Weight of American yellow pine is given by Prof. Rankin as 5,400 pounds per square inch, and of oak, as 6,700. American authors give to White pine 10,000 pounds per square inch. This last is considered too great by some authors.

These are some of the principal timbers used in bridge building. Engineers differ as to the allowable working strain of timber. General Hart, a distinguished American Engineer, "has not considered it safe to assign more than 800 pounds per square inch as a permanent load, and