

CAST IRON BRIDGE

at Upper Clatford, Nr. Andover, Hampshire
(Grid Reference 358 435)

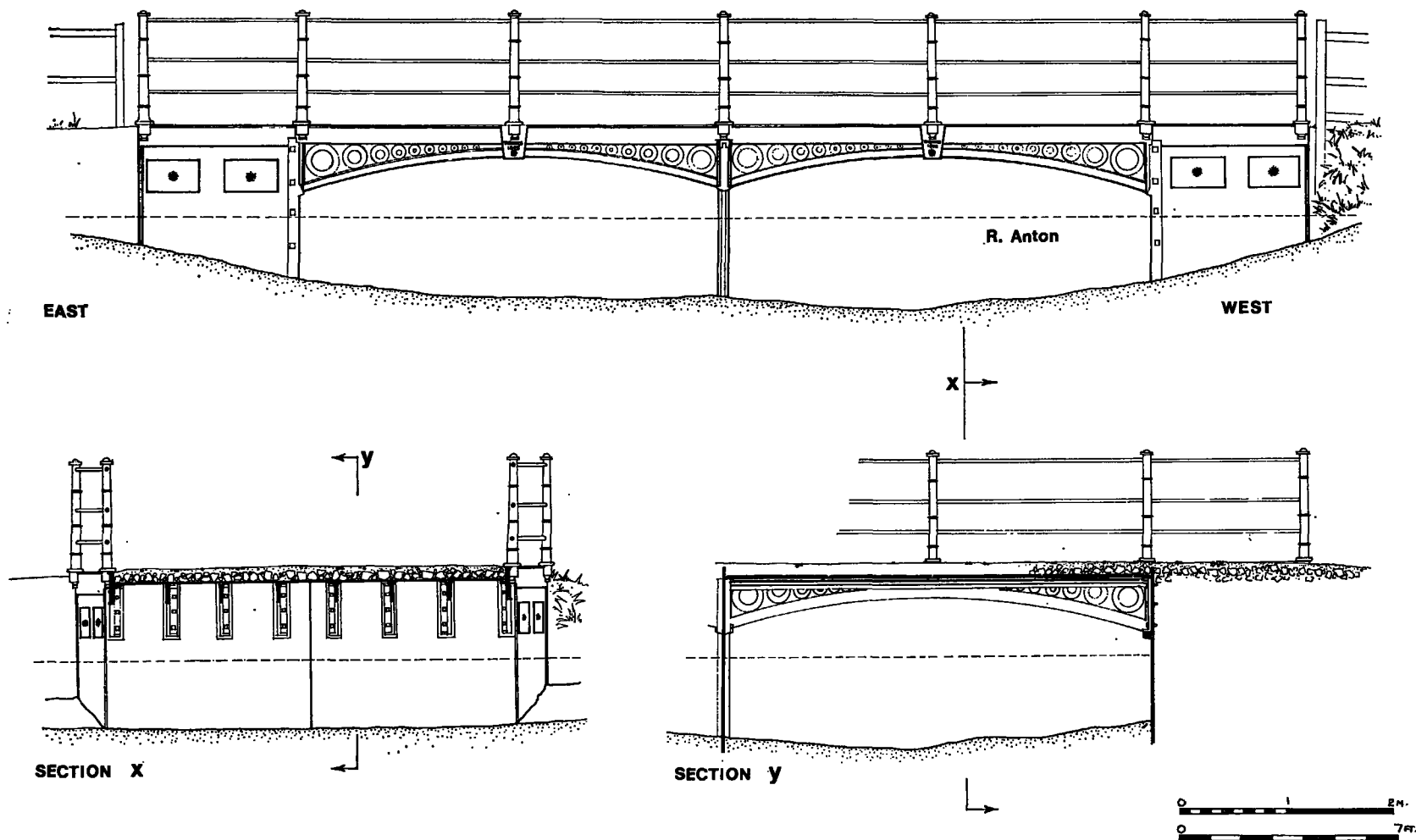
By RICHARD WARMINGTON

BEFORE the development of large-scale industrial concerns producing extensive ranges of standardised components and 'Package Deals', a wide variety of goods had to be manufactured as best possible by small local industry. Thus, in relatively rural regions, manufacturers were often required to produce a 'one-off' item for a particular purpose. It was not until the growth of the railway system in the middle and later nineteenth century, that rural regions could become more independent of local resources.

Northern Hampshire was almost entirely unaffected by late eighteenth and early nineteenth century industrial developments, apart from the founding of a few small ironworks to manufacture agricultural implements. These concerns soon found that they were called upon to undertake a wide range of work besides agricultural equipment. The Waterloo Ironworks were established by William Tasker at Anna Valley, Andover, nominally for the production of agricultural equipment. However, by the later decades of the nineteenth century, Taskers were specialising in the manufacture of traction engines.

Like most rural ironworks, Taskers were quite prepared to try their hand at almost anything. In 1843 a small bridge was cast at the Waterloo Ironworks. This was designed to carry a road across the relatively shallow river Anton to the east of Upper Clatford. It probably replaced a timber structure on that site. The cast iron bridge survives intact and in everyday use and is in an excellent state of preservation.

The entire structure is of cast iron and the extremely graceful and delicate construction must indicate a competent and highly-skilled designer. The road is carried by two separate arches, each 4 m. in span, springing from a slender midstream support to abutments on each bank. The roadway is 4 m. wide, built over cast iron plates. These are in turn supported by the eight cast iron arches that form each span. The arches describe graceful, shallow curves; they have solid flanges and the spandrels are filled by an attractive design of perforated discs. The flanges forming the ends of the arch members slot into boxes cast onto the plates of the abutments. The outside arch spans have an extended upper flange terminating in a simple moulding, and contain the edge of the road metalling. The road has handrails supported by cast iron columns. These columns slot into decorative semi-circular boxes cast onto the outer faces of the extended upper flanges of the outside arches. The columns are of circular section, tapering slightly to a simple cap, and perforated to take three horizontal rails. The rails are all solid section, 30 mm. diameter, and the uppermost forms the actual handrail. The columns are symmetrically placed along each side of the bridge; over the crowns of the arches, the midstream support, and at each end of the abutments. At the crowns of the outside arch castings, plaques with the title 'Taskers' and, under it the date 1843 and a decorative rosette, are still perfectly preserved. The abutments on each bank are



CAST IRON BRIDGE at Upper Clatford, Andover
Cast 1843 at Taskers Ironworks

Fig. 31.

MEASURED & DRAWN BY R. WARMINGTON 1870.

CAST IRON BRIDGE

formed from large cast panels, the side elements of which each have two decorative panels with a rosette in the centre of each.

Practical production economics necessitated that the bridge be fabricated from a minimal number of castings. The total number of castings actually required were ten, and the greatest number of casts from one mould were the 12 inner arch members, and the flat plates to support the road. The bridge remains unchanged since first erected, and the ironwork is in perfect condition. In fact, only the road metalling is modern. The excellent craftsmanship illustrates the high standards that a small rural ironworks could achieve at this date.

The drawings illustrate the elevation and section of the bridge and the method of fabrication which still maintains the structural stability of the bridge despite the loads it is now subjected to. It remains a graceful and enduring monument to the designer and craftsmen of Waterloo Ironworks in the 1840's.

DETAILS

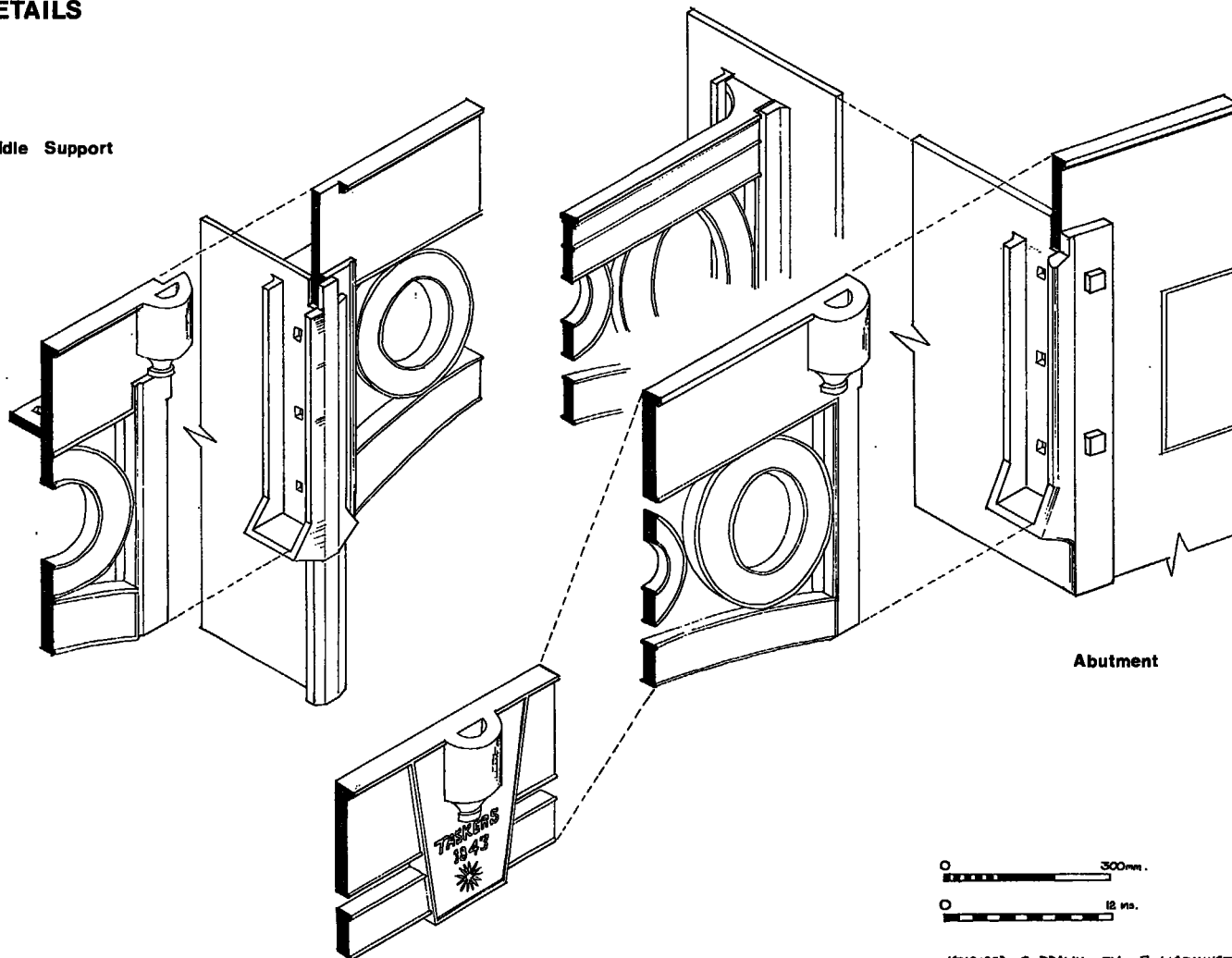
Middle Support

Abutment

PROCEEDINGS FOR THE YEAR 1971

80

Fig. 32.



MEASURED & DRAWN BY R. WARMINGTON 1970