

**KING'S SERIES IN
WOODWORK AND
CARPENTRY.
CONSTRUCTIVE CARPENTRY**

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King's Series in Woodwork and Carpentry. Constructive Carpentry by Charles A. King

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CHARLES A. KING

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CONSTRUCTIVE CARPENTRY

BY

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KING'S SERIES IN WOODWORK AND CARPENTRY

ELEMENTS OF WOODWORK
ELEMENTS OF CONSTRUCTION
CONSTRUCTIVE CARPENTRY
INSIDE FINISHING
HANDBOOK FOR TEACHERS

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TO THE
LIBRARY

PREFACE TO THE SERIES

THIS series consists of five volumes, four of which are intended as textbooks for pupils in manual-training, industrial, trade, technical, or normal schools. The fifth book of the series, the "Handbook in Woodwork and Carpentry," is for the use of teachers and of normal students who expect to teach the subjects treated in the other four volumes.

Of the pupils' volumes, the first two, "Elements of Woodwork" and "Elements of Construction," are adapted to the needs of students in manual-training schools, or in any institution in which elementary woodwork is taught, whether as purely educational handwork, or as preparatory to a high, or trade, school course in carpentry or vocational training.

The volumes "Constructive Carpentry" and "Inside Finishing" are planned with special reference to the students of technical, industrial, or trade schools, who have passed through the work of the first two volumes, or their equivalent. The subjects treated are those which will be of greatest value to both the prospective and the finished workman.

For the many teachers who are obliged to follow a required course, but who are allowed to introduce supplementary or optional models under certain conditions, and for others who have more liberty and are able to make such changes as they see fit, this series will be found perfectly adaptable, regardless of the grades taught. To accomplish this, the material has been arranged by topics, which may be used by the teacher irrespective of the sequence, as each topic has to the greatest extent possible been treated independently.

The author is indebted to Dr. George A. Hubbell, Ph.D., now President of the Lincoln Memorial University, for encouragement and advice in preparing for and planning the series, and to George R. Swain, Principal of the Eastern High School of Bay City, Michigan, for valuable aid in revising the manuscript.

Acknowledgment is due various educational and trade periodicals, and the publications of the United States Departments of Education and of Forestry, for the helpful suggestions that the author has gleaned from their pages.

The illustrations in this Series, with the exception of the photographs in "Elements of Woodwork" and "Elements of Construction," are from drawings made by the author.

BAY CITY, MICHIGAN.

CHARLES A. KING.

PREFACE TO CONSTRUCTIVE CARPENTRY

BEFORE undertaking the work included in the following pages, the student should have passed through that contained in "Elements of Woodwork" and "Elements of Construction," or their equivalent.

In preparing the material for this book, it has been the author's first purpose to arrange and present the subjects in such a manner that they will be easily adaptable to use in technical schools for students of architecture and engineering, and in trade and industrial schools for the teaching of the principles and methods of building construction, to students who plan to make carpentry a means of livelihood.

The matter as arranged has special reference to the laying out and planning of the construction of wooden buildings, for the foreman as well as for the one who is to work under his direction. The important problems met with in preparing a house for the inside finish are discussed, and the relation between the carpenter and other mechanics is explained.

The teacher should see that there is a select library for the use of the students, including the leading trade periodicals, from which should be selected subjects for discussion, research, and essays bearing upon the different stages of the work.

The method of teaching the use of the steel square was devised by the author to meet classroom conditions; the formulas and instruction given may be applied to any pitch or plate angle or to any combination of them.

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