PRACTICAL CENTRING, TREATING OF THE PRACTICE OF CENTRING ARCHES IN BUILDING CONSTRUCTION AS CARRIED ON IN THE UNITED STATES AT THE PRESENT TIME: ALSO GIVING OTHER USEFUL INFORMATION OF VALUE TO THE TRADE

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Practical centring, treating of the practice of centring arches in building construction as carried on in the United States at the present time: also giving other useful information of value to the trade by Owen B. Maginnis

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### OWEN B. MAGINNIS

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# PRACTICAL CENTRING

TREATING OF THE PRACTICE OF

## CENTRING ARCHES

In Building Construction as carried on in the United States at the Present Time

ALSO

GIVING OTHER USEFUL INFORMATION OF VALUE
TO THE TRADE

BY

OWEN B. MAGINNIS

SIXTY-FIVE ILLUSTRATIONS

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### INTRODUCTION.

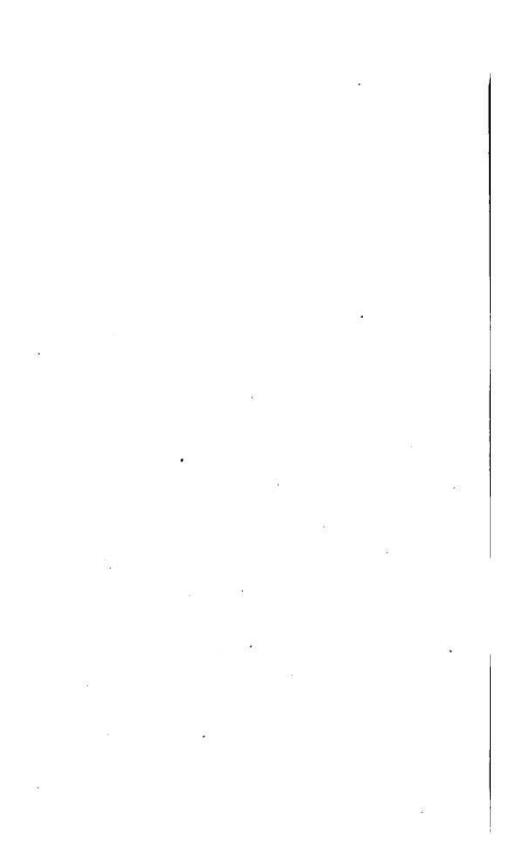
In response to a request from many carpenters and builders to republish in book form the following articles, which originally appeared in Carpentry and Building, The National Builder, and The American Builder, all published in the United States, and in the Illustrated Carpenter and Builder, published in London, England, I now take pleasure in putting forth this little volume, with the hope that they will find it useful.

The work embraces each subject in detail, and in language that practical men can understand. I would especially commend it to the attention of students attending trade, technical, and architectural schools, as they will find it helpful in acquiring the practical knowledge of construction so essential to success.

My best thanks are due to the builders, from whom I have obtained much of my information; also to the publisher, who has gotten up the book in a form to be a useful addition to the chest or book-shelf of every rising worker in the trade.

OWEN B. MAGINNIS.

NEW YORK, 1891.



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## PRACTICAL CENTRING.

#### CHAPTER I.

PRACTICAL CENTRING.—CENTRES OF FIREPLACES OR BRICK LINTELS.
—CENTRES FOR SEGMENTAL ARCHES OF SMALL SPAN, SHOWING METHODS OF CONSTRUCTION.

ENTRING may be described as an auxiliary art employed by masons in building construction for the purpose of sustaining temporarily the voussoirs, or pieces of stone or brick which form an arch, holding them in their correct position until the last, or keying piece, is inserted, and the whole arch has had time to settle into place. The temporary supports used are called "centres," and are usually supplied by the carpenter. It devolves upon him to put them in correct position under the intended arch whenever required by the mason. Centres, accordingly, must be constructed of correct shape, and in a way to have sufficient strength, both by nature of the form and the material employed, to resist the weight which is to be placed upon them. The centres must be firmly fixed in place, and yet, as they are only for temporary use, provision must be made for gradually lowering them for the purpose of taking them out when they have fulfilled their mission. There are many kinds of centres required for the different designs of arches which are constructed, reaching from the simple brick lintel to the complex groin. All of these demand care in their design and construction.

In an attempt to illustrate principles and show methods of construction I will commence at the simplest form—