

viewed through a smoked glass. We were, fortunately, in a great degree, independent of it, as it was not necessary to see more than a short distance to discover the signals for the soundings. It however prevented me from verifying my astronomical stations, which I was desirous of doing.

Acting-Master Sinclair, who had been despatched to Vancouver for some articles belonging to the Oregon, that had been left there, joined us below Warrior's Point, on the 19th, with letters and news that had been brought from the United States by an over-land party. These letters were very acceptable, as we had not received any advices from home for twenty-two months, and tended to revive our spirits, as well as encourage our exertions. On the 20th, we anchored again off Coffin Rock, near which we found a depth of twenty-five fathoms, which is the deepest water within the capes. This place is sixty miles from the mouth of the river, and eight miles above the confluence of the Cowlitz. The shores here are composed of trap and a conglomerate, the last of which is the same rock as that which occurs below, and has already been spoken of. The Coffin Rock, which is not more than sixty feet in diameter, and twelve feet above the water, appears to have been exclusively reserved for the burial of chiefs. Dr. Holmes procured here some fine specimens of Flathead skulls for our collection. We anchored the same evening off the Cowlitz.

Early the next morning, I proceeded up the Cowlitz in my gig, in order to finish the survey of that stream and examine the strata of coal said to exist there. After entering it, it was with difficulty that I recognised the river; for there is a greater difference than even in the Columbia, between its high and low states. After passing up the Cowlitz several miles, I encountered rapids, through which it was necessary to drag the boat by a line. I found, after great exertion and fatigue, we could not ascend beyond thirteen miles; for it had become so shallow that the boat would not float, and we had not strength enough to force her over the wide bars of gravel and sand, that had apparently accumulated during the last spring. After securing some specimens of lignite that were found embedded in the alluvial banks, and taking observations for time, I turned back; and feeling anxious to reach the brig at an early hour, I ventured to shoot one of the rapids. In doing this, we all had a narrow escape; and particularly two of the boat's crew, who were in great danger of their lives. We fortunately escaped, but with considerable damage to the boat and a few bruises, the whole of which was the work of an instant. This taught me not to venture upon such an experiment again, and I felt thankful to escape