**Limiting Sizes of Sections.** — No rods less than three-quarters (\(\frac{3}{4}\)) of an inch in diameter are to be used in a bridge. No channels less than five (5) inches in depth are to be used for upper chords, batter braces, or posts, or less than four (4) inches in depth for other members. No flat bars less than one-half (\(\frac{1}{2}\)) inch thick, or one and a half (1\(\frac{1}{2}\)) inches wide, are to be used for diagonals or chord bars; nor any iron less than one-quarter (\(\frac{1}{4}\)) of an inch thick anywhere in a bridge, excepting for filling plates.

**Expansion.** — All spans are to be provided with some means of expanding and contracting longitudinally, with a variation in temperature of one hundred and fifty (150) degrees Fahrenheit. Spans of over seventy-five (75) feet are to have at one end nests of turned wrought-iron friction rollers, running between planed surfaces.

**Anchorage.** — At least one end of every bridge must be anchored to the foundations. If the overturning moment of the greatest assumed wind pressure be more than half the resisting moment of the weight of the bridge, the latter must be anchored at the roller end also, but in such a manner as not to interfere with the expansion.

**Sliding.** — At the roller end of a bridge, if the frictional resistance to the sliding of the shoe in the direction of the axes of the rollers be not more than double the tendency to slide produced by the wind pressure, a resistance equal to the difference between this tendency and the frictional resistance with a factor of safety of four (4) must be provided.