

when fallen, was found by Baron Müller to be 478 feet in length.*

We travelled about 50 or 60 miles by coach. The coaches are very like Californian coaches, and are rough but very strong, the bodies being slung by thick leather straps to wheels as stout as cart wheels. The road is scarcely anywhere better than is an English green lane in a clay soil district. In wet weather deep ruts are cut in it; then these are baked dry and hard, and at the next shower form watercourses and get scooped out deeper than ever. The road at last comes to consist of a series of sharp ridges separated by intervening troughs, often two feet deep. The consequence is that as the coach rattles and leaps bumping over these, the suspended body of the coach heaves and sways, and this to such an extent that my companion and a lady in the coach were sea-sick all the way.

We travelled over some of the roughest of the road at night, which, of course, made matters worse, since the "driver" could not see the pitfalls; but, like a Californian "stage-driver," he well knew all the dangerous ones, even in the dark, and in one or two places made *détours* through the bush for a little way.

The ranges are covered with a dense forest of gum-trees, in many places of enormous height, standing with their smooth trunks close together, and running up often for a height of 200 feet without giving off a branch. The light-coloured stems are hung with ragged strips of separated bark.

The great slenderness of the trunks of these giant gum-trees in proportion to their height is striking, and in this respect they contrast most favourably with the Californian "big trees," which, in the shape of their trunks, remind one of a carrot upside down, so disproportionately broad are they at their bases. The large species of gum-tree, the tallest tree in the world, is *Eucalyptus amygdalina*. As Baron von Müller says, "the largest specimens might overshadow the pyramid of Cheops."

Beneath, in the gullies, is a thick growth of tree-ferns and underwood on the banks of a mountain stream. The undergrowth is the haunt of Bush Wallabies (*Halmaturus ualabatus*). I put one of them suddenly to flight as I was creeping through

* The highest estimate ever made of the height of a *Sequoia gigantea* is that of Bigelow, who put the height of one at from 420 to 470 feet. Bigelow, in "Whipple's Expedition," p. 23 (Pacific Railroad Explorations); cit. by Grisebach, "Veg. der Erde."

Sir Joseph Hooker, in a lecture delivered at the Royal Institution of Great Britain, April 12th, 1878, and published in separate form, p. 12, cites Prof. Whitney's careful measurements of the heights of Californian Big Trees as the best available estimate up to date. Average height 275 feet; maximum height a little over 320 feet.