four hundred years; but judging from the number of concentrical circles in large trees, they would seem to attain even a greater age in New Brunswick.

Properties and Uses.—Michaux the younger says—"The wood of the American Larch is superior to any species of Fine or Spruce, and unites all the properties which distinguish the European species, *being exceedingly strong, and singularly durable.*" Tredgold says it is extremely durable in all situations, failing only where any other wood would fail; and for this property of durability it has been celebrated from the time of Vitruvias, who regrets that it could not be easily transported to Rome, where such a wood would have been so valuable. It appears, however, that this was sometimes done, for we are told that Tiberius caused the Naumachiarian Bridge, constructed by Augustus, and afterwards burnt, to be rebuilt of Larch planks brought from Rhætia. Among these was a trunk 120 feet in length, which excited the admiration of all Rome. Wribcking, in his celebrated work on Bridges, says that Larch is preferable to the Pine, the Pineaster, or the Fir, for constructing the arches of wooden Bridges.

"Many encomiums (says Hanbury in speaking of this tree) have been bestowed on the timber of the Larch; and we find such a favorable account of it in ancient authors as should induce us to think it would be proper for almost any use. Evelyn ~~writes~~ a story of Witsen, a Dutch writer, that a ship built of this timber and Cypress had been found in the Numidian Sea, twelve fathoms under water, sound and entire, and reduced to such a hardness as to resist the sharpest tool, after it had lain submerged above 1400 years. Certain it is, this is an excellent wood for ship and house building."

The borderers on the Lake of Geneva prefer it for building their vessels. In some parts of Kamschatka it arrives at a considerable size, and is there used for ships, which last extremely well.

Painters, from the time of Pliny to that of Raphael, trusted their works to this wood, which the Roman Naturalist styles *immortale lignum.*

The wood of the American Larch is highly esteemed in New Brunswick and the other North American Colonies for ship building, especially for knees, the butt of the stem and one of the principal roots forming together the angle required. For ship planks it is also much used; and few descriptions of wood, if any, are superior to it for this purpose. It is now exported largely to Great Britain, of specific dimensions, for Railway Sleepers, for which it would seem to be admirably adapted, not only from its strength and durability, but because it bears driving bolts and nails better than any other kind of the resinous woods. It is peculiarly adapted for flooring-boards in situations where there is much wear, and for staircases; in the latter, its fine color when rubbed with oil, renders it greatly preferable to any painted wood, from economy alone. It is also well adapted for doors, shutters, and the like, as from the beautiful color of the wood when varnished, painting is not necessary. It makes excellent tree nails, little if at all inferior to those of the Acacia, or Locust tree.

The wood of the Larch tree is said to be much improved in hardness by barking the trees in spring, and felling them late in the autumn. The wood becomes very hard by seasoning, burns with difficulty, and does not readily absorb water. The weight of a cubic foot when dry, varies from thirty five to forty one pounds.

Representing the mean strength of Oak by 100, that of Larch will be 103.
" " stiffness of Oak by 100, " " 79.
" " toughness of Oak by 100, " " 134.

It is therefore stronger and much tougher than Oak, but not so stiff; and it has been recommended by Tredgold that, with a view to improve the stiffness of the wood for joists and beams, further experiments should be made of barking trees