

this there is little chance. I dare say, in the spring, the "laderas," or roads, which each year are formed anew across the piles of fallen detritus, are very bad; but from what I saw, I suspect the real danger is nothing. With cargo-mules the case is rather different, for the loads project so far that the animals, occasionally running against each other, or against a point of rock, lose their balance, and are thrown down the precipices. In crossing the rivers I can well believe that the difficulty may be very great: at this season there was little trouble, but in the summer they must be very hazardous. I can quite imagine, as Sir F. Head describes, the different expressions of those who *have* passed the gulf, and those who *are* passing. I never heard of any man being drowned, but with loaded mules it frequently happens. The arriero tells you to show your mule the best line, and then allow her to cross as she likes: the cargo-mule takes a bad line, and is often lost.

April 4th.—From the Rio de las Vacas to the Puente del Incas, half a day's journey. As there was pasture for the mules, and geology for me, we bivouacked here for the night. When one hears of a natural bridge, one pictures to one's self some deep and narrow ravine, across which a bold mass of rock has fallen; or a great arch hollowed out like the vault of a cavern. Instead of this, the Incas Bridge consists of a crust of stratified shingle, cemented together by the deposits of the neighboring hot springs. It appears as if the stream had scooped out a channel on one side, leaving an overhanging ledge, which was met by earth and stones falling down from the opposite cliff. Certainly an oblique junction, as would happen in such a case, was very distinct on one side. The Bridge of the Incas is by no means worthy of the great monarchs whose name it bears.

5th.—We had a long day's ride across the central ridge, from the Incas Bridge to the Ojos del Agua, which are situated near the lowest *casucha* on the Chilean side. These casuchas are round little towers, with steps outside to reach the floor, which is raised some feet above the ground on