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ERECTION METHODS, BLOOR STREET VIADUCT, TORONTO

BRIEF REVIEW OF METHODS ADOPTED BY THE HAMILTON BRIDGE WORKS CO., LIMITED, IN ERECTING THE SUPERSTRUCTURE OF THE DON SECTION.

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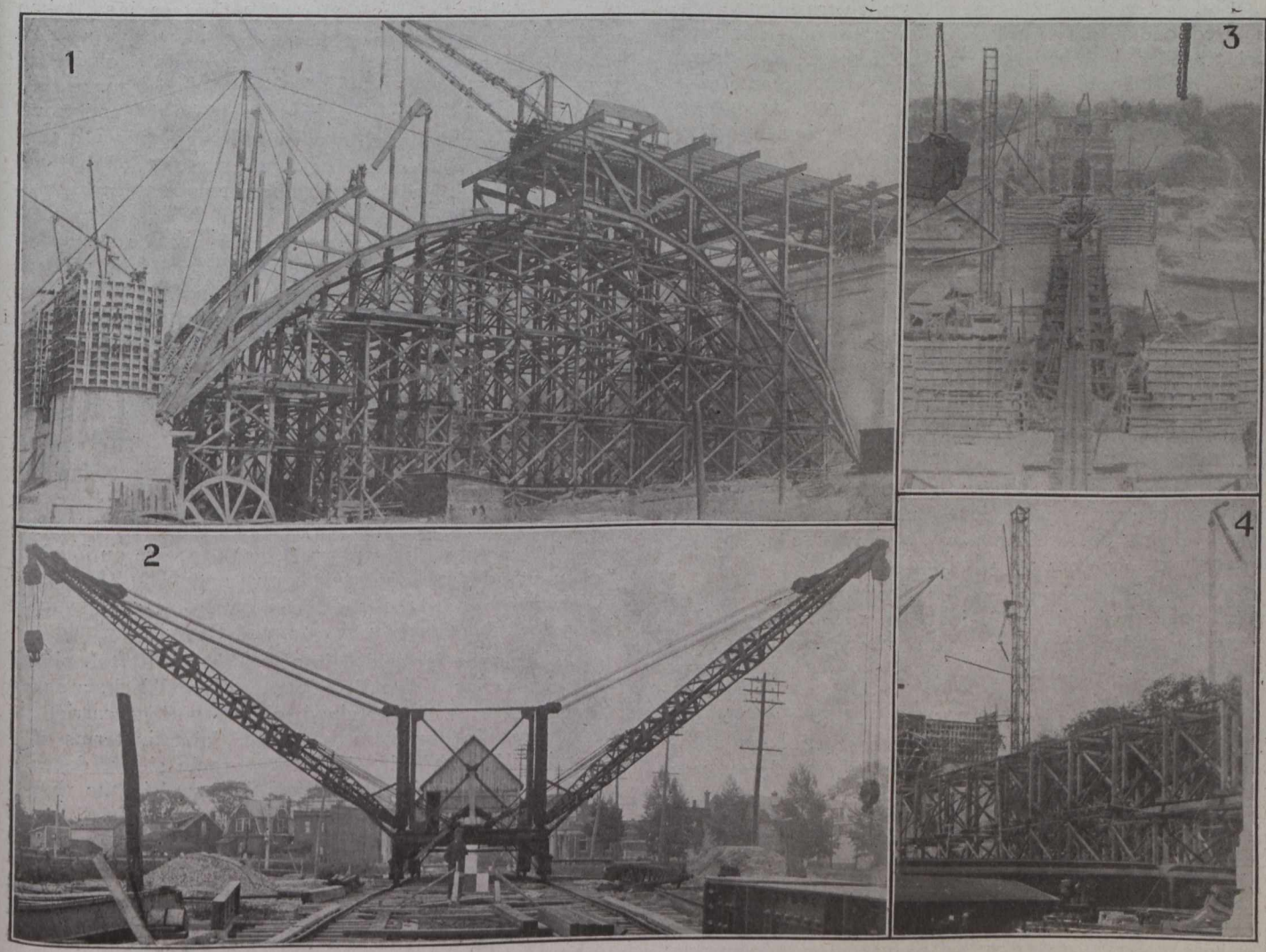
THE bridge forming the Don Section of the Bloor Street Viaduct, Toronto, comprises five three-pin arch spans and two approaches, double-deck type, with a maximum width for sidewalks of eighty-six feet. The general design of this bridge, and also of the bridge forming the Rosedale Section of the viaduct, has been previously covered in *The Canadian Engineer*—in the issues of October 29, 1914, December 17, 1914, December 16, 1915, and September 28, 1916.

The unloading of material at the east end of the bridge was a comparatively simple matter, owing to the close proximity of the Canadian Pacific Railroad tracks. The material was handled at this point by a 20-ton guy derrick which was afterwards used in the same position to erect steel on the west side of the 158-ft. span.

At the west end of the bridge the nearest railroad track was 700 ft. from the west abutment. Steel for the west approach, to the amount of 450 tons, was unloaded and transported by an aerial cableway to a point beyond the west abutment at an elevation 125 ft. above the level of the tracks.

As many of the sections on the west 158-ft. and 240-ft. spans weighed from 11 tons to 17 tons, the material for these two spans was unloaded in the manner indi-



1—Grey derrick helps traveller in erection of steel; 2—Type of traveller used; 3—Temporary track for conveying materials; 4—Crane lifts material onto trucks at unloading point.