will undoubtedly become the comprehensive text on a specialized subject that has never before received the appropriate attention. Both Saff as the author and the Antiquarian Horological Society as the publisher deserve the gratitude of the readership of texts covering such a complex and challenging subject.

I hope others will be as excited as I am after spending days reading what undoubtedly will become the authoritative text documenting the achievements of the clock makers of the Bond dynasty.

From Celestial to Terrestrial Timekeeping: Clockmaking in the Bond Family by Donald Saff. ISBN 978-0-901180-54-4. Published and distributed by Antiquarian Horological Society, London (UK) www.ahsoc.org. Hard cover, dustjacket; 424 pages. Distributed in the United States exclusively by the National Association of Watch & Clock Collectors, Inc. on www.nawcc.org.

-Fortunat Mueller-Maerki, FNAWCC (NJ)

Professor Bond at the 1851 London World's Fair

The Bond & Sons "Clock and Spring Governor," described in Don Saff's new book, earned nearly six pages and a full-page engraved illustration in a rare book I own, American Superiority at the World's Fair. The cover page added, "Designed to Accompany a Chromo-Lithographic Picture Illustrative of Prizes awarded to American Citizens At The Great Exhibition: A Compilation from Public and Private Sources, By Charles T. Rogers, of Louisiana, Philadelphia, Published by John J. Hawkins, 1852."

The old book, and even rarer color lithograph, were rushed into print as a reaction to highly critical reviews of the United States' displays at London's 1851 immense international Crystal Palace Exhibition. Even Queen Victoria, who visited the fair on multiple occasions and published a lengthy journal of her observations, had only a few words to say about our nation's participation. On May 19 she wrote: "3rdly to America, which is certainly not very interesting, but contains some very curious inventions: small maps on gutta percha—a reaping machine etc. We crossed over and began going down the south side, which begins with America, where there was a double piano exhibited, 2

While the United States' area certainly was dwarfed by the home country's massive displays of manufacturing might, the official catalog of all exhibitors does list 566

people playing at each end, which had a ludicrous effect."

OBJECTS REPRESENTED IN THE CHROMO-LITHOGRAPH.

Taken Laterally, viz., From Right to Left.

- 1. Birt's Solar Compass.
- 2. Service of plate presented to E. K. Collins, Esq.
- 3. Goodyear's India Rubber Globe of the earth.
- 4. Bache's Balance.
- 5. Howland's Bell Telegraph.
- 6 & 7. Taylor's Gothic windows of Transparent Soap.
- 8. Simmons's Edge Tools—Axes, &c.
 9. Brown & Wells's Tools—Braces and Bits.
- 10. Colt's Repeating Pistol.
- 11. Palmer's Artificial Leg.
- 12. Power's Greek Slave.
- 13. Ericsson's Sea Lead.
- 14. Centre Piece: Yacht America.15. Iron Bridge of the New York Iron Bridge Company, in the back ground of the Centre Piece. 16. Ericsson's Alarm Barometer.
- 17. Bust of Hobbs, and Day & Newell's Parautoptic Lock.

- 18. Schooley & Hough's Ham.
 19. Prouty & Mears's Plow.
 20. Bond & Son's Astronomical Clock.
- 21. Power & Weightman's Chemicals.
- 22. Louderback's Peaches.
- 23. Borden's preparation called Meat Biscuit.

- 24. Amoskeag Manufacturing Company's Tickings.
- 25. Lawrence, Stone & Co.'s Tartan made from native wool.
- 26. Chilson's Hot Air Furnace.
- 27. Dick's Anti-Friction Press.
- 28. Lowell Machine Shop's Self-Acting Lathe.
- Portrait of Brady, Daguerreotypist.
 Watson's Sporting Wagon.
 McCormick's Reaper.

- 32. Storr's Bookbinding Machine.
- 33. Lerow & Blodgett's Sewing Ma-
- 34. Woodbury's Wood Planing, Tongueing and Grooving Machine.
- 35. Eisenbrant's Flutes.
- 36. Gemunder's Violins.
- 37. Crystal Palace.
- 38. Nunn's & Clark's 7 oc've Piano Forte.
- 39. Albro & Hoyt's Floor Cloth, beneath the Piano Forte.
- 40. Herring's Patent Salamander Safe. Round the Centre Piece are grouped the Cotton Plant, the Sugar Cane, the Tobacco Plant, Rice, Wheat and Indian Corn, emblematic of the "Produce," for which prizes were awarded to the

State of Maryland, and citizens from different sections of the country.

A page from American Superiority that identifies the objects on the chomolithograph illustrating the American exhibit items receiving prizes at the 1851 Crystal Palace Exhibition (see the back cover of this issue of the Watch & Clock Bulletin). COURTESY BOSTON ATHENAEUM, BOB FRISHMAN PHOTO.

> American firms with wares on display. In January 2017, I spent a day in the library of the Victoria & Albert Museum in London studying this thick publication, not only to see who came from America but also who from around

Horologica

the world mounted horological material. The latter I continue to research, but the two categories overlapped in a few instances. Among American establishments in addition to Bond, I spotted "345. Sperry, H., New York — Clocks" and "532. Rogers & Co. Newhaven Co. — Clocks." Nearby exhibitors boasted "Shirts," "Cheap Newspapers," "Sarsaparilla," and "Beehives and bees."

The author of *American Superiority* featured 40 key exhibitors. These were lovingly illustrated on the large lithograph and lavishly described in the book. Deadcenter on the print, and loudly crowed about in the book's first pages, is the racing yacht *America*, which sailed from to New York to soundly humiliate the entire British sailing squadron at Cowes. Just below the yacht, and just above the portrait of photography pioneer Mathew Brady, is the astronomical dial of Bond's regulator clock. I was able to locate and view one of the few known remaining examples of the faded color print in the collection of the Boston Athenaeum.

The book's discourse on Bond begins as follows on page 19: "One of the most important contributions to the World's Fair was unquestionably Professor Bond & Son's Clock and Spring Governor. Under an exceedingly modest, if not positively an unprepossessing exterior, this beautiful piece of mechanism was comparatively unnoticed by the fashionable lounger, and the uninvestigating crowd. Its transcendent merit was however soon discovered by the British astronomers, and a council medal was awarded its scientific inventors."

We also learn that Bond's display was pulled by Colonel Reid and Sir David Brewster from an obscure alcove and moved to a position of prominence, calling it ".... the most wonderful achievement of science which the world has seen since the days of Newton."

The bulk of the small, dense text about Bond's invention is highly technical and mostly reprinted from a long article on the subject published in *Chamber's Edinburgh Journal*. That article's title previewed the contents: *A Peep into the Observatory: Professor Bond and Son's Clock and Spring Governor, for Registering Astronomical Observations by Electricity*. I have scanned those pages and would be happy to share them. More important, Don Saff's new book tells the full story, and I urge anybody interested in the subject to purchase it.

-Bob Frishman, FNAWCC (MA)



Detail showing dial of Bond's regulator.