

illustrated in pl. V, not in pl. IV. The overall view of cat. no. 51 in pl. XI has received an inaccurate number, no. 516.

The catalogue is followed by the bibliography, notes, plates of illustrations, and indices of literary and epigraphical sources, indices of museums and objects mentioned in the text, as well as a list of sources of illustrations.

Despite the minor flaws mentioned above, this book is an excellent source for everyone interested in Roman art, as well as for specialists studying Roman portraits. The publication is also a valuable chronological study on the development of the imperial cult.

*Arja Karivieri*

COLIN O'CONNOR: *Roman Bridges*. With photographs, sketches and diagrams by the author. Cambridge University Press, Cambridge 1993. ISBN 0-521-39326-4. xvii, 235 p. GBP 65.

This handsome book on Roman bridges is written by an engineer who has himself worked on bridge design over many decades and who has since the 1970s done extensive research on the history of bridges. It was then that he began to collect material for a systematic study of historic bridges, and where else could one start but with Roman bridges? The project was, however, considerably delayed because in the 1980s the author was invited to study and record Australia's historic bridges. A further reason for O'Connor to have written this book is his personal experience. As a pious Christian he became thoroughly impressed by the idea that Paul on his way from Jerusalem to Rome had used the existing Roman road system which, of course, included bridges as well. Thus O'Connor takes a study of Roman roads as a part of the background of Christian church history.

After a general history of Roman bridges, the study focuses on the builders of bridges, building technology, masonry bridges, timber bridges, aqueducts, design and construction of Roman arches. A thorough listing and description of all known bridges includes some 330 stone arch bridges, 34 timber bridges and 94 aqueducts. The final chapters are important as they examine the proportion of the stone arches and subject the rules that emerge to modern structural analysis. The work concludes with useful appendices including a glossary of technical terms and three tables which survey a great number of various types of bridges with detailed technical data. The index of place-names from all over the Roman empire is particularly impressive, considering that the author himself is responsible for most of the photographs printed in the book. The frontispiece of the book is decorated by a beautiful reconstruction of the Ponte d'Augusto at Narni, drawn by the author himself. Anyone who has personally seen the remains of this bridge on the Via Flaminia will surely be impressed by the elegant touch of O'Connor's pencil.

*Mika Kajava*