

covered with large blocks of rock: its conical shape proved its volcanic character, although no crater could be perceived.

The Shaste Peak is a magnificent sight, rising as it does to a lofty height, its steep sides emerging from the mists which envelope its base, and seem to throw it off to an immense distance; its cleft summit gave proof of its former active state as a volcano. The snow lies in patches on the sides and part of the peak of this mountain; but there is a great difference in the position of its snow-line from that of Mount Hood or St. Helen's. Its height is said to be fourteen thousand three hundred and ninety feet, but Lieutenant Emmons thinks it is not so high. After passing this ridge, they soon met the head waters of the Sacramento, flowing to the southward, and their camp was pitched on the banks of another stream, that came from the Shaste Peak.

Our party now had their prospects somewhat brightened, having passed safely through the country of the "Bad Indians." I cannot but regret that they should at this time have been found in so hostile a state that it rendered it not only prudent, but necessary for the safety of the party, that all intercourse should be avoided, and consequently one of the objects of the Expedition, that of acquiring some knowledge of their actual condition, numbers, &c., was frustrated.

On the 4th, they had fairly entered into the district of pines: again some of the Lambertiana were measured, and found to be eighteen feet in circumference, with cones sixteen inches long.

They encamped on Destruction river, which runs from this mountain range toward the south, in a place where they found food for their horses and water in abundance. The air was delightful; the forest protected them from the rays of the sun, and besides this the game was plentiful. Near the encampment, in a northwest direction, was a mountain ridge shooting up in sharp conical points and needle-shaped peaks, having a precipitous front. One of these peaks almost overhangs the valley, presenting a gray surface of naked rock two thousand feet high. The valley which adjoins is strewn over with boulders of white granite similar to that already described. From this there is little doubt that the ridge is formed of the same material. At meridian they reached a small valley bordering on the Destruction river, where they found a chalybeate spring. The water oozes out from the rocks, bubbling up freely, and is highly charged with carbonic acid gas. In taste it was found agreeable to both the riders and the animals. Its temperature was 50°, that of the air being 75°;