

# **INTRODUCTION TO A HISTORY OF IRONMAKING AND COAL MINING IN PENNSYLVANIA**

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Introduction to a History of Ironmaking and Coal Mining in Pennsylvania by James M. Swank

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**JAMES M. SWANK**

**INTRODUCTION TO A  
HISTORY OF IRONMAKING  
AND COAL MINING IN  
PENNSYLVANIA**



*Francis Laird*

INTRODUCTION

TO A HISTORY OF

IRONMAKING AND COAL MINING

IN PENNSYLVANIA.

CONTRIBUTED TO THE FINAL REPORT OF THE PENNSYLVANIA  
BOARD OF CENTENNIAL MANAGERS.

BY

UNIV. OF  
CALIFORNIA

JAMES M. SWANK,

SECRETARY OF THE AMERICAN IRON AND STEEL ASSOCIATION.

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## PREFACE.

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THE following chapters were written during the summer of 1877, at the request of the Pennsylvania Board of Centennial Managers, to accompany their final report to the Pennsylvania Legislature, and are believed to possess sufficient value to justify their publication in a form which will make them accessible to the general reader. They were written amid the pressure of other duties, and it is possible that the critical reader will detect some errors of statement and some omissions of important facts which in his charity he may concede would not have occurred if the author had been a gentleman of leisure, as every true historian ought to be, intent on doing one piece of work at a time and doing it well. I am, however, not conscious of any lack of enthusiasm or industry in the performance of a really difficult and laborious task.

That there may be no misunderstanding, I wish distinctly to impress upon the mind of the reader the fact that I have not attempted to write a complete history of ironmaking and coal mining in Pennsylvania, but have assumed only to write such an introduction to their history as will contain a record of the principal events which mark the beginning of these two great industries of our State, and mark, also, the leading events in their subsequent development. Beginning with their beginning, I end with the progress they had made down to 1876, but only glance at the great gap between. Otherwise stated, the scope of the following pages embraces a statement of the first enterprises in iron-making and coal mining in Pennsylvania, a reference to significant periods of their development, and a summary of ultimate results. Greater amplitude and detail could only have been possible by completely changing the plan upon which the two essays had been projected. I have undertaken to preserve only that part of the history of our iron and coal industries that is of most value and is in most danger of being lost.

To those who would have been gratified to see in this volume a description of existing ironworks in Pennsylvania, it is proper that we should say that the American Iron and Steel Association published in 1876 a complete list of all such enterprises in the United States, which list is now being revised for publication in the spring of the present year.

In the preparation of the chapters which follow I have consulted all accessible printed sources of information which were deemed authentic, and, in addition, I have personally or by letter communicated with many persons who were likely to possess information concerning our early ironmaking and coal-mining enterprises. Upon many of the subjects treated of in connection with the history of early ironmaking in Pennsylvania, as, for instance, the first iron rails made in the United States, there was absolutely no literature to consult, and great difficulty was experienced in obtaining reliable facts from living ironmasters, family records, or other private sources.

I have been greatly aided by the polite and sympathetic attention of the gentlemen in charge of the library of the Historical Society of Pennsylvania, who have afforded me every desired facility for the examination of historical data contained in colonial records, old maps, local histories, and biographical sketches.

I have freely consulted in the library of the American Iron and Steel Association such standard historical and statistical works as Charles E. Smith's *Statistics of Iron Manufacture in Pennsylvania*, (1850); J. P. Lesley's *Iron Manufacturer's Guide*, (1857); Joseph Scott's *Geographical Description of Pennsylvania*, (1806); Sherman Day's *Historical Collections of the State of Pennsylvania*, (1843); Thomas F. Gordon's *Gazetteer of the State of Pennsylvania*, (1832); Dr. William H. Egle's *Illustrated History of the Commonwealth of Pennsylvania*, (1876); Dr. J. Leander Bishop's *History of American Manufactures*, (1861); J. H. Alexander's *Report on the Manufacture of Iron*, (1840); Harry Scrivenor's *Comprehensive History of the Iron Trade*, (London, 1841); Daddow & Bannan's *Coal, Iron, and Oil*, (1866); Walter R. Johnson's *Notes on the Use of Anthracite*, (1841); etc., etc. I have quoted freely from the Annual Reports of the Secretary of the American Iron and Steel Association for 1876 and 1877. Mr. Robert W. Hunt's paper on the "History of the Bessemer Manufacture in America," and the paper of my deceased friend, Mr. William Firmstone, entitled a "Sketch of Early Anthracite Furnaces," both papers contained in the *Transactions of the American Institute of Mining Engineers*, (1875 to 1877), have been carefully studied. I have also examined Hon. Abram S. Hewitt's lecture on the *Statistics and Geography of the Production of Iron*, (1856); B. F. French's *History of the Rise and Progress of the Iron Trade of the United States*, (1858); and John B. Pearse's *Concise History of the Iron Manufacture of the American Colonies and of Pennsylvania*, (1876). Mrs. Isabella James's *Memorial of Thomas Potts, Junior*, was of great service to me, because of the reliable documentary references to colonial ironmaking which are contained in it. I am also under obligations to this lady for some suggestions of value in connection with the same period of our iron history.

Although it is impossible in a brief preface to mention the names of all the friends who have aided me, verbally or in writing, in obtaining information, there would seem to be a special propriety in mentioning the fact that in my search for reliable data I have not limited my inquiries to our own country, but have been honored by a correspondence with two distinguished Englishmen, Mr. R. F. Mushet, concerning his share in perfecting the Bessemer Process, and Dr. C. W. Siemens, concerning his invention of the Gas Furnace and Direct Process. I name these gentlemen to show to the reader that wherever it has been possible I have gone to the fountain-head for information.

The publication of the report of the Pennsylvania Board of Centennial Managers having been delayed until February, 1878, owing mainly to the illness of their Secretary, Alexander C. Mullin, Esq., as a matter of propriety the contributions to that report which are contained in this volume could not be published until now, although written several months ago.

JAMES M. SWANK.

OFFICE OF THE AMERICAN IRON AND STEEL ASSOCIATION,  
No. 205 SOUTH FOURTH STREET, PHILADELPHIA, FEBRUARY 15, 1878.



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