

wheel is badly constructed: it is a breast-wheel, with great loss of power.

There appears but little economy about the establishment: as an instance of this, instead of drying and preparing the cane for fuel, they use wood altogether, which is very scarce, and costs much to transport it. The sugar appears to be of good quality, and with proper attention, the manufacture could no doubt be made profitable. I understood from the Chinese who had charge, that the sugar could be sold at four cents per pound, and that with a proper economy as to fuel, might be reduced to half that sum.

Both the king and chiefs have a desire to encourage the arts and agriculture. Unfortunately, however, after they have incurred expenses, they are obliged to give the sole direction into the hands of those who have nothing but their own interests in view. The consequence is, that in all these undertakings the king and chiefs have found themselves deceived, by listening to foreigners by whom they have been defrauded.

We now rode down the valley among the taro-patches, and over to the Sand-hills. In passing over them we saw some remarkable concretions, resembling large tunnels or broken pipes, which were quite hard, and resembled solid rock interspersed with amorphous sandstone. Mr. Greene, who was with us, could give me no information respecting their formation. Dr. Pickering met with these also, and considers them as mineral concretions, although they appeared to him to resemble those formed by annelidæ, or like beds of sabellæ.

On the isthmus, the sand was drifting like snow, and afforded a good illustration of the rapidity with which it changes its place by the effects of the winds.

In the centre of the Sand-hills, we stopped on a mound of human bones,—a perfect Golgotha. There appears to be no tradition respecting this accumulation of mortal relics. By some it is supposed to have been a burying-place after a battle, for the place where they were found was known to be a battle-ground. Bloody contests, indeed, must have taken place here, if we are to judge from the number of skeletons which are exposed. Some of these are in a state of perfect preservation, and I regretted not being able to transport one to the ship.

Near this place we saw several boys anxiously watching some object, and on getting near them, found they were employed in catching birds. This was done by baiting small sticks, to which a string was tied, and the other end of the string fastened to a small stone: the bird swallows the stick along with the bait, and in attempting to fly off, it pierces his throat, and he is thus secured.

After riding around these plains we returned to Wailuku, where we