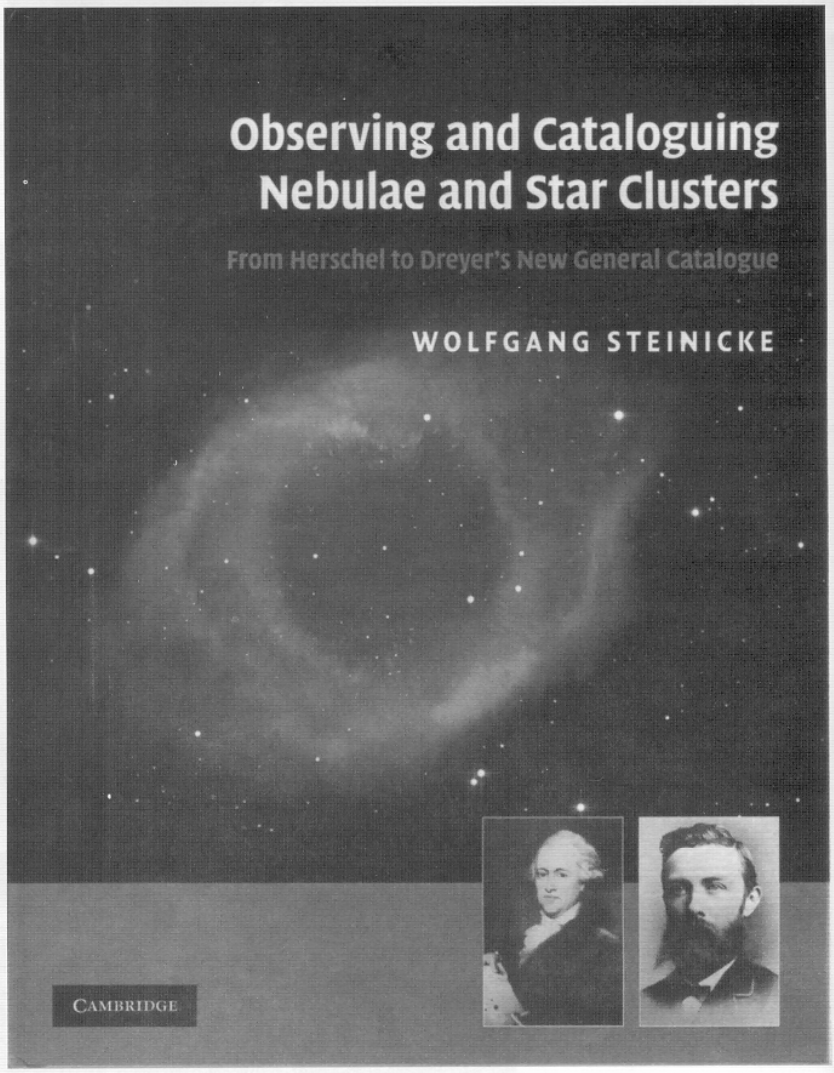
Book Reviews

Observing and Cataloguing Nebulae and Star Clusters: From Herschel to Dreyer's New General Catalogue
by Wolfgang Steinicke
Cambridge University Press
ISBN 978-0-521-19267-5
Pages xii + 648, hardback
£90, $140



'Monumental' is not too laudatory a term to describe this outstanding book, as it certainly reflects the results of a study that describes in great detail the fascinating history of deep-sky astronomy in a manner that I find to be quite extraordinary and I would not be hesitant to say that it will become the definitive work on the subject for many years to come. The scholarship and amount of research that was required to produce this work is absolutely incredible and is unmatched by any previous publications on the subject that I have encountered. It will no doubt form an excellent source for future references. I have personally been involved in deep-sky astronomy for more than 50 years and considered myself to be well informed on the subject, but so much of the information I acquired from reading a pre-publication copy of this work was entirely new to me and will no doubt prove to be to all others who examine it.

The book begins with the early observations and names those first contributors, such as Messier, Méchain, de Cheseaux and Lacaille, listing their individual discoveries, before getting into the story of the Herschels, both the father William and his son John. Steinicke describes not only their major discoveries of more than 4000 of what later became the NGC objects, but also goes into considerable detail about their mirror making and the observing methods employed in carrying out their celestial surveys of both the northern and southern skies, which were the basis for the first really modern catalogue of deep-sky objects, the General Catalogue of Nebulae (GC), compiled by John Herschel and published in 1864.

After completing the story of the Herschels, Steinicke takes up each of the other observers who were now becoming engaged in searching for these interesting objects, giving the reader a brief biography of each and discussing their discoveries, while adding many tidbits of personal but related

events during their astronomical careers, most incidents being generally unknown, so that the reader comes away with a greater understanding of who these astronomers were, their achievements and sometimes failures, information that is both informative and even entertaining.

Another section of the book that greatly caught my attention deals with the controversies and mysteries that developed in the astronomical community of the nineteenth century after certain claims were announced by some deep-sky observers. These are presented and discussed in great detail by the author and my personal favourite, which I had no previous knowledge about, deals with the heated debate that occurred after the announcement of spiral form in the nebula called M51 (NGC 5194) by Lord Rosse and the observers at Birr Castle and which lasted for more than 40 years before being completely resolved due to photography. The arguments detailed by Steinicke make for fascinating reading, as he produces copies of the letters and responses that were published in various journals, by the proponents and those opposed. With the author's permission I gave a presentation based on this controversy as depicted in his book to a gathering of the Temecula Valley Astronomers and it was received with great interest and a considerable number of follow-up questions about both the event and the book as a whole.

How the author even found the necessary time to amass such a huge amount of material on the subject of the book is in itself highly impressive and I am confident in saying that much of it will be completely new to the reader. I would think that for anyone who considers themselves to be an ardent deep-sky enthusiast this book is a must. The illustrations (375) alone make this work a remarkable addition to anyone's library, showing each of the contributing astronomers to the NGC, and many of the telescopes they used to make their discoveries, many being photographs that I have never seen published before. Yes, I am very excited about this book. Not only does it contain a wealth of information of scientific significance, but because of its scope it also reads often as an adventure story and in many respects that is exactly what the study of this fabulous field contains.

Finally, a word about the price. As you can see, it is not inexpensive and because of this it may cause some to pause about whether to purchase a copy. Believe me, it is well worth buying, as such books do not come along often. I would even go as far as to suggest that if the price is a problem then I would sell off any number of other books in my personal collection in order to obtain this one, as any loss I might imagine I would suffer from such action would be more than replaced by the contents of this book. I can assure you that you will not be disappointed.

Malcolm J Thomson, FRAS

The Caldwell Objects and How to Observe them

by Martin Mobberley
Springer (2009)
ISBN 978-1-4419-0325-9
273 pages, paperback
£24.99, $34.95, Euro 34.95

I opened this book in eager anticipation. Immediately I was pleased to note the author, Martin Mobberley, in the first paragraph in his preface referring to Stephen O'Meara's comprehensive book on the Caldwell Objects and querying himself what he could add. He then refers to the skies enjoyed by O'Meara as opposed to the skies here in the UK and his decision to observe the objects himself, at least as far as he can from his latitude in the UK (objects C1 to C65) – excellent and exactly what I would do. I never talk about what can be observed in an object without having first observed it myself, yet it is clear that a number of writers of books and articles for magazines do just that. So far so good! The author decides that where he can add over and above O'Meara's book is to make the emphasis for the imager, taking into account 21st-century advances in imaging technology and the use of specialised filters to cut through our light-polluted skies. A bit of a disappointment from a selfish viewpoint as a purely visual observer, but realistically correct, especially as more and more amateurs in the UK are turning to imaging.

Chapter 1 gives an introduction to Sir Patrick Moore, his contribution to astronomy and the raison d'être of the Caldwell list.

Chapter 2 is the main substance of the book, giving detailed descriptions of all 109 Caldwell objects. It starts off with an outline of the different classes of astronomical objects within the Caldwell list, the distances involved and an explanation of the terms used. Each object has two pages devoted to it. The first half-page is in data form giving position, magnitude, size,