

upright stools of the white cedar (*Cupressus thyoides*), showing that an ancient forest must once have extended farther seaward. One of these swamps we passed yesterday at Hampton, on the way from Boston to Portsmouth; and Mr. Hayes gave me specimens of the submarine wood in as fresh a state as any occurring a few yards deep in a British peat-bog.

That some of these repositories of buried trees, though geologically of the most modern date, may really be of high antiquity, considered with reference to the history of man, I have no doubt; and geologists may, by repeated observations, ascertain the minimum of time required for their formation previously to their submergence. Some extensive cedar-swamps, for example, of the same class occur on the coast near Cape May, in the southern extremity of the State of New Jersey, on the east side of Delaware Bay, filled with trees to an unknown depth; and it is a constant business to probe the soft mud of the swamp with poles for the purpose of discovering the timber. When a log is found, the mud is cleared off, and the log sawed up into proper lengths for shingles or boards. The stumps of trees, from four to five feet, and occasionally six feet in diameter, are found standing with their roots in the place in which they grew, and the trunks of aged cedars are met with in every possible position, some of them lying horizontally under the roots of the upright stumps. Dr. Bresley, of Dennis Creek, counted 1080 rings of annual growth between the center and outside of a large stump six feet in diameter, and under it lay a prostrate tree, which had fallen and been buried before the tree to which the stump belonged first sprouted. This lower trunk was five hundred years old, so that upward of fifteen centuries were thus determined, beyond the shadow of a doubt, as the age of one small portion of a bog, the depth of which is as yet unknown.

Mr. Hayes drove me in his carriage through woods of fir on both banks of the Piscataqua, where the ground was covered with that fragrant shrub, the candleberry (*Myrica cerifera*), the wax of which, derived from its shining black berries, is used for making candles. The odor of its leaves resembles that of our bog-myrtle (*Myrica gale*). The barberry, also (*Berberis vul-*