not more than fifteen or twenty miles distant. It is not a little singular that neither Lewis and Clarke nor Lieutenant Wilkes distinguished Mt Adams as a separate peak from St Helens, for although they resemble each other considerably in general form, their positions in the range are very different. Mt Adams alone is visible from the Dalles, but both of them as well as Rainier can be seen from a slight elevation at the mouth of the Willamette.

The sketches of Lieut Duncan accompanying the reports will better convey an idea of these mountains than a mere verbal description. The angle of incidence of their sides was taken by a clinometer. The steepest continuous face of St Helens, disregarding precipices, was about 40° and none of the others exhibit a greater declivity.

The crater of Mt. Hood is on its south side, that of St Helens is on the northwest and of Mt Adams apparently on the east. Smoke was distinctly seen issuing from St Helens during our journey. This and Mt Baker are the only volcanoes at present in action in the chains. Its last considerable eruption was in 1842, when it covered the country, as far as Vancouver and the Dalles with ashes, and presented a luminous appearance after the smoke had cleared off. The Indians report that there were once three mountains that smoked always. Mt Hood and

0473