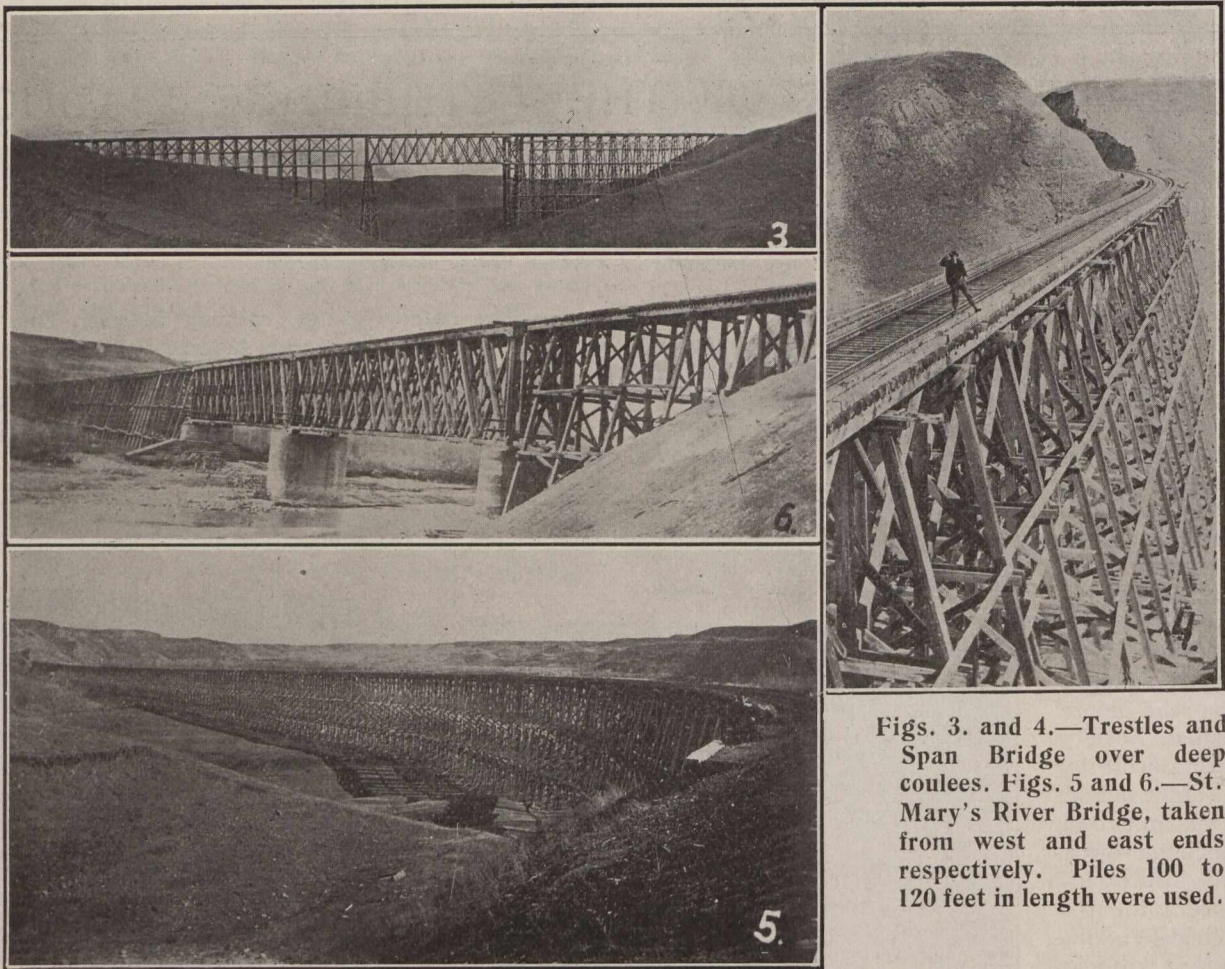


but in getting down to the adopted level for these, it was necessary to build other 18 trestles and trestle bridges across the mouths of deep coulees or valleys, which were tributary to the main valley or gorge. Some idea of these coulees and of the main gorge can be had from

in the majority of cases the problem of complete renewal was presenting itself. Contemplating the event of such a condition, the management of the company had extensive surveys made, covering several years, to determine whether any advantage could be had by the con-



Figs. 3. and 4.—Trestles and Span Bridge over deep coulees. Figs. 5 and 6.—St. Mary's River Bridge, taken from west and east ends respectively. Piles 100 to 120 feet in length were used.

Figs. 1 and 2, and of the trestles and bridges which were built from Figs. 3, 4, 5 and 6, the two last mentioned showing the crossing of the St. Mary's River, about twelve miles above Lethbridge.

Operating expenses on the old line were very heavy. The life of a great many of the old structures had almost expired, making the maintenance of these excessive; and

construction of any possible alternative line, and finally one located by F. M. Young, Esq., M.Can.Soc.C.E., now engineer in charge of construction on the Kootenay Central Railway, approximately $31\frac{3}{4}$ mi. long, with a gradient of 0.4 per cent., was chosen. On this line were two heavy high-level crossings—one over the Belly River at Lethbridge, and the other over the Old Man

