

Whilst we were hunting along the river bank, numerous bright paroquets were flying about amongst the trees, and a great flock of white cockatoos flew overhead, harshly screaming at the danger. They settled in some trees near, but were far too wary to let me get a shot, though I did my best to creep on them. The smaller bright paroquets are not at all wary as a rule, but are most easily shot.

Grisebach, in his account of the Vegetation of Australia,* dwells on the close relation of interdependence which exists between the tree vegetation and the coating of grass which covers the ground beneath it; and remarks, that the amount of light allowed by the trees to reach the ground beneath them is rendered more than usually great by the vertical position in which their leaves grow. Hence the growth of the grass beneath is aided.

It may be that this permitting of the growth of other plants beneath them, and consequent protection of the soil from losing its moisture, besides other advantages to be derived, is the principal reason why, as is familiarly known, two widely different groups of Australian trees, the *Eucalypti* and *Acacias*, have arrived at a vertical instead of a horizontal disposition of their leaves by two different methods.

The *Acacias* have accomplished this by suppressing the true horizontal leaves, and flattening the leaf-stalks into vertical pseudo-leaves or "phyllodes." The gum-trees, on the other hand, have simply twisted their leaf-stalks, and have thus rendered their true leaves vertical in position. There must exist some material advantage, which these different trees derive in common, from this peculiar arrangement, and the benefit derived from relation to other plants by this means may be greater and more important than that arising from the fact that the vertical leaves have a like relation to the light on both sides, and are provided with stomata on both faces.

In support of this conclusion I was told, when at Melbourne, that when the native vegetation was cleared away from under gum-trees they ceased to thrive, and in time perished. I was shown a number of gum-trees, not far from the city, scattered over some public land, covered with only short turf, which seemed to be mostly in a dying condition.

April 2nd, 1874.—On the voyage to Sydney, two Fur Seals were seen about the ship. They were of a smaller species than that occurring at Kerguelen's Land. They swam alongside with remarkable ease and rapidity, having in the water just the appearance of porpoises. The hind limbs were

* A. Grisebach, "Vegetation der Erde," p. 216. Leipzig, W. Engelmann, 1872.