Queen (Placer Gulch), 92.
- Silver Queen (Bear Creek), 141.
- Sound Democrat, 91.
- Summit, 30.
- Sunnyside, 96.
- Sunnyside Extension, 94.
- Sunset, 130.
- Tempest, 114.
- Titusville, 62.
- Toltec, 88.
- Tomboy (main adit), 10.
- Tomboy (upper tunnel), 11.
- Tom Moore, 87.
- Unity Tunnel, 64.
- U. S. Depository, 4.
- Veta Madre, 79.
- Webster, 31.
- Wheel of Fortune, 3.
- White Cloud, 19.
- Yankee Girl, 22.
- Yukon Tunnel, 50.
- Zuni, 49.

COLUMNAR SECTION



WHITMAN CROSS,
ERNEST HOWE,
Geologists.



FIG. 1.—VIEW FROM SNOWDON PEAK NORTH TOWARD SILVERTON.

In the center lies Moias Lake, underlain by Ouray limestone. On the deforested slope to the left are ledges of Carboniferous limestone. Above these rise Grand Turk and other mountains of San Juan tuff. To the right of the lake is the line of Animas Canyon, with Kendall Mountain beyond.



FIG. 2.—VIEW DOWN IRONTON PARK FROM MOUTH OF GRAY COPPER GULCH.

The nearly level park extends for 11 miles from view point. On the right are Saratoga mill and mine buildings, where Algonkian quartzites and overlying Paleozoic beds appear. On the left is fan of Full Moon Gulch, with Carboniferous sandstone at the road level on either side. Above, on Hayden Mountain, appear characteristic cliffs of San Juan tuff.



FIG. 3.—TALUS PILES IN EASTERN BRANCH OF HORSESHOE BASIN.

Shows relation of talus and cliff where a snow bank against foot of cliff is supposed to have aided in the accumulation of debris at some distance from cliff. This mass grades into rock stream at its upper end.



FIG. 4.—ROCK STREAM IN SILVER BASIN.

Shows sharp definition of stream and indicates its great volume as compared with talus piles below right-hand cliffs. These cliffs of Potosi lavas are similar in material and height to those whence the material of the rock stream came.

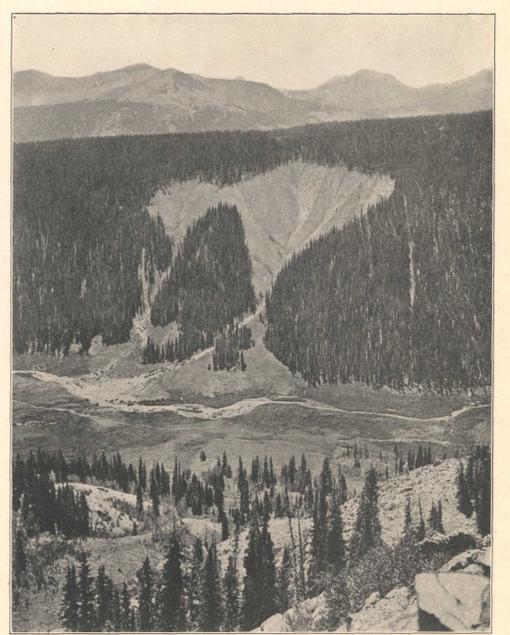


FIG. 5.—TORRENTIAL FANS ON SOUTH SIDE OF RIO GRANDE BELOW DEEP CREEK, FROM SLOPE OF SHEEP MOUNTAIN.

Ravines cutting into forested hillsides of San Juan tuff are depositing most of their detritus in torrenial fans below.



FIG. 6.—LANDSLIDE SURFACE BELOW RED MOUNTAIN NO. 2, FROM FAN AT MOUTH OF GALENA LION GULCH.

Shows multitude of small slide blocks. This slide area extends across ridge from Red Mountain No. 2 into Colescrew Gulch. On the left is the knoll above Paymaster mine. In the foreground are White Cloud and American Girl mines.



FIG. 7.—LANDSLIDE AREA OF RED MOUNTAIN CREEK NEAR ROBINSON AND GUSTON MINES.

View is up creek from knoll north of Robinson mine, in foreground. All is landslide area but the distant cliffs. On the right the blocks are larger and of comparatively fresh rock. On the left the blocks are small and much disintegrated. A small knob of silicified rock appears beside Robinson shaft.