

DIVISION OF TIMBER TESTS

The major projects prosecuted by this Division during the year were as follows:

Mechanical and Physical Properties of Woods Grown in Canada. Object:

To determine, by means of an exhaustive series of mechanical and physical tests, the strength functions of Canadian commercial timbers.

The obtaining of reliable data involves the making of a very large number of tests, some five thousand of which were carried out during the year. Results are of great value in connection with the utilization of wood for every purpose in which strength is of importance and are of immediate application in industry. Data have now been obtained for practically all Canadian timbers of any commercial value but much work remains to be done before figures can be considered complete.

Glued Joints. Object: To investigate the effectiveness of glues of the various classes for joint work.

Some twenty-six commercial adhesives of the hide and casein classes were investigated during the year, the work including both mechanical tests on joints and physical determinations on the adhesives. Aging tests to secure information on the permanency of the adhesives were also undertaken. The leading woods employed in cabinet and furniture manufacture were used. Upwards of five hundred mechanical tests were made and the work will be continued.