workers at meetings questioned whether they "were in the company or in the union hall." As investors and consultants pushed hard for a public stock issue that would dilute and ultimately dissolve any remnant of workers' control over the business, Lieber notes, "Weirton seemed less like a steel town than a huge investors' conference with financial analysts, fund managers, and members of the ESOP administrative committee lecturing constantly to groups of employees on every wrinkle of the upcoming decision." By the time Weirton Steel stock went public in 1991, power was clearly shifting toward the investment bankers who "have an interest in marketing tightly run companies in a cost-cutting mode."

Sipping a cappuccino while writing this review in a used book store on Pittsburgh's South Side, in a block which was once lined by "shot and a beer" bars, I heard a man ask where he might find a book on refrigeration technology. I laughed to myself — Rousseau, Rilke, or religious mysticism maybe, but not refrigeration technology on the South Side anymore, is what I thought. We started talking and he told me he had worked more than 20 years at Weirton Steel and yet had not heard about Lieber's book.

When questioned about the mill, he talked about constant downsizing, outsourcing, and subcontracting. He said there were only 4,500 union workers at Weirton (out of a total workforce of about 5,600), down from over 7,000 union members who had voted on the ESOP. He indicated that the talk around the mill was that downsizing would continue over the next couple of years and that they might end up with only a finishing mill.

The present union president at Weirton, Mark Glyptis, told me in an interview that the workers now own less than half of Weirton's stock and that the sense of ownership that the workers felt in the early years has faded. Glyptis is deeply concerned about management's declining interest in workplace safety. A four-hour union shutdown in the company's tin mill over toxic emissions provoked a company lawsuit against the independent union.

Jim Lieber ends his book on an upbeat note. Indeed, his lively account of how the workers enthusiastically participated in numerous production committees to improve quality and efficiency shows how seriously workers will get involved in their jobs if given the opportunity. But, the costs of Weirton's path to survival were high. The Weirton worker's final words hung in the air of the cafe as the late autumn sunlight slanted across the polished wooden floors. "You know," he said, "we saved the mill, but most of us lost our jobs."

*Friendly Takeover* is an important contribution to the literature on corporate restructuring and the decline of regional manufacturing. Lieber's study needs to be complimented by an equally meticulous examination of the contemporary attempts at "hostile takeovers" of steel facilities on Pittsburgh's South Side or in the Mon Valley, which, unlike Weirton, faced an unwilling seller, a skeptical press, and an indifferent political establishment. In any case, Lieber's book is a fascinating account of the multiple difficulties involved in trying to fundamentally change the relationship between labor and capital in this country even when conditions for doing so are almost ideal. 

**Encyclopedia of American Business History and Biography: Iron and Steel in the Twentieth Century**

Bruce E. Seeley, ed.


by Kenneth Warren

Like its predecessor volume dealing with the 19th century (published in 1989), this encyclopedia will prove an invaluable resource of easy reference for anyone studying the economic and business history of the steel industry. The 250 entries cover its technology, companies, leading individuals — mostly on the managerial side, but including a number of union leaders — major labor disputes, organizations, and industry-wide arrangements such as pricing policy. There are 139 biographical entries. A lucid introductory essay surveys the general course of the history of American steel in the 20th century. It is followed by a few tables charting the annual production of crude steel and steel imports and exports. Similar records for ore, coke, pig iron, and the main finished steel products would have been useful — yearly statistics for all are available.

A few important companies and individuals are omitted. Not very convincingly the editor's note cites space constraints as the reason for excluding major steel operations attached to other industries, such as those of Ford Motor Co. or International Harvester. On the other hand, the many new companies founded this century and the leading individuals associated with them are covered well. This is the case, as examples, with Armco, the Verity family, and Charles Hook; with Weirton and the highly distinctive character of the company founder and his town, Ernest Weir; and with Inland Steel and the remarkable Block family dynasty. There is no entry for the strange leader of Midvale Steel in the early years of the century, Charles Harrah. The even more important William H. Donner also is not listed. After setting up one of the early tin plate operations in the 1890s, he built the Donora Works in the Pittsburgh district, then went on to an important role at Cambria and at Pennsylvania Steel before establishing the steel company which bore his name and became one of the operations of Republic Steel. Donner lived until 1953.

Price McKinney is mentioned in the article on Corrigan McKinney, but there is no systematic account of the business career of the man who, after building up a major Cleveland steel plant, committed suicide. A handful of the biographical entries are of people whose main work was done in the 19th century (James Gayley and Henry De Bardeleben). Russell Davenport and Robert Linderman, both important in the history of Bethlehem Steel, somehow or other seem to have been lost between the two volumes.

The material so amply provided in the encyclopedia enables the interested reader to trace connections or comparisons beyond the remitment of the authors. For instance, the biographical

details for 126 of the steel industry executives reveals that only eight were born outside the United States. (In the 19th century volume, 15 out of 66 were foreign-born.) Of the remaining 118, the birthplace of 20 was in or near Pittsburgh, 11 came from the Chicago area, three from Youngstown, and 84 from elsewhere in the nation.

Another feature of interest is the way in which some leading executives have migrated from company to company. Avery Adams, during 40 years in the industry, worked for seven different firms. He began with Trumbull Steel, then went to Republic, which took over his old company. From there, he moved on to Carnegie-Illinois, to Inland, to US Steel and then to Pittsburgh Steel before finishing his career at Jones & Laughlin. Tom Girdler, well-known for his vigorous style and aggressive attitude to New Deal policies, worked for Buffalo Forge, Oliver, Colorado Fuel and Iron, Atlantic, and Jones & Laughlin, and then became chairman and later president of Republic Steel. Ben Fairless, who dominated US Steel in the critical period of World War II and the early post-war years, began at Central Steel Co., then joined Republic when it merged with Central, rising to its executive vice presidency in the 1930s, before moving to Carnegie-Illinois in 1935. In complete contrast, and representing a different philosophy of management, Charles M. Schwab’s five successors as chief executive of Bethlehem Steel (Eugene Grace, Arthur Homer, Edmund Martin, Stewart Cott, and Lewis Poy) spent the whole of their working lives — a combined total of 235 years — with that one company.

Bethlehem’s 20th century management has contrasted sharply with that of US Steel in at least one other respect. Until the 1980s, top control at Bethlehem was in the hands of steel men who lived in the area of the plant and corporate head offices at Bethlehem, Pa. Ultimate power at US Steel, however, was exercised from New York until the headquarters was moved to Pittsburgh. Much more significant, the chief executives of USS were largely drawn from the worlds of finance or law. For only seven of its first 50 years was it headed by men trained and reared in steel (Schwab and Farrell); over its whole 94-year history, non-steelmen have headed it for 64 years.

There are separate essays dealing with “basing point pricing” and the “Pittsburgh Plus” system. While stressing that the latter policy in particular stirred up resentment among steel consumers distant from the basing point, the encouragement which “phantom freight” provided for growth of steel products in these same areas — the “Judge Gary umbrella” — is not sufficiently emphasized.

The entries dealing with processes and technology are not wholly satisfactory. Those on the open hearth furnace, rolling mills, and the hot strip mill are too short to do justice. The latter in particular inadequately covers a triumph of technical innovation that has been by far the most important change in steel finishing in this century and which was unquestionably a remarkable American achievement in research and development. Though attempts to roll sheet steel continuously at US Steel’s mills proved to be a blind alley, attempts in the first decade of the century by C.M. Bray — first at McKeesport, Pa., and later at Mercer, Pa. —

deserve mention. The discussion of blast furnace technology fails to recognize that as long as 20 years ago there were furnaces overseas which had already reached a daily production of 10,000 tons of iron. In the discussion of continuous casting, it is recognized that the U.S. industry fell behind some of its leading rivals but there is no adequate consideration of what happened in the 1980s.

The book is illustrated well with black and white photographs, though they are often not particularly good reproductions. Most of the articles have useful lists of publications and references. Where appropriate, the location of the archives of leading individuals is indicated.

It is all too easy for a critic to see loopholes and to carp about any work of scholarship. This reviewer does recognize, however, that the encyclopedia represents a tremendous achievement on the part of both the editor and his authors. They are to be warmly congratulated on a book which for many years to come will be used and enjoyed by all who continue to be fascinated by the great story of the American iron and steel industry.

Thomas Mellon and His Times
Thomas Mellon

by Hax McCullough

Judge Thomas Mellon (1813-1908) was a gifted, resourceful man who looked upon parenthood as a responsibility which gentlemen were to assume and from which they were not to wander. Knowledgeable sons who would become leaders in the community were his goal, and leaders they became. That he chose to record his experiences and judgments as guidelines for the future is very much in character. His wide-ranging, authoritative story of his life and achievements is a unique document of significant value for those interested in the history of Pittsburgh. It may make many rethink what they were taught.

Never one to postpone necessary action, Judge Mellon’s superb autobiography was first printed in 1885 by Wm. G. Johnston & Co. exclusively for his family and friends. Since then, only a few have read it and had a chance to learn about this extraordinary man and his considered judgments (not all to our taste today) about work, motivation, frugality, justice, knowledge, religion, travel, and history.

I first read this splendid book in 1969 in an original edition at Mellon Bank’s library. I then bought a photographic reproduction in 1970 from the Kraus Reprint Co. But this University of Pittsburgh Press reprint gives us all the opportunity to know this solid, self-made pioneer. The new edition is both handsome and full of riches. Thomas Mellon showed himself as literate, perceptive and dynamic — a man of greatness whose life was patterned with

Hax McCullough is the author of One Hundred Years of Banking, Mellon’s Bank centennial history that the bank published in 1969. He writes frequently for Pittsburgh History.