



# ADVENTURE IN IRON

*The blast furnace and its spread from Namur to northern France, England and North America, 1450-1640; a technological, political and genealogical investigation.*

by Brian G. Awty

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*This remarkable piece of scholarship, the result of more than 20 years' research in British and continental archives, traces the spread of iron-making through the families of the skilled personnel who operated the furnaces and forges from late-medieval Belgium via northern France and Britain to colonial America.*

The introduction of water-powered bellows in the manufacture of iron during the Middle Ages brought about a radical technological change. The taller furnace resulted in greater efficiency, with a much greater proportion of the iron extracted from the ore, but at least some of the iron produced was contaminated by carbon, and this cooled into a brittle cast iron, an apparently useless by-product, quite different from the intended wrought iron.

Gradually it became evident that cast iron could be put to use, like other metals such as lead and tin, by running it into moulds. At the same time a variety of techniques to 'fine', or eliminate its impurities were tried, so that useful wrought iron might again become the end product. The blast furnace was among the new processes that evolved. However, a satisfactory way of fining cast iron in large quantities, and making the 'indirect method' of iron production more practicable, evolved only in the 1440s.

Such developments could not be accomplished without

the craftsmen who were prepared to leave their homes and travel over land and sea, bringing with them skills which were handed down, sometimes across several generations, their techniques often being modified and improved in the process. These people are the heroes of this study.

In the very earliest period we know many of their names because it was to them that the leases of works were made, without the intervention of merchants or other procurers of capital. Although after around 1500 the names of technicians were replaced in leases and lawsuits by the names of forgemasters, often drawn from the ranks of landowners and merchants, the names of many of the individual workmen who carried the industry to England from northern France are preserved, found in the rolls of denization (naturalization) in the 1540s, when the threat of war with France made it expedient to order foreign nationals to become naturalized, or to quit the realm.

*An important new source for Social and Economic Historians, Genealogists, Archaeologists, and Local and Family Historians in the British Isles, Western Europe and North America.*

For further information, including detailed contents, list of families and sample pages, go to [www.wealdeniron.org.uk/publications/adventure-in-iron/](http://www.wealdeniron.org.uk/publications/adventure-in-iron/)

## ADVENTURE IN IRON

By Brian G. Awty

To be published in 2 Volumes at about £60  
by the Wealden Iron Research Group in 2018

Case bound	14 Illustrations (black and white)
Approximately 900 pages	21 maps of ironworking sites
Detailed Contents pages	Footnotes and Bibliography
2 Appendices	General and Persons Indexes

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### *Chapter Titles*

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APPENDIX 1: Ironworkers listed in the denization rolls of 1541 and 1544

APPENDIX 2: Aliens in Lay Subsidy rolls of the Weald, 1524-1595

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*A major focus of this work is the tracing of the families of ironworkers, all with continental origins, and of their changing roles in the furnaces and forges where they were employed. Names such as Blewett, Diamond, Gringo, Hunnisett, Lavender, Leonard, Maybury, Message, Perigoe, Pinion, Ponting, Pray, Quintin, Tully, Tyler and Vinton are just a few of the more than 400 families described.*

**For a full list of the families described, together with further information about the book, go to [www.wealdeniron.org.uk/publications/adventure-in-iron/](http://www.wealdeniron.org.uk/publications/adventure-in-iron/)**

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### ABOUT THE AUTHOR

Brian Awty was born in Yorkshire in 1925. After war service he gained a degree in German and Spanish at University College, London, before working as an archivist and librarian, latterly at the London School of Economics. He contributed nearly 40 papers to learned journals, including two in French. He died in 2013.

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