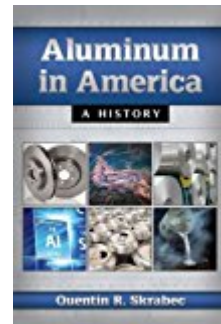


Quentin R. Skrabec. *Aluminum in America: A History*. Jefferson: McFarland, 2016. viii + 244 pp. \$39.95 (paper), ISBN 978-0-7864-9955-7.



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Roughly two-thirds of all aluminum metal ever extracted from bauxite ore was still in use in 2017. Today, creating an aluminum can requires “as much energy as powering a laptop for 11 hours, or a television for 4 hours or the equivalent of a half a gallon of gasoline” (p. 223). These are just some of the eye-popping statistics featured in Quentin R. Skrabec’s historical survey of the American aluminum industry. Skrabec, an engineer by training and business professor, is the author of several “books dealing with the pantheon of great American industrialists” (p. 2). *Aluminum in America* is his ninth book on US businesses published since 2006.

Skrabec structures his narrative chronologically, beginning with the dawn of commercial aluminum manufacture in the United States in the late nineteenth century and ending with cutting-edge aluminum innovations of the twenty-first century. Skrabec writes glowingly—at times in the same fashion as a Gilded Age industrial booster—of metal men such as Ohioan Charles Martin Hall, who perfected an electrolysis process that yielded purified aluminum metal from bauxite ore in the 1880s and 1890s. Hall, working with wealthy magnates such as future US Treasury secretary Andrew Mellon, helped to found the Aluminum Company of America (ALCOA), headquartered in Pittsburgh, which became one of the

dominant aluminum monopolies in the world and a central subject in Skrabec’s story.

Throughout the book, Skrabec traces the highs and lows in the industry. He focuses on the ways in which efforts to unionize laborers during the New Deal challenged factory managers in the industry and details how both WWI and WWII offered ALCOA new opportunities for growth through lucrative military contracts. Boom years continued into the 1950s, with the emergence of aluminum folding chairs, Reynolds Wrap Aluminum Foil (branded in 1947), and other consumer items that enhanced suburban living, both in the kitchen and on the lawn.

But these sunny days did not last forever. The hang-over years of the 1970s followed on the halcyon heyday of midcentury growth, when high energy prices made operating costs soar. And energy concerns were just part of the problem. “By the late 1970s,” Skrabec explains, “aluminum had an image problem” (p. 204). Once considered an expensive luxury item that adorned the walls of Gilded Age mansions owned by America’s ostentatious elite, aluminum became the metal of the working class, used to create affordable mobile homes, the chronically run-down Chevy Vega, recyclable Christmas trees, and

throwaway cans. In the minds of some, aluminum had become trash.

Nevertheless, by the end of the twentieth century, this maligned metal began to break free of its cultural baggage, in large part because of environmental engineers who saw in aluminum major advantages over other metals. “The green movement,” Skrabec writes, sought to revalorize aluminum, as industrial engineers developed new uses for this lightweight and highly recyclable resource in the twenty-first century (p. 218).

Environmental scholars interested in energy history can find much to mine in this book, especially in the discussions of dynamos and dams that powered this American metal industry, but Skrabec’s assessment of the environmental impact of aluminum manufacture only scratches the surface. He offers some astounding statistics on the benefits of aluminum reclamation—noting, for example, that “recycling saves 95 percent of the production energy needed to create the metal through smelting processes”—but he writes very little about the long-term ecological consequences of bauxite ore mining in Alabama or Arkansas that undergirded the American aluminum industry (pp. 222-223). Later, Skrabec expands bauxite discussions to include Australia, Indonesia, and other global sites of production, and here the reader learns of links between extraction and nasty air pollution that some deem responsible for serious health problems. But again, these discussions are brief, occupying just a few paragraphs before giving way to other topics.

This lack of extensive engagement with these environmental issues is troubling considering some of the prescriptive proclamations Skrabec makes in the book. For example, after citing a *Washington Post* report about the destruction of grassland and other environmental troubles near a bauxite mine site in Mongolia, Skrabec holds that people “may once again look at the use of paternal capitalism (as imperfect as it was), at least as a start” to solving these problems (p. 216). Here, we see Skrabec speaking longingly about the days of Charles Hall and Andrew Mellon. But was the world ALCOA created in Progressive Era America really so cheery?

The problem is we never hear from the laborers in the factories or mines in order to form an educated answer to this question. In addition, Skrabec does not reference any scientific studies or environmental reports published by public agencies tasked with overseeing the aluminum industry. In fact, most of the citations in the book are to secondary sources, and footnotes are used sparingly, with several chapters including three or fewer citations. Instead of references to letters found in archival repositories, the reader discovers Ayn Rand’s *Capitalism: An Unknown Ideal* (1966) as one of the nine works cited in chapter 12. Thus, the facts detailed in this book may be fascinating, but unfortunately the lack of rigorous archival research and sparse footnoting make Skrabec’s work a shaky source for any environmental historian looking to use it as a touchstone text on the aluminum industry.

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