

operations have so far only yielded a tree of 3250 years old.

Popular lecturers, in solemn tones, are apt to tell us, "Scientists agree that the bigtrees are 10,000 years old." This may or may not be the case. The foresters, however, after finding trees 3,200 years old, are willing to concede that there may be trees which took root between 4,000 and 5,000 years ago.

During logging operations in the Converse Basin of Fresno County, a clear boled symmetrical bigtree was being cut, and, much to the astonishment of the sawyers, black sawdust appeared at several different intervals. When the tree finally succumbed to their efforts, it was found that at different times fire had burned through the bark and charred the wood. But the tree with infinite patience had each time enclosed the wound with new growth and left the trunk perfect as far as outward appearance was concerned, except for one fire scar.

The tree in question was 2,171 years old. It began its existence 271 B.C. At the beginning of the Christian Era it was already about twelve feet in circumference. When 516 years of age (A.D. 245) a burning occurred three feet wide on the trunk. It took 105 years to heal this wound. Then for 1196 years it grew without injury. When 1712 years old (A.D. 1441) two fire scars were made, the healing process taking 139 years. Again 217 years of growth followed without injury, until in

1797, when the tree was 2068 Years old, a great fire ate away the bark and attacked the wood in a scar 18 feet wide and nearly 30 feet in height.

During the following 103 years before it was cut, four feet of this scar had been covered with fresh growth. If the tree had not been cut we might have expected it to entirely heal over about the year 2250. Thus it would have taken four and one-half centuries to repair the damage wrought by one forest fire.

Any other tree would have been attacked by decay and completely destroyed after any of these fires; but the Sequoia, with its thick protective bark, and its equally wonderful disease resisting wood, stands out among trees and man as having the greatest vitality of any growing thing.

Why in Groves?

We are absolutely certain that many individual trees are at least 3250 years old. Many may be between 4,000 and 5,000 years old. Why, then, do we find them still remaining in the small isolated groves where the ice age left them? Why, as in the case of the pines and firs, did they not reach out and take their place, scattered all over the great forests of the Sierras? They bear millions of seeds and wind and water scatter these about the forest. Yet century after century they have grown in the same spot. A few young trees grow up to take the place of those which die, but still in sight of the same little spot of earth where their parent tree, perhaps, is standing to-day.

A TREE 4,000 YEARS OF AGE

When one of the big trees in California fell, John Muir counted 4,000 rings from the heart out. That meant the tree was forty centuries old. Thus it was a strong young tree when Abraham went into Egypt; it was bearing seed when Sodom and Gomorrah were destroyed; it was old as America when Joseph was sold into Egypt, nearly a thousand years old when David slew Goliath, and older when Christ was born than the Christian religion is to-day!