

Geological Exploration 40th Parallel,
Chico, Cal. Oct. 10, 1840.

Maj. Genl. A. A. Humphreys
Commanding Corps of Engineers.

General,

I have the honor to report that since the date of my last communication I reached Mt. Shasta and spent the entire month surveying and studying the complicated geology of the Butte itself and the country lying between it, and our former work. The labor has been extremely severe; our camps were frequently up to 12,000 ft. above sea level, and, on one occasion, over 14,000 ft. We completely upset the ideas of Humboldt and of Fremont concerning the mountain itself, and have made the somewhat startling discovery of immense existing glaciers. This is the more surprising when we consider that Whitney, Brewer, Dana, and Fremont, all visited the peak without observing them; and that Whitney, Dana and Agassiz have all published the statement that no true glaciers exist in the United States.

May I ask, that, this be kept private until my return.