

## **The Coalbrookdale Iron Bridge – the transition from wood to cast iron**

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You can get close to the joints and see the dovetails and wedges, the language of the carpenter translated into cast iron. Recent research has provided further answers as to how the 1779 Iron Bridge was cast and erected and how mistakes were accommodated. Mould-makers' marks and carpenters' marks provide clues about the process and archival material has confirmed some of the dating. There was even a vibration experiment carried out on one of the major castings before assembly. One built a concerted advertising campaign brought widespread awareness of the structure, yet it resulted in few new commissions until scepticism about this untried material for civil engineering was finally squashed when the Bridge withstood a major flood some 16 years after it was erected. Spans increased and weights were reduced from 1796 onwards, and although cast iron became a standard bridge material for the next 50 years, the timber technology of Coalbrookdale proved to be a blind alley.

David de Haan was the lead author of the Conservation Plan for the Iron Bridge and it is being used to guide the major conservation programme being undertaken during 2017.

Theme: 'Materials and technologies of bridges'