

# Practical Sheet Metal Duct Construction

A Treatise in the Construction and  
Erection of Heating and  
Ventilating Ducts

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Illustrated by Two Hundred and Seven-  
teen Engravings, Mostly from  
Pen and Ink Drawings

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## INTRODUCTORY

The modern demand for economy and efficiency in methods of production have given a strong impetus to specialization in the various branches of sheet metal work. In the larger cities are found very many shops that contract exclusively for heating and ventilating, exhaust pipes and ducts, etc. Only the well equipped, well-manned plant and only the skillful operator thoroughly familiar with his special calling, can readily take advantage of the opportunities presented in this large field.

Many excellent books have been prepared for the guidance of operators in various distinct branches of sheet metal work but none has heretofore been designed to cover the subject of heating and ventilating duct construction. The plan of the present work is to take up each operation, and by means of descriptions, with in nearly all cases accompanying illustrations, to show all operations incident to the construction and erection of heating and ventilating ducts. The reader may thus be equipped with a complete series of practical methods, available almost at a glance.

It should be stated that the operator whose business it becomes to install heating and ventilating pipes should thoroughly understand reading architectural plans such as are used in building construction; that is, he should be familiar with the methods by which the various means used in heating and

ventilation are indicated upon plans, elevations and sections, as the furnaces, blowers, steam pipes and coils, air ducts, registers, ventilators, smoke flues, etc., as well as with the usual locations of the same, so that he may trace the courses of ducts and pipes from basement up through the several floors, locating bends, risers, junctions, etc. He should also understand the methods of calculating capacities of ducts and amount of heating surface of pipes and coils and the requirements of the same, as well as areas of wall and glass surfaces with reference to the heat units required. It may be said that the best way of learning how to read plans is to learn how plans, sections, etc., are made. This is a subject which is taught in all technical schools and in courses given by correspondence. Any attempt to illustrate this subject as it should be done, would involve the presentation of at least one complete set of heating engineers' plans, while it is to be doubted if one set, as designed for any particular case, would include everything usually indicated upon plans made for this purpose.