

**BOILER TESTS; EMBRACING THE
RESULTS OF ONE HUNDRED AND
THIRTY-SEVEN EVAPORATIVE TESTS,
MADE ON SEVENTY-ONE BOILERS,
CONDUCTED BY THE AUTHOR**

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Boiler tests; embracing the results of one hundred and thirty-seven evaporative tests, made on seventy-one boilers, conducted by the author by Geo. H. Barrus

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GEO. H. BARRUS

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BY

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PREFACE.

This book relates to a large number of evaporative tests, which were conducted personally by the author. The substance of Parts I and II, which form the body of the work, was originally prepared at the request of the New England Cotton Manufacturers' Association, and embodied in a paper, which was read to that Society. A few copies of the paper were reprinted from the Transactions of the Association, and furnished to parties interested in the subject. The supply of these was quickly exhausted. The favor with which the paper was received, not only by members of the Association, but also by those who have been supplied with the reprints, led to its publication in the present form. In the revised work the arrangement and numbering of the various boilers have been changed, and cuts have been introduced to show the general features of the boilers tested. An index has also been added. These changes supply what was lacking in the paper as first prepared, and give to the work that degree of completeness which is desired in a book of reference.

The author has made, in later tests, investigations of the heating power of various fuels, determining the heat of combustion, for this purpose, by the use of a coal calorimeter. It has been thought desirable, in view of the bearing which these investigations have upon the general subject of boiler tests and the combustion of fuel, to give a brief account of the work in connection with the tests under consideration, and this has been done in the Appendix. There is also presented

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in the Appendix a portion of the author's paper on "A Universal Steam Calorimeter," which is added partly on account of its bearing on the subject, and partly because it has, in the author's later tests, taken the place of the Superheating Calorimeter, referred to in Part I.

The book is offered to the public in the belief that it is of considerable interest and value to steam engineers, manufacturers, and any persons who are concerned, either directly or indirectly in the burning of coal and the economical generation of steam.

GEO. H. BARRUS.

95 MILK ST., BOSTON,
May, 1891.

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PART I

