

state, has already been described. Like the monocotyledonous and coniferous trees, they are also found silicified in many localities. The most beautiful specimens I have seen are from the Lybian and Egyptian deserts, and were collected by my friend, Colonel Head. In these the most delicate vascular tissue is permeated by chalcedony and jasper, and some of the vessels are injected with silex of a bright vermilion, and blue colour, traversing the cellular structure which is of a rich yellow. Fragments of these silicified trees are scattered everywhere among the sands of the desert; but the most interesting locality is a sterile, irregular plateau, which reposes on marine limestone, considerably above the level of the Nile, about seven miles east by south from Cairo. This district is called the *petrified forest*, from the immense quantities of silicified trees with which it is covered. Many of the trunks are scattered over the surface, among rolled and angular fragments of dark grit, and pebbles of jasper, chert, and quartz. The large trunks occur in greatest numbers on dark-coloured knolls, where they lie, like the broken stems of a prostrate forest, crossing each other at various angles. Two of the largest measured forty-eight, and sixty feet in length, and two and a half, and three feet in diameter at the base. With but two or three exceptions, all the specimens examined microscopically, possess dicotyledonous structure. No traces of seed-vessels or leaves have been