Science, Technology and Medicine in Modern History

General Editor: **John V. Pickstone**, Centre for the History of Science, Technology and Medicine, University of Manchester, England (www.man.ac.uk/CHSTM)

One purpose of historical writing is to illuminate the present. At the start of the third millennium, science, technology and medicine are enormously important, yet their development is little studied.

The reasons for this failure are as obvious as they are regrettable. Education in many countries, not least in Britain, draws deep divisions between the sciences and the humanities. Men and women who have been trained in science have too often been trained away from history, or from any sustained reflection on how societies work. Those educated in historical or social studies have usually learned so little of science that they remain thereafter suspicious, overawed or both.

Such a diagnosis is by no means novel, nor is it particularly original to suggest that good historical studies of science may be peculiarly important for understanding our present. Indeed this series could be seen as extending research undertaken over the last half-century. But much of that work has treated science, technology and medicine separately; this series aims to draw them together, partly because the three activities have become ever more intertwined. This breadth of focus and the stress on the relationships of knowledge and practice are particularly appropriate in a series which will concentrate on modern history and on industrial societies. Furthermore, while much of the existing historical scholarship is on American topics, this series aims to be international, encouraging studies on European material. The intention is to present science, technology and medicine as aspects of modern culture, analysing their economic, social and political aspects, but not neglecting the expert content which tends to distance them from other aspects of history. The books will investigate the uses and consequences of technical knowledge, and how it was shaped within particular economic, social and political structures.

Such analyses should contribute to discussions of present dilemmas and to assessments of policy. 'Science' no longer appears to us as a triumphant agent of Enlightenment, breaking the shackles of tradition, enabling command over nature. But neither is it to be seen as merely oppressive and dangerous. Judgement requires information and careful analysis, just as intelligent policy-making requires a community of discourse between men and women trained in technical specialities and those who are not.

This series is intended to supply analysis and to stimulate debate. Opinions will vary between authors; we claim only that the books are based on searching historical study of topics which are important, not least because they cut across conventional academic boundaries. They should appeal not just to historians, nor just to scientists, engineers and doctors, but to all who share the view that science, technology and medicine are far too important to be left out of history.

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Operations Without Pain

**The Practice and Science of Anaesthesia in
Victorian Britain**

Stephanie J. Snow

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macmillan

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For my family, especially Evie, Verity and Gwyn

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List of Abbreviations

AMJ	<i>Association Medical Journal</i>
BMJ	<i>British Medical Journal</i>
CB	Ellis, Richard H (ed.), <i>The Casebooks of Dr John Snow</i> (London: Wellcome Institute for the History of Medicine, 1994).
L	<i>Lancet</i>
LMG	<i>London Medical Gazette</i>
MT	<i>Medical Times</i>
MTG	<i>Medical Times and Gazette</i>
OC	Snow, John, <i>On Chloroform and Other Anaesthetics</i> (London: Churchill, 1858).
OE	Snow, John, <i>On the Inhalation of the Vapour of Ether in Surgical Operations: Containing a Description of the Various Stages of Etherisation and a Statement of the Results of Nearly Eighty Operations in Which Ether Has Been Employed</i> (London: Churchill, 1847).
ON	Snow, John, 'On narcotism by the inhalation of vapours', <i>London Medical Gazette</i> , 1848–51.

Acknowledgements

Humphry Davy's words from his work on nitrous oxide encapsulate my own thoughts as the process of writing this book draws to a close:

In the course of this investigation, I have met with many difficulties; some arising from the novel and obscure nature of the subject, and others from a want of coincidence in the observations of different [historians] on the properties and mode of production of [anaesthesia]. By extending my researches...and by multiplying the comparisons of facts, I have succeeded in removing the greater number of those difficulties, and have been enabled to give a tolerably clear history of the [innovation of anaesthesia]...I have endeavoured to guard against sources of error; but I cannot flatter myself that I have altogether avoided them....I cannot close...without acknowledging my obligations.

Indeed, this book has only been made possible through the help and support of numerous individuals. The project, which was generously supported by a Research Fellowship from the Wellcome Trust for the History of Medicine, was undertaken in the Centre for the History of Science, Technology and Medicine at the University of Manchester. The Centre's exemplary knack of combining intellectual rigour and friendliness makes it a pleasure to work in. Many archivists and librarians have provided me with invaluable help over the years and I would particularly like to thank staff of the Wellcome Institute for the History of Medicine, the Royal College of Surgeons of England, the British Medical Association, the Royal Society of Medicine, St George's Hospital, St Bartholomew's Hospital, King's College Hospital, the London Hospital, the Royal Free Hospital, the London Metropolitan Archives, Westminster Medical Society, Edinburgh Public Record Office, Glaxo Wellcome, the History of Anaesthesia Society, the John Rylands University Library and Liverpool Medical Institute. I thank Her Majesty Queen Elizabeth II for permission to cite correspondence between Queen Victoria and the Duchess of Sutherland, held by the Royal Archives at Windsor; Geoffrey Davenport, librarian of the Royal College of Physicians, who, many years ago, kindly supplied me with a copy of John Snow's casebooks; Robert Galland for sharing his data on amputations at the Royal Berkshire

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Stephanie J. Snow
Erway Hall
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