

securing an improvement in outline. Still more significant is the fact that the saving is greatest when the curvature of the chords is most regular. Thus, Mr. Charles Macdonald, M. Am. Soc. C. E., points out* that investigations made in connection with the design of the Hawkesbury Bridge in New South Wales showed that a considerable saving would have been effected by the adoption of a regular curva-

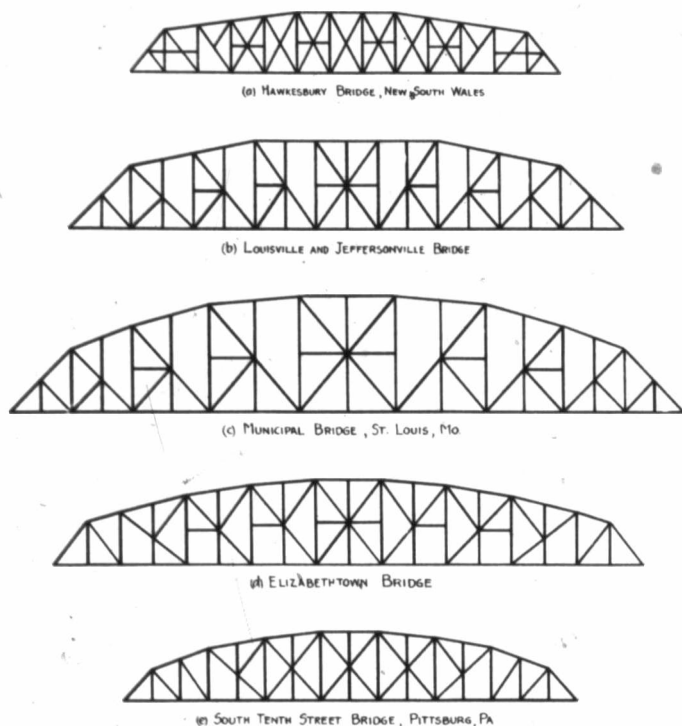


Fig. 20—Comparison of Trusses with Curved Top Chords.

ture for the top chords of the trusses instead of the broken outline as actually used (Fig. 20a). Certainly the appearance would have been greatly improved by a more regular curvature, and the same may be said of the trusses of the Louisville and Jeffersonville Bridge over the Ohio River, shown in Fig 20b, which are marred by the abrupt changes from the horizontal to the inclined sections of the

*Proc. Inst. C. E., Vol. CXLV, p. 235.