

ROOF TRUSSES

The illustrations seen on page 93 show roof truss construction of the more unusual type either as regards length or appearance. The Grand Stand at Ottawa is situated on the Racecourse and is typical of light covered in structures for seating and shelter purposes. The curved trusses seen in the lower left hand cut are part of the roof of the Convocation Hall of Toronto University.

The other photographs show the Edmonton Stock Pavilion built during 1912. This building is 187 feet 5 inches wide (57.13 m) outside the walls and 315 feet 4 inches (96.11 m) long, and the main roof consists of 10 trusses, 8 of which are at 39 feet (9.11 m) centres and span as a double cantilever the whole width giving a clear central opening of 100 feet (30.5 m). They were designed so that the centre portion was carried as a suspended span seated on the overhanging arms of the cantilevers whilst the anchor columns were in the walls where the weight of the seating, etc., could be obtained to act against any possible uplift. The other two trusses one at each end were simple spans three to the width of the building. The photograph taken during construction shows the design of the long span roof trusses and the detail at the junction of the suspended span and cantilevers. Slotted holes were provided for excessive expansion or contraction but were bolted up to a fair tightness to secure some rigidity. The trusswork was fabricated in Lachine but the columns and framing in Winnipeg. The interior view shows the general pleasing appearance obtained by the use of a curved bottom chord.