

"them. They frequently furnish sticks 150 feet long, 18 by 18 and even  
"24 by 24 inches square, without a particle of sap, without a rent or  
"check, perfectly sound and straight. Planks of this timber, 60 feet and  
"90 feet long, are readily obtainable, thus avoiding the necessity for  
"more than one-third to one-half as many butts or scarphs in a ship's  
"sides, decks, or fore-and-aft timbers, as are required in Eastern or Euro-  
"pean vessels. As to the strength of these woods, many mechanics think  
"it fully equal to that of Eastern white oak: and they all agree that, if  
"oak be stronger, nothing is easier than to use enough more of the fir to  
"make up the difference in the strength. In some respects, the fir has  
"the advantage over oak. It contains just enough pitch to enable it to  
"hold iron fastenings with a tenacity so great that bolts and spikes will  
"generally break before they will draw out of it. Iron never becomes  
"sick' when imbedded in it, as it does when corroded by the acid which  
"saturates all kinds of oak. As to its durability, we know that, although  
"it has not yet been tested as the sole material of a guano or pepper  
"ship, yet it has been extensively used for new timbers, planking, ceiling.  
"decks, keelsons, and stanchions in large vessels repaired on the coast,  
"It has been the sole material used in building our coasting and river  
"schooners. It has built the *Chrysopolis*, *Yosemite*, *Capital*, *Geo. S.*  
"*Wright*, *John T. Wright*, and many other river steamers. It has been  
"used in doubling and rebuilding all the old ocean steamers on this coast,  
"and we have never yet met a ship-master or a ship-carpenter who,  
"during our fifteen years of this kind of experience, has complained of its  
"want of durability.

"The Yellow Cedar is undoubtedly the most valuable of all our trees  
"for ship-building. It is found in great quantities at Coos Bay, thence  
"along the coast of Oregon to Port Orford; also on the islands and main  
"land of Alaska. The Indians of the latter territory have for ages used  
"its trunk for their canoes. A vessel built of it at Sitka, thirty years  
"ago, was recently examined, five years after she was wrecked, by the  
"officers of the Revenue steamer *Lincoln*. The timbers appeared as sound  
"and perfect as on the day she was launched. This cedar is much finer  
"grained, handsomer, more dense, and a better timber in all respects than  
"any other cedar known. It grows to a height of 175 feet, with a diam-  
"eter of 4 feet. It is probably the finest material for docks in the world.  
"At Coos Bay, Mr. A. M. Simpson informs us, there are inexhaustible  
"quantities of this cedar, which has been used to some extent in the con-  
"struction of the bark *Melancthon*. After fifteen years' use in the frame  
"of his saw-mill, it shows no signs of decay. Mr. Simpson expresses the  
"confident opinion that heart cedar, cut from the lower part of this tree,  
"will outlast teak in any part of a ship's frame."