

**THE PRINCIPLES OF
VENTILATION AND
HEATING AND THEIR
PRACTICAL APPLICATION**

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The Principles of Ventilation and Heating and Their Practical Application by John S. Billings

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BY

JOHN S. BILLINGS, M. D., LL. D. (Edinb.)

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PREFACE.

DURING the years 1880-'81-'82, the writer contributed to the SANITARY ENGINEER a series of papers entitled "Letters to a Young Architect on Ventilation and Heating." These letters were originally prepared to meet current demands, and to answer questions sent to the journal, and had, therefore, no special connection with each other. The following work contains the substance of these papers, the whole being re-arranged and in part re-written, and new matter and illustrations being added. It is not intended to be a systematic manual on ventilation and heating for the instruction of the skilled architect or engineer, but rather to present the general principles which should guide one in judging of the merits of various systems of, and appliances for, ventilation, more especially as applied to large public buildings, with some illustrations of their practical application, and this has been done as far as possible without the use of technical expressions, or of any but the simplest mathematical formulæ.

The number of queries from architects, physicians and others, which appear from time to time on this subject, is sufficiently great to warrant the belief that there is a demand for an explanatory work on the subject, and it is hoped that this volume may serve to meet the want.

WASHINGTON, D. C.,
May 1st, 1884.



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