was absent from his state funeral. This was organised by William Dethick, who as Garter King of Arms was necessarily involved in the obsequies of a Garter Knight. The authors consider that the arms on the roll were added by a skilled painter, one who exhibited certain 'idiosyncrasies' of style, but that the scrivening was added by a different, non-skilled (or elderly) individual. It is to be doubted that a professional herald could have been the informant for the original chapel scheme since the arms of Bishop John Alcock, the founder of Jesus College, Cambridge, were left blank. The authors described the arms of Miles Sandys as being enigmatic for two reasons: firstly because the colours on the roll are at variance with those noted by Mytton (which the authors consider to be the correct version), but more importantly because he was a fifth son, with at least two surviving elder brothers, but took as his cadency mark the crescent traditionally ascribed to the second son. Heraldic treatises have tended to create the false impression that the system of cadency marks was immutable from the Tudor period, but it is clear that no such certainty can be relied upon in the Elizabethan era. In all probability there was a long period during the sixteenth century when the heralds were not in complete agreement about the need for standardisation.

From the medieval era most of the same cadency markings had been used without attaching them to any particular son. Two further examples from the roll need not, therefore, be a cause for consternation: Sir John Throckmorton with an annulet for difference, supposedly the mark of a seventh son, when he was known to be the fifth, and William Gerard with a mullet for difference on the roll (third son), but a crescent on his tomb. It would be somewhat anarchic had brothers changed their arms every time an elder brother died, and the discrepancy on Gerard's funeral monument more likely constitutes a herald's idea of what the correct mark needed to be. This does not mean, however, that church monuments can be completely relied upon to bear what we now understand to be the correct markings.

The reproduction of all the arms in colour with a wide variety of additional illustrations make this an enjoyable and accessible guide, one which contains everything that might be wished. To round it off, the complete roll is illustrated on the fold-out front cover, inside of which is a reconstruction of the Elizabethan chapel.

PAUL A Fox

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Adventure in Iron. The blast furnace and its spread from Namur to northern France, England and North America, 1450–1650: a technological, political and genealogical investigation. By Brian G Awty. 295mm. Part one: pp xviii + 1–427. Part two: pp xii + 428–977, 37 figs, 18 tabs. Wealden Iron Research Group, Tonbridge, 2019. ISBN 9781916042308. £45 + p&p (hbk) from the Wealden Iron Research Group (www. wealdeniron.org.uk).

This monumental work, published posthumously in a limited edition of 350 copies available only from the publishing society, is the most important book on the early modern European iron industry to appear for many years. Probably its greatest strength is that it avoids the narrowly Anglocentric tradition of studies of the industry in the British Isles. It does this partly by tracing the diffusion of the indirect process from its continental origins (rather than starting the story with the first blast furnace in the Weald), and partly by continuing the account from Britain to North America.

The book achieves these objectives in a highly original way, by discussing not merely the spread of the new technology but also the men who transferred it from France to England. Not only was Brian Awty effortlessly familiar with the German and French literature - ancient and modern, national and local, historical and technical – in a way that no other recent British historian of the subject has been, but he worked assiduously in French as well as English local archives, tracing families who were involved in the industry on both sides of the Channel. No one has attempted this before. The outcome is not merely a path-breaking study of the iron industry in Britain and on the Continent, but also a major contribution to the wider question of the diffusion of technology in Europe between the mid-fifteenth and mid-seventeenth centuries.

Awty did not particularly try to revise the chronology of early blast furnace construction in England. Most furnaces in this period were in the Weald, where a generation of scholarship, initially led by the late David Crossley and continued by the Wealden Iron Research Group, has established when almost all the furnaces and forges were in use and by whom they were operated. Less work has been done on other regions for the period before 1660 and here Awty in general relied on published sources. The novelty of his study lies in his prosopographical approach, showing how mobile skilled ironworkers were. In a few cases, his identification

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of men with common surnames active as late as the early nineteenth century, with others mentioned much earlier, is perhaps less convincing than his demonstration of the close links between France and the Weald at the beginning of the period. The final section, which traces the migration of iron-workers from England to the American colonies, seems more soundly based.

Awty effectively completed this study twenty years before he died in 2013. He seems to have accepted that it would be difficult to publish, because of its length (about three-quarters of a million words) and specialised interest. Only after he died did the Wealden Iron Research Group take on the task, in circumstances that were never going to be easy. Computer files had been lost; archives had migrated or been re-numbered; bibliographical references in at least three languages (and some very obscure journals) had to be checked; and indexing a book with so many personal and place names (spread over several countries) would itself be a major task. The main burden of this work fell on Jeremy Hodgkinson, of the Wealden Iron Research Group, Christopher Whittick, of the East Sussex Record Office, and Ann Hudson, an experienced indexer based in Sussex.

The text has been set in a single block on an A4 page, with footnotes on each page. The result is reasonably easy to read, although an average of eighteen words to a line is more than most typographers would recommend, the paragraph indents are rather deep, and the headings might have been laid out more economically. Setting in two columns would have shortened the book by about 10 per cent and produced a better line length. By contrast, the footnotes cannot be faulted and the copy-editing and indexing would do credit to a major university press, never mind a voluntary society. For just over a thousand pages the price is very reasonable. Overall, the end result is a huge achievement that reflects great credit on all concerned. The book should be an essential purchase for all major academic libraries in Britain, and those in iron-making regions on the Continent and in North America.

PHILIP RIDEN

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Memorializing the Middle Classes in Medieval and Renaissance Europe. Edited by Anne Leader. 235mm. Pp xviii + 342, 87 figs, 5 maps. Medieval Institute Publications, Western Michigan University, Kalamazoo, 2018. ISBN 9781580443456. £94.95 (hbk).

In 1631 John Weever complained that 'by some of our epitaphs more honour is attributed to a rich quondam Tradesman, or griping usurer, then is given to the greatest Potentate entombed in Westminster': a contrast to the past, when decorum was observed in fitting the monument to the patron's rank. Many of the papers in this book show how wrong Weever was. The aspirational middle has always defined itself by useless luxury items, and nothing is more uselessly luxurious than a lavish tomb.

The essay topics here range from Cyprus to England and from the thirteenth to the seventeenth centuries. In her introduction, Anne Leader acknowledges the difficulty of arriving at a definition of 'middle class' over such wide geographical and temporal spans: the Pisan merchants (discussed by Karen Rose Matthews) of 1200-1400, who were re-using ancient sarcophagi to signify their proud republicanism, are very different from the ambitious merchant tailors (described by Christian Steer) of later medieval London, who acquired large country estates far from the capital, and who chose to be buried there, obscuring the commercial origins of the family fortune for their noble descendants. A similar degree of aspiration is seen in the informative and amusing essay by Ann Adams and Nicola Jennings on fifteenthcentury Castile, Flanders and Burgundy, which (unusually in this book) attempts a definition of the middle classes and sets the subject in a European context. Meredith Crosbie's essay on the juxtaposition of two monuments in Madonna dell'Orto, Venice, shows a merchant monument facing down, in position and design, the aristocratic monument to which it is opposed. A different type of cultural assimilation is examined by Agnieszka Patała in her survey of the way that the immigrant Nuremberg merchant community in Breslau/Wrocław chose to be commemorated, although this essay would have benefited from reference to studies of similar immigrant communities and earlier studies of commemorative strategies.

Ruth Wolff discusses the use of the *imago* doctoris in cathedra on northern Italian legal monuments of the fourteenth century, including the history and imagery of the tomb of Pietro di Dante (d. 1364; son of the poet) in Treviso. Anne Leader writes about the choice of religious houses as locations for burial in Florence, arguing that this ensured a funerary location surrounded by perpetual prayer (a point made in several essays). This would have benefited from awareness of work outside Italy, such as Phillip Lindley's on religious houses as locations for