

Preface

In the middle of the nineteenth century the USA, previously dependent on Europe for general information on astronomy, matured to the point where it also could contribute to this knowledge. No longer would astronomy be considered only a tool for navigation and time-keeping. In this book we will demonstrate how American citizens promoted the participation of their young country in this science. Particular spectacular events and objects such as comets, meteor storms, solar eclipses, and transits of Venus were well covered in newspapers and periodicals, and public lectures on these topics were well attended. Some members of the general public became more involved, and would contribute funds and even participate in astronomical endeavors, as amateur and professional astronomy grew throughout the nation during the second half of the nineteenth century.

Members of the scientific community are most generous and have been willing to share their time, thoughts, and resources with us. It has been our pleasure to communicate by phone, e-mail, and in person with the following individuals, and we would like to express our gratitude to them.

Robert Ariail, of the Antique Telescope Society and co-author of *Alvan Clark & Son – Artists in Optics* (1995), supplied useful information on Clark telescopes, and gave us permission to use his photograph of the Fitz telescope in this book.

Dr Walter Breyer, the Executive Secretary of the Antique Telescope Society, recommended knowledgeable colleagues who proved to be invaluable sources of information.

Ben Burress, Program Content Developer of the Chabot Space and Science Center, provided details on its growing significance since the nineteenth century in bringing astronomy to the public.

Jacqueline Davis, the current Director of the Fort Sam Houston Museum, assisted the first author in locating the historical marker for the American transit expedition site in San Antonio, Texas, and provided some materials that brought the event to life.

Dr Suzanne Debarbat (Paris Observatory) provided some elusive information on the French transit of Venus expedition to St. Augustine, Florida, with the assistance

of Virginie Barbet from the Paris Observatory Library. She also had numerous discussions with the second author of this book on the nineteenth century French transit of Venus campaigns.

Dr Steven Dick (ex-U.S. Naval Observatory) brought to our attention records in the National Archives in Washington D.C. relating to public contributions to the Government's 1882 transit of Venus program, and he kindly sent specific information which enabled us to locate these in a timely manner. Meanwhile, on numerous occasions he discussed the American nineteenth century transit of Venus programs with the second author during their collaborative research on these expeditions.

The late Professor Hilmar Duerbeck (University of Münster, Germany) provided information on the German transit of Venus site at Trinity College in Connecticut, and details of other nineteenth century German transit of Venus expeditions.

Bart Fried, a founder of the Antique Telescope Society, kindly discussed the American telescope-maker John Brashear and recommended some useful resources.

Professor Jay Pasachoff from Williams College provided us with useful comments about nineteenth century solar eclipses and transits of Venus.

Dr John Pearson from the National Astronomical Research Institute of Thailand provided us with valuable information on nineteenth century total solar eclipses, and the Lick Observatory's solar eclipse expeditions.

Leslie Proudfit from the Astronomical Society of the Pacific provided information on the growth and accomplishments of the Society during the late nineteenth century.

Carolyn Sanford, Head of Reference and Instruction at the Gould Library at Carleton College, and Eric Hillemann, Gould College Archivist, provided information on their *Sidereal Messenger*.

Professor Chris Sterken (Vrije Universiteit Brussel, Belgium) provided several items of interest and inspiration regarding the 1882 transit of Venus, especially relating to Jean-Charles Houzeau and the Belgian expedition to San Antonio, Texas. He also discussed the accomplishments of the American astronomer David Todd during this event.

John Ventre, the Historian at the Cincinnati Observatory, was always available to verify facts and offer useful suggestions. He also provided the 1870 roster of members of the Observatory.

Associate Professor Alice Walters (St. Francis University, USA) provided a copy of her paper on broadsides and solar eclipses.

Eileen Wild from the Chicago Astronomical Society communicated details regarding the Society, its membership, and its accomplishments.

It is difficult to express adequate gratitude to Dr Tom Williams from Rice University. He provided numerous valuable suggestions that were helpful in creating much of the framework of this book.

In addition, many unnamed individuals were immensely helpful during this project, and we are especially grateful to staff at the Adler Planetarium in Chicago, the Aiken County Historical Society, the University of Cincinnati Archives, the Cincinnati Historical Society, the National Archives in Washington, D.C., and the Shelbyville Historical Society.

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Chiang Mai, Thailand

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