is 30 ft. The bridge has a rise towards the centre of 2 ft. 6 in. The superstructure consists of a wrought-iron continuous girder supported at intervals of 40 ft. upon piers formed of iron piles. The main girders are 3 ft. 6 in. deep, with webs ½ in. thick, and top and bottom flanges 12 in. by ½ in. The flanges of each girder are joined to the web by pairs of 3 in. by 3 in. by ½ in. angle irons. The girders are firmly bolted to the three centre piers, and ride on the remainder on expansion rollers. They also rest on expansion rollers at the two abutments. Ornamental cast-iron brackets are introduced at the angles formed by the piers and girders, as represented in Fig. 2 on the present page.

The transverse girders, which are placed 6 ft. 8 in. apart from centre to centre, are of wrought iron, 14 in. deep, with ½ in. webs, and top and bottom flanges, each formed of a pair of ½ in. by ½ in. angle irons. The platform is of Memel planking, 3 in. thick, carried by short longitudinal beams, 11 in. deep by ½ in. thick, the ends of which are inserted between the flanges of the transverse girders. The platform was covered with a thick coating of asphalt before the metalling was put on.

The abutments are of red brick, with ashlar caps and string courses. Their face walls are 3 ft., and the wing walls 2 ft., thick at the top, with a batter of 1 in 8. The piers are each composed of two screw piles, as shown in

Figs. 1 and 2 on the present page. In order to guard against the action of ice, &c., the lower portion of each pile, up to about 5 ft. above the water-level, is made of wrought-iron plate ½ in. thick. This lower portion of each pile is 1 ft. 8 in. in diameter outside, and it is filled in with concrete. The upper portion of each pile, which is of cast iron, is 10 in. in diameter and ½ in. thick. The transverse girders connecting the piles are 12 in. deep, and the cross bracing of the lower portions of the piles consists of 4 in. by 4 in. by ½ in. angle irons, and that of the upper portions of flat bars 4 in. by ½ in. The piles are screwed down into the bed of the river to depths of from 6 ft. to 10 ft.

The contract price for the bridge was, as we have already stated, 2520L, a remarkably low one for the work done, and only explicable from the fact of the contractors being large iron manufacturers as well as ex-