

specimens might have been drier than the other, and was therefore deficient in the element of water, or that the shoulders of the weaker specimen, at the end at which the failure occurred, were not out very parallel with each other, and thus the greater part of the load might have been concentrated on one side.

c. As a result of the experiments, the average shearing strength of Douglas Fir in lbs. per square inch is 411.61, 377.14 or 403.605 according as the plane of shear is tangential, at right angles, or oblique to the annular rings.

In practice, therefore, it will be safe to adopt as the average coefficients of shearing strength for Douglas Fir. 400 lbs. per sq. inch for shears tangential and oblique to the annular rings, and 375 lbs. per sq. inch for shears at right angles to the annular rings.

Note.—The numbers in brackets at the end of the total shears in the following Table correspond to the numbers in the diagrammatic sections, and indicate the position in the stick from which the specimens are taken. The letter H designates a specimen taken from the heart.

