

8 *W. P. Blake on the Gold Region of California and Oregon.*

I have a very beautiful specimen of this character in the form of a leaf: one side is beautifully arborescent, and the other is studded with perfect octahedrons of various sizes and about twenty-five in number, including the smallest. They are geometrically arranged, all their similar edges being parallel. This is believed to be the most remarkable and beautiful specimen known. Its weight is 17 pwt. 10 grains. Length, two and one quarter inches, width, one and a half inches.

One of the foliated specimens in my collection, bears a crystal having the form of a pentagonal dodecahedron with cavernous faces.

One of the largest specimens of this arborescent and foliated gold that has been procured, was about twelve inches long and about four broad. A part of the specimen was a plate three or four inches long, covered with triangular marks; the remainder was arborescent, and the whole appeared to have grown from one end.

Another specimen slightly different in its character and probably from another locality in the vicinity, was ten inches long, three broad and about half an inch thick. It weighed 31 ounces, and was free from quartz; forming a most beautiful mass of a rich yellow color and a delicately marked surface, consisting of a net-work of fibres. It appeared like a bundle of broken fern leaves closely matted together.

These specimens are evidently from a quartz vein, but although I have visited the locality, I have not been able to see the place from which they were taken, or to obtain any reliable information concerning their mode of occurrence and the associate minerals. Some of the foliated specimens were incrustated with a thick scale of sesquioxvd of iron.

The locality is about three miles from Sutter's mill—the point where the gold was first discovered.

PLATINUM.—The occurrence of this metal and its associates with the gold of Port Orford, has been previously noticed in this Journal.* It appears to constitute a large percentage of some of the samples of gold brought from that region and this renders the locality peculiarly interesting. Several ounces of the mixed metals were obtained, and are now being carefully examined. The platinum is in very small thin scales and is easily lifted by a magnet. The difference in the specific gravity between this metal and gold is beautifully shown by the newly invented separating machine,† which distributes black-sand, gold and platinum in separate zones at the upper edge of the oscillating copper table.

I have found platinum in small quantities in the gold of the Middle mines, and in the fine scale gold from the forks of the American river, but it appears to exist in small quantity. It is

* Second Series, vol. xviii, p. 156.

† Invented by Horatio Bradford, Esqr., of New York.