橋梁及架臺用木材强弱表

Average Safe Allowable Working Unit Stresses in Pounds per Square Inch-Recommended by the Commttee on Strength of Bridge and Trestle Timbers.- American Association of Railway Superintendents Bridges and Buildings.- Fifth Annual Convention, New Orleans, October5, 1895.

Kind of Timber	Tension.		Compression.			Transverse Rupture.		Shearing	
			With Grain						
	With Grain.	Across Grain.	End Bearing.	Columns under 15 Diams.	Across Grains.	Extreme Fibre Stress.	Modulus of Elasticity	With Grain	Across Grain.
Factor of Safety.	Ten.	Ten.	Five.	Five.	Four.	Six.	Two	Four.	Four.
White Oak,	1000	200	1400	900	500	1000	550000	200	1000
White Pine,	700	50	1100	700	200	700	500000	100	500
Southern, Long Leaf, or Georgia Yellow Pine,	1200	60	1600	1000	350	1200	85000	150	1250
Douglas, Oregon and Wash-ington Fir or Pine — Yellow Fir.	1200	.....	1600	1200	300	1100	700000	150	.....
Douglas, Oregon and Wash-ington Fir or Pine — Red Fir,	1000	.....	.....	.....	.....	800	.....	.....	.....
Northern, or Short Leaf Yellow Pine,	900	50	1200	800	250	1000	600000	100	1000
Red Pine,	900	50	1200	800	200	800	600000	.....	.....
Norway Pine,	800	.....	1200	800	200	700	600000	.....	.....
Canadian (Ottawa) White Pine	1000	.....	.....	1000	.....	.....	.....	100	.....
Canadian (Ontario) Red Pine,	1000	.....	.....	1000	.....	800	700000	100	.....
Spruce and Eastern Fir,	800	50	1200	800	200	700	600000	100	750
Hemlock,	600	.....	.....	800	150	600	450000	100	600
Cypress,	600	.....	1200	800	200	800	450000	.....	.....
Cedar,	800	.....	1200	800	200	800	350000	.....	400
Chestnut,	900	.....	.....	1000	250	800	500000	150	400
California Redwood,	700	.....	.....	800	200	750	350000	100	.....
California Spruce,	.....	.....	.....	800	.....	800	600000	.....	.....

橋梁及架臺用木材强弱表

Average Ultimate Breaking Unit Stresses in Pounds Per Square Inch.—Recommended by the Committee on Strength of Bridge and Trestle Timbers"-American Association of Railway Superintendents Bridges and Buildings.-Fifth Annual Convention, New Orleans, October, 1895,

Kind of Timber.	Tension.		Compression.			Transverse Rupture.		Shearing.	
			With Grain.						
	With Grain.	Across Grain,	Fnd Bearing	Columns under 15 Diams.	Across Grain.	Extreme Fitre Stress.	Modulus of Elasticity	With Grain.	Across Grain.
White Oak,	10000	2000	7000	4500	2000	6000	1100000	800	4000
White Pine,	7000	500	5500	3500	800	4000	1000000	400	2000
Southern, Longleaf, or Georgia Yellow Pine,	12000	600	8000	5000	1400	7000	1700000	600	5000
Douglas, Oregon and Wash-ington Fir or Pine, — Yellow Fir,	12000	.....	8000	6000	1200	6500	1400000	600	.....
Douglas, Oregon and Wash-ington Fir or Pine, — Red Fir	10000	.....	.....	.....	.....	5000	.....	.....	.....
Northern, or Short Leaf Yellow Pine,	9000	500	600	4000	1000	6000	1200000	400	4000
Red Pine,	9000	500	600	4000	800	5000	1200000	.....	.....
Norway Pine	8000	.....	600	4000	800	4000	1200000	.....	.....
Canadian (Ottawa) white Pine,	10000	.....	.....	5000	.....	.....	.....	350	.....
Canadian (Outario) Red Pine,	10000	.....	.....	5000	.....	5000	1400000	400	.....
Spruce and Eastern Fir,	8000	500	600	4000	700	4000	1200000	400	3000
Hemlock,	6000	.....	.....	4000	600	3500	900000	350	2500
Cypress,	6000	.....	600	4000	700	5000	900000	.....	.....
Cedar,	8000	.....	600	4000	700	5000	700000	.....	1500
Chestnut,	9000	.....	.....	5000	900	5000	1000000	600	1500
California Redwood,	7000	.....	.....	4000	800	4500	700000	400	.....
California Spruce,	.....	.....	.....	4000	.....	5000	1200090	.....	.....