square foot for bridges of Class C, irrespective of the length of bridge.

Dead Load. — The dead load is to include the weight of all the iron and wood in the structure, excepting that of those portions resting directly on the abutments, whose weights do not affect the stresses in the trusses; also, if necessary, an allowance for snow, mud, paving, or any other unusual fixed load that may ever be placed on the bridge.

Pine-lumber is assumed to weigh two and a half (2½) pounds per foot, board measure; and oak-lumber, four and a third (4½) pounds per foot, board measure.

Should, in any bridge of or below one hundred (100) feet span, the calculated dead load differ more than eight (8) per cent from that assumed, or in any bridge from one hundred (100) to two hundred (200) feet span, more than six (6) per cent, or in any bridge exceeding two hundred (200) feet span, more than four (4) per cent, the calculations of stresses, etc., are to be made over with a new assumed dead load.

Wind Pressure. — The wind pressure per square foot is to be assumed as forty (40) pounds for spans of one hundred (100) feet and under, thirty-five (35) pounds for spans over one hundred (100) and not greater than one hundred and fifty (150) feet, and thirty (30) pounds for all greater spans.

For bridges in unusually exposed situations, these pressures are to be increased by ten (10) pounds per square foot.

The total area opposed to the wind is to be determined by adding together the area of the vertical projection of the floor and joists, and twice the area of the vertical projection of the windward truss, hand rail, hub plank, guard rail, and ends of floor-beams.

Length of Span. — The length of span is to be understood as the distance between centres of end pins for trusses, and between centres of bearing-plates for all beams and girders.

Limiting Lengths of Span for Different Clear Roadways. — The greatest lengths of span for the different clear roadways are to be one hundred and forty (140) feet for twelve (12) foot roadways, one hundred and ninety (190) feet for fourteen (14) foot roadways, two hundred and sixty (260) feet for sixteen