

The Inside History of the
CARNEGIE
STEEL COMPANY

A Romance of Millions

JAMES HOWARD BRIDGE

Introduction by John N. Ingham



PITTSBURGH SERIES IN SOCIAL AND LABOR HISTORY



ANDREW KLOMAN
OUT OF WHOSE LITTLE FORGE GREW
THE CARNEGIE STEEL COMPANY

The Inside History
of the
Carnegie Steel Company

A Romance of Millions

By

JAMES HOWARD BRIDGE



UNIVERSITY OF PITTSBURGH PRESS

Published by the University of Pittsburgh Press, Pittsburgh, Pa. 15260
Copyright © 1991, University of Pittsburgh Press
All rights reserved
Eurospan, London
Manufactured in the United States of America

First published in 1903 by the Aldine Book Company
32-34 Lafayette Place, New York.

LIBRARY OF CONGRESS CATALOGING-IN-PUBLICATION DATA

Bridge, James Howard, 1858-1939.

[History of the Carnegie Steel Company]

The inside history of Carnegie Steel Company / James Bridge.

p. cm.—(Pittsburgh series in social and labor history)

First published under the title: History of the Carnegie Steel Company.

New York: Aldine Book Co., 1903.

ISBN 0-8229-1166-3. — ISBN 0-8229-6095-8 (pbk.)

1. Carnegie Steel Company — History. 2. Steel industry and trade —
United States — History. I. Title. II. Series.

HD9519.C2B9 1991

338.7'669142'0973 — dc20

91-50106

CIP

TO RECALL THEIR FORGOTTEN SERVICES

This
History of a Great Business
is dedicated
To the Memory of
the Men who Founded it, Saved it from early
Disaster, and won its First Successes :

ANDREW KLOMAN
DAVID McCANDLESS
WILLIAM COLEMAN
THOMAS MORRISON CARNEGIE
WILLIAM R. JONES
WILLIAM P. SHINN
DAVID A. STEWART
HENRY M. CURRY

CONTENTS

INTRODUCTION • ix

PREFACE • xxxi

AUTHOR'S NOTE TO THE THIRD EDITION • xxxv

CHAPTER I

THE HUMBLE BEGINNING: 1853–1863 • 1

CHAPTER II

“A MOST HAZARDOUS ENTERPRISE”: 1863–1865 • 13

CHAPTER III

EARLY STRUGGLES AND SUCCESSES: 1865 • 25

CHAPTER IV

IRON RAILWAY BRIDGES: 1865 • 39

CHAPTER V

A RIVALRY OF GREAT FURNACES: 1872 • 54

CHAPTER VI

BEGINNINGS AND GROWTH OF THE STEEL BUSINESS: 1875 • 71

CHAPTER VII

SOME INSIDE FINANCIAL HISTORY: 1875–1888 • 94

CHAPTER VIII

QUARRELS AND “EJECTURES” • 117

CHAPTER IX

A GLANCE AT PROCESSES • 136

CHAPTER X

THE RISE AND GROWTH OF HOMESTEAD: 1879 • 150

CONTENTS

CHAPTER XI	
THE INCOMING OF HENRY CLAY FRICK: 1882	• 167
CHAPTER XII	
THE CAPTURE OF THE DUQUESNE STEEL WORKS: 1889	• 174
CHAPTER XIII	
LABOR CONTESTS IN THEORY AND PRACTICE	• 184
CHAPTER XIV	
THE HOMESTEAD BATTLE: 1892	• 203
CHAPTER XV	
ATTEMPTED ASSASSINATION OF MR. FRICK	• 224
CHAPTER XVI	
THE AFTERMATH OF WAR	• 236
CHAPTER XVII	
A RELUCTANT SUPREMACY: 1892-1899	• 254
CHAPTER XVIII	
THE WORKINGS OF THE CORPORATE MIND: 1899	• 275
CHAPTER XIX	
THE ZENITH OF PROSPERITY	• 293
CHAPTER XX	
CARNEGIE'S ATTEMPT TO DEPOSE FRICK	• 316
CHAPTER XXI	
THE FAILURE OF THE IRON-CLAD	• 336
CHAPTER XXII	
THE ATLANTIC CITY COMPROMISE	• 346
CHAPTER XXIII	
THE BILLION-DOLLAR FINALE	• 358
APPENDIX	• 365
INDEX	• 371

INTRODUCTION

JOHN N. INGHAM

The Inside History of the Carnegie Steel Company created a sensation when it was published in 1903. Theodore Roosevelt was president, “trusts” were a national concern, and the Progressive Era was just beginning its reign of reform consciousness. This book, with its focus on a giant corporation, and on the machinations of “robber barons,” fit into the muckraking mold of so much of the literature of that time. Its image was enhanced by the fact that the author had served for five years as literary assistant to Andrew Carnegie, helping the latter write *Triumphant Democracy*. This connection, along with the title, suggested that the *Inside History* was an “insider’s account” of the operations of a gigantic and powerful industrial enterprise. Yet we know little today about James Bridge, his relationship to Carnegie, or the curious circumstances under which the book came to be written and published — facts that might enable the reader to determine the accuracy of his material.

Bridge was born into a middle-class family in Manchester, England, in 1856 and was educated at the Grand Lycée in Marseille and at the University of Bonn in Germany. Upon returning to England, Bridge worked as a newspaperman for about two years. In 1879 he became private secretary to Herbert Spencer, the eminent Social Darwinist. Spencer by that time had achieved world renown for his ideas and was at the height of his popularity among American business groups. He was also corresponding frequently with Andrew Carnegie by this time, and undoubtedly as a result of this connection Bridge came to the United States in 1884 to become literary assistant to Carnegie, the steel company magnate who fancied himself a social philosopher. Their collaboration on *Triumphant Democracy*, which appeared in 1886, was a success, as the book became a bestseller, and Carnegie himself acquired the sort of intellectual cachet he had long cherished.

There are also some indications, Bridge's protestations to the contrary, that he was more than a mere literary assistant during those years. After *The Inside History of the Carnegie Steel Company* was published, Bridge was sharply criticized by some for betraying confidences as Carnegie's private secretary. In a note to the third edition, Bridge replied that "he was never Mr. Carnegie's 'private secretary' as the term is usually understood. For several years he assisted Mr. Carnegie in literary work... and during this time he had neither the opportunity nor the inclination to learn the business secrets of the steel companies. This book does not contain a single fact that was acquired by Mr. Bridge in a confidential capacity" (iv). Yet, there are some hints in Joseph F. Wall's exhaustive and authoritative biography of Carnegie that Bridge was functioning as something more than a literary assistant, and was, indeed, a private secretary in some respects.¹ Whether he had access to Carnegie's business correspondence and decisions is not clear, but is probable.

In any event, Bridge stayed with Carnegie until 1889, when he began to pursue other, unspecified endeavors. Then, in 1896, Bridge bought the famous *Overland Mail*, a California magazine which he edited until 1900, publishing several of the early stories of Jack London. Although the details are not clear, sometime during this period Bridge became allied with Henry Clay Frick and Henry Phipps, longtime Carnegie partners who were by then involved in a bitter dispute with the Pittsburgh steelmaster. The nature of this dispute will be outlined in greater detail below. While writing and publishing his *Inside History*, Bridge moved to New York City, where he became editor of *Commerce and Industry* until 1914. In that year Bridge formalized his long association with Frick by becoming curator of the famous Frick art collection in New York. Bridge served fourteen years in this position until he resigned in 1928. He lived the balance of his life in New York City, dying on May 29, 1939, at his home in Scarsdale. He was at the time of his death president emeritus and the oldest living member of the Author's Club of New York. During his lifetime, Bridge had written a number of other books, including *A*

1. Joseph F. Wall, *Andrew Carnegie* (1970; rpt. Pittsburgh: University of Pittsburgh Press, 1989).

Fortnight in Heaven; Uncle Sam at Home; The Trust—Its Book; Ozone Treatment of Public Water Supplies; Portraits and Personalities in the Frick Galleries; Millionaires and Grub Street—Comrades and Contacts of the Last Half Century, and he coedited “*Liber Scriptorum*,” *the Second*, 1919–21.

In order to understand how the present book came about, and the potential bias of which the reader must be aware, it is necessary to briefly recount the history of Carnegie Steel and unravel the bitter controversy between Carnegie and his partners, Frick and Phipps. As Bridge notes, the Carnegie firm was founded in 1861, not by Andrew Carnegie, but by Andrew Kloman and his brother, Anthony. Called Iron City Forge by the two Prussian immigrants, they had taken a silent partner, Thomas Miller, into the business. Miller’s front man was Henry Phipps, Jr., a boyhood chum of Andrew Carnegie’s. Iron City Forge produced finished iron and steel products for the Union Army during the Civil War and also began producing fine axles for railway cars. After a time there was internal dissension between Andrew Kloman and Thomas Miller over the direction of the firm, and that soon resulted in a struggle between Miller and Phipps. To settle this quarrel, Miller asked Andrew Carnegie, an old friend, to intervene. Andrew negotiated a settlement whereby his brother, Thomas M. Carnegie, became a partner in the enterprise. Miller at the same time was forced out by a buy-out clause Andrew Carnegie had inserted in the agreement. This turn of events made Miller furious, and he joined with Andrew in starting a rival firm, Cyclops Iron, to drive Iron City Forge out of business.

Andrew, of course, had no intention of destroying his brother’s firm; his goal was a merger of the two concerns. This he was able to do in 1865 with the creation of the Union Iron Mill Company. The nature of Andrew Carnegie’s early involvement in the iron industry is deserving of some detailed analysis because it opens up a number of important questions. It shows, first of all, the rather devious way in which Carnegie approached most dealings. He had his fingers in many pots at the same time and often played the contesting elements off against one another. There was nothing illegal, nor even particularly immoral about this, but Carnegie’s actions often fell substantially short of what his contemporaries at the time, or we today, would consider fully rectitudinous behavior. Andrew’s proclivities

were recognized by most of his contemporaries, but have been obscured by his self-serving *Autobiography*, in which he always puts himself in the best possible light.

How does Bridge's *Inside History* fare in recounting the above tale and other examples of Carnegie's slick maneuvers? Generally quite well. In chapters 1 and 2 Bridge handles the Miller affair in a rather even-handed way as far as Carnegie is concerned. Although he is certainly cynical about Carnegie's actions, his cynicism is probably justified. The problem for the historian in making a definitive judgment is that we have little concrete evidence of what actually happened. One source, Carnegie's own *Autobiography*, is so self-congratulatory as to be virtually worthless. Although Carnegie's personal papers and writings are available at the Library of Congress, Carnegie Steel's corporate papers belong to USX Corporation (formerly United States Steel). USX has followed a highly restrictive policy with these holdings, and the only historian who has been granted access to them is Joseph F. Wall for his biography of Carnegie. We must surmise, however, that the Carnegie Steel files contain little or nothing on the above transactions, since Wall relies almost solely on Bridge for his analysis of them.

We can conclude from Bridge's treatment of this early incident that he endeavored to be fair and accurate in his portrayal of events, but also that he was prepared to hold Carnegie to strict standards of conduct. His sponsors in writing the book, Henry Phipps and Henry Clay Frick, are consistently treated with gentleness and deep respect. Bridge's purpose oftentimes seems to be to denigrate Andrew Carnegie's contribution to the firm's growth and success, while elevating the contributions of others. This bias, even when tempered by scrupulous attention to the facts as they were known, and even a careful handling of controversial events, must always be kept in mind by the reader.

The milling operations of Union Iron expanded rapidly during the late 1860s, and in 1872 Carnegie completed the first step in vertical integration of the firm with the building of the Lucy No. 1 blast furnace. Soon followed by Lucy No. 2, these furnaces set records for pig-iron production during the next several years. The most significant step Carnegie took at this time, however, was his move into Bessemer steel

production in 1872 at the new Edgar Thomson Works. Here, again, we encounter a controversial area. It is Bridge, perhaps more than anyone else, who popularized Carnegie's vaunted dictum, "pioneering don't pay," to portray him as the most conservative member of the young steel firm, the individual most resistant to significant technological change. In chapter 6, Bridge apportions credit to everyone but Carnegie when discussing the decision to build a massive Bessemer plant. It is William Coleman who gets the lion's share of the credit, with Thomas Carnegie playing a supporting role. Only after Andrew Carnegie watched a Bessemer operation in England, according to Bridge, did he sign on to the project.

Joseph Wall's research in the USX archives, however, produces a very different version of this episode. Although Carnegie did proclaim that "pioneering don't pay," this was an aphorism of his later years. Wall demonstrates that Carnegie had been involved in Bessemer production in a small way in the late 1860s with the Freedom Iron Company and probably would have built a large Bessemer plant sooner had it not been for the resistance of other members of the firm. Wall shows that Carnegie's visit to the Bessemer works in England was designed more to convert the skeptics among his own partners than to bring about some miraculous conversion of Carnegie himself. It was Phipps, Kloman, and Tom Carnegie, all old iron men, who opposed the building of the Edgar Thomson plant, while William Coleman, an inveterate risk-taker, was the only one willing to support Andrew. In this case, Bridge's bias appears to have interfered with a balanced telling of an event of crucial importance in the development of industrial America.

The adoption of the Bessemer process brought about a revolution in the fortunes of the Carnegie properties, and in the nation's iron and steel industry. Carnegie, with magnificent connections in the railroad industry, focused upon supplying the Pennsylvania Railroad and the Allegheny Valley Railroad with steel rails. Bridge develops well the fortunes of the Carnegie firm during this time of great expansion and also discusses the significant contribution of William P. Shinn's accounting procedures to the firm. Shinn, who had learned his accounting techniques with the Allegheny Valley Railroad, brought the road's voucher system to the new

steel firm. His daily cost sheets and other data were used to determine costs and prices with a precision heretofore unknown in the industry, where “lump” accounting procedures were commonplace. Shinn’s techniques allowed Carnegie to evaluate the various technological innovations advocated by his mill manager, Captain William R. Jones, to expand output and lower costs. All of this Bridge in one fashion or another covers in chapters 4–7, but the credit consistently falls to someone other than Andrew Carnegie. Bridge, who dedicated his book to “the Memory of the Men who Founded it, Saved it from early Disaster, and won its First Successes: Andrew Kloman, David McCandless, William Coleman, Thomas Morrison Carnegie, William R. Jones, William P. Shinn, David A. Stewart, Henry M. Curry,” makes no secret of his loyalties in this chapter.

It was William Coleman, according to Bridge, who established the intimate connections with the Pennsylvania Railroad. It was Shinn, of course, who introduced the accounting system. It was “Cap’n” Jones who was responsible for all the technological innovations. What was Andrew Carnegie’s role in all of this? According to Bridge, Carnegie was deeply immersed in financial scheming and chicanery. After all the praise heaped upon Carnegie’s minions in preceding pages, Bridge’s reintroduction of Carnegie to the narrative in this chapter is hardly flattering to the Scotsman. He quotes an associate who was asked about “Andy” Carnegie’s contributions to the firm during these critical years: “Oh, Andy looked after the advertising and drove the band wagon!” Beyond that, according to Bridge, Carnegie lusted after social and political recognition and, as he details in subsequent chapters, spent many hours scheming to trick his associates and buy them out of the business at bargain rates. How accurate is this image of Carnegie?

As with any stereotype, there is certainly a kernel of truth to it. Andrew was very much the “outside” man of the partners — the one who got all the publicity and press. Then, too, as Bridge well knew, he craved recognition as a great social and political thinker and pandered after Herbert Spencer and other British literati. But reducing Andrew Carnegie’s role to that of a loud-mouthed lobbyist and political groupie does a

severe injustice to his brilliance and to the profound role he played in orchestrating the parts of his mammoth enterprise. Joseph Wall's analysis of the Carnegie company papers reveals the magnitude of Carnegie's contribution. Although most of his contemporaries joshed that Carnegie knew nothing of the steel business, and despite the fact that he spent much time traveling in Europe, it is clear that Carnegie maintained an intimate relationship with the firm, its managers, and its costs. Hardly an ignorant promoter, Carnegie knew exactly how well the firm was operating at any given time, and why it was performing in that manner.

Nor does Wall credit Coleman with developing the close connections with the Pennsylvania and other railroads. Rather it was Andrew Carnegie who was always the firm's "super salesman." And it was Carnegie who first recognized that the voucher system of accounting developed on the railroads could be used in the company and identified Shinn as the man to institute it. Finally, although certainly an enormous amount of credit must be given to Captain Jones and A. L. Holley (designer of the Bessemer plant) for the wondrous technological innovations, it must be remembered that neither of these men were staff executives. It was ultimately Carnegie who had to recognize the worth of these innovations, sign on in support of them, and provide the financing to carry them through.

The one area in which Wall's treatment differs little from Bridge's is Carnegie's incessant plotting to buy out his partners at bargain rates. The record on that is all too clear and incontrovertible.

Bridge provides a fascinating glimpse of two attempts by some of the older Pittsburgh iron and steel men to compete with Andrew Carnegie in the field of Bessemer rails. The first of these challenges came at Homestead, where Carnegie's former partner, Andrew Kloman, was building a massive Bessemer works and rail mill in conjunction with William G. Park and others. In this case, Bridge's refusal to regard Andrew Carnegie as a superhero reaps some important dividends. Other writers have often ignored these attempts at Bessemer production by older iron and steel families, or have dismissed them as utter failures by inept, shortsighted iron men that simply strengthened Carnegie's hand.

Although there is a fair measure of truth in the latter view, Bridge captures a complexity in the situation that often eludes other writers. The second incident came at Duquesne in 1886, when many of these same ironmasters mounted another unsuccessful challenge to Carnegie by building the most technically sophisticated plant in the industry. It, too, ended in failure.

As far as I can tell, Bridge's account of these two confrontations, covered in chapters 10 and 12, is largely accurate and portrays the real drama involved. Pittsburgh iron and steel makers did not like Andrew nor were they enamored with the new Bessemer process. But, as Bridge makes clear, once they made a commitment to challenge Carnegie, their attempt was not to be taken lightly, nor was Carnegie's victory fore-ordained as so many analysts have assumed. In each case, the older Pittsburgh steel men built Bessemer plants that were wonders of technological and organizational efficiency, only to be undone each time by labor disturbances and other problems. Most writers have tended to assume that labor troubles stemmed automatically from a more conservative attitude on the part of the older Pittsburgh steelmasters, but Bridge gives evidence that this was not quite the case. At Homestead, they were caught at a delicate time by the death of Andrew Kloman, who was supposed to run the plant. To take Kloman's place, they brought in William Clark, owner of Solar Steel, to manage the plant. Clark was hardly a man of aristocratic, old Pittsburgh lineage. Born in England, he had worked as a skilled steelworker in Pittsburgh, and elsewhere, and had owned a couple of mills in Youngstown before returning to Pittsburgh. Along the way, Clark had developed rabidly anti-union attitudes, but these seemed to emanate from the fact that he had risen from worker to capitalist. He, therefore, had little patience for labor unions or workers who did not share his own ambition. The older Pittsburgh iron and steel men, on the other hand, had long been used to dealing with unions in their own plants.² When it became clear that Clark's anti-union actions

2. See John N. Ingham, *Making Iron and Steel: The Independent Mills of Pittsburgh, 1820-1920* (Columbus: Ohio State University Press, 1991), for an analysis of labor relations in Pittsburgh's independent iron and steel mills.

were jeopardizing the Homestead plant's survival, the older Pittsburgh owners were caught on the horns of a dilemma. Since there were few men in America who had Clark's expertise in steel mill management, they were doomed whether they kept him or let him go. This helped spell the downfall of the Pittsburgh Bessemer Steel Company and forced its owners to sell out to Carnegie at a bargain price.

A similar situation occurred at the Duquesne plant. Many of the same iron and steel men again built a plant that was a wonder of modern technology, only to have labor problems and some defects in the operating department sink the venture. It was also crippled by some deception on Andrew Carnegie's part. The Duquesne plant used the new "direct" process for rolling steel rails, that is, the ingots were run directly from the soaking pits to the various rolls, without cooling and reheating. This was unheard of in the industry at the time, although it later became the norm, creating great savings in the process. Carnegie, however, sent out a circular to the railway companies, warning them that rails made by this process would be defective and might crack. He knew this was not true, but it did inhibit the number of orders received by the new plant. Nonetheless, as Bridge makes clear, Carnegie (or in this case Henry Clay Frick, who was now managing Carnegie's operations) was able to buy out the Duquesne group for \$1 million in bonds that would not mature for five years. By the time they did mature, the plant had paid for itself six times over. This purchase, as much as any other event, solidified Carnegie's reputation for genius in the industry and guaranteed him the unending enmity of Pittsburgh's older iron and steel families.

Much of the last half of Bridge's book deals with Henry Clay Frick's managerial contribution to the Carnegie firm. As noted above, one of Bridge's goals in this work is to enhance the reputations of the various Carnegie partners, while correspondingly denigrating the role of Andrew Carnegie himself. But Frick, who was Bridge's longtime sponsor, is singled out for special treatment here. Bridge's account of Frick's impact on Carnegie Steel is almost breathless in its sense of awe, but in this instance his admiration seems well placed. Frick was, as he was called at the time, a "master manager." Unlike Carnegie, Frick belonged to the Pittsburgh establishment, since his grandfather ran a successful distillery

in the area, and Frick himself married into the eminent Childs family. Further, Frick was a lifelong friend of Andrew W. Mellon, of the powerful banking family. As a young man in the early 1870s, Frick clearly grasped the potential of Pittsburgh's industrial transformation. Even though Andrew Carnegie had not yet built his massive Edgar Thomson Works, Frick understood that the future of Pittsburgh lay with steel. The iron industry, which was still dominant in Pittsburgh, could use coal as fuel, but steel depended upon coke. Frick, who grew up in the Connellsville region, southeast of Pittsburgh, therefore was determined to get control of that region's plentiful supply of coking coal.

In conjunction with some relatives, Frick began borrowing every cent he could to buy coal lands and build coke ovens. His ally in this endeavor was Thomas Mellon, banker and father of Andrew Mellon, who loaned Frick \$10,000 to construct fifty coke ovens and later advanced more money. By 1873, the Henry C. Frick Coke Company was a great success. Frick was able to sell all the coke he could produce at a good price and had already paid back his most pressing debts. At that critical juncture, the banking house of Jay Cooke failed, and the country was plunged into its first modern depression; an extraordinarily steep economic downturn that lasted a full five years. Prudent business practice dictated that Frick cut back on his expenditures, ride out the worst of the bad times, and then expand when good times returned. But Frick, like Andrew Carnegie, turned this conventional business wisdom on its head.

Carnegie built his Edgar Thomson Works during the depths of the depression of the 1870s, when orders for steel rails from the hard-pressed railroads were scarce, but the cost of materials was about 25 percent less than in good times. Frick followed the same general maxim, with the same beneficial results. He was what is referred to today as a "bottom picker," buying when demand and prices were low and holding out until the depression was over. In this manner, Frick was able to gain control of the Connellsville coke fields for a fraction of what they might have cost. Others saw both Carnegie and Frick as reckless and daring for these moves, but it was a calculated daring, based on much study and a firm conviction that the economy would revive. When it did, in 1879, both Frick and Carnegie were in a position to reap enormous benefits.

Suddenly, coke prices, which had stood at \$1 a ton during the depression, skyrocketed to \$5 a ton. By 1879, the thirty-year-old Frick was a millionaire.

Carnegie, however, watched Frick gain control of the region's critical coke fields with much apprehension. As long as there were hundreds of producers in the Connellsville area, Carnegie had little concern about price or supply. By 1880, however, with Frick in command of over 80 percent of the coalfields and ovens, he was in a position to put a stranglehold on the Carnegie interests. Andrew Carnegie recognized that Frick was an opportunist of the first order, just like Carnegie himself, and he wondered just how long Frick could resist putting the squeeze on his biggest customer — Carnegie. Andrew Carnegie did not wait to find out; he secretly began buying up stock in H. C. Frick Coke Company. Then, while Frick was honeymooning in New York City, he and Carnegie had dinner together and Carnegie toasted their new "partnership." This was the first time Frick had heard of it, but he was willing to go along, since it gave him a number of advantages. First, it provided him with badly needed capital, and second, it gave his firm a great deal of prestige to be allied with Carnegie. Most important, however, was that it gave Frick entrée into the steel industry. To be emperor of the coke fields was gratifying to be sure, but in Pittsburgh steel was king; coke was just a sideline. Frick desperately wanted to be a player on the main field, and his association with Carnegie gave him that opportunity.

At first, Frick continued to manage the coke concerns with no input to Carnegie's broader operations, but when Andrew's brother, Tom, died in 1886, Frick was named manager of the entire Carnegie concern. It turned out to be a far-sighted move on the part of Carnegie, as Frick was in many respects the ideal manager. A brilliant tactician with a powerful and determined intellect, Frick had just one flaw: he didn't like to take orders. For Andrew Carnegie, whose management style consisted of barking out no-nonsense orders to his subordinates (and Frick, however exalted his station, was still Carnegie's subordinate), and who treated his partners in a cavalier fashion, this situation almost guaranteed that the two men would be in continual conflict.

For a number of years the partnership of Carnegie and Frick seemed

to be a marriage made in heaven. First of all, it allowed Carnegie finally to devote himself nearly full time to travel and writing, the avocations to which he had become increasingly devoted. Second, Frick brought to the Carnegie works a rigorous managerial discipline scarcely experienced on the American industrial scene. His first accomplishment as chairman was his astounding purchase of the Duquesne Steel Works, a "steal" of nearly unprecedented proportions. This acquisition allowed the Carnegie firm to make up lost technological ground in a single stroke. Then, once he had acquired Duquesne, Frick set about streamlining the entire Carnegie operation. Bridge states in Chapter 11 that "up to the time of the incoming of Mr. Frick the group of men with whom he allied himself had had no definite policy." This is an exaggeration, yet it cannot be denied that Frick brought a far greater degree of centralization to the enterprise, and this helped increase profits some 75 percent during the first year of his management. Then, in 1892, Frick persuaded Carnegie to create Carnegie Steel Company, Ltd., to take over all the Carnegie assets. The new concern included three Bessemer mills, Keystone Bridge Company, Lucy Furnace, Union Iron, Frick Coke, and a number of other properties. Frick also built a railroad line to connect all the company properties, which freed the firm from dependence on the Pennsylvania and Baltimore and Ohio railroads. With less than 100 miles of track, the line in 1899 carried as much freight as many of the major railway systems in the country — 16 million tons.

The rock upon which Carnegie and Frick's partnership foundered was labor relations. As similar as the two men were in some respects, in others they were totally different. Carnegie was the gregarious "gladhander" who craved public attention and wanted to be loved by all, including his workers. Frick, on the other hand, was a rather dour man who had few friends and was reserved and formal in all his personal and business relations. Of greatest importance, Frick had learned heavy-handed tactics for dealing with labor in the coal fields. While Carnegie was writing articles extolling the "dignity of labor" and adopting (at least in theory) a conciliatory stance toward unions, strikes, and workers, Frick believed that both unions and strikes must be ruthlessly suppressed.

This temperamental difference in regard to labor was to plague the relationship of the two men over the years, and it exploded into prominence during the infamous Homestead lockout of 1892.

One of the great advantages of Bridge's work is that in an attempt to temper the criticism of Frick's role in the Homestead dispute of 1892, he places the entire confrontation within a longer history of embittered labor relations in the plant and industry. Where others have stressed the immediate issues of 1892 and Frick's cruel and belligerent response to them, Bridge treats the bloody episode as part of a broader picture of labor intransigence. He also makes much of Carnegie's cupidity and of stupid actions on the part of other management personnel. To a certain extent, Bridge is correct in his analysis; at least his views must be correlated with others to achieve a fuller understanding of what happened during those tragic days and weeks in 1892.

Chapter 13 in the text is a competent, though strongly anti-union, analysis of the context of labor relations in the steel industry generally, and at the Carnegie mills in particular. Bridge details the earlier strikes in the Carnegie plants, giving a clear sense of the rather strained relations between Carnegie management, which was ever pushing for lower costs, and the workers, who of course wanted to protect their wages and their workplace prerogatives. At critical junctures in these relations, when the workers and their unions had reached a breaking point and were about to go out on strike, Carnegie would accede to some of their demands, thereby allowing him to continue running his mills without interruption, often during a period when his fellow Pittsburgh millowners found their plants shuttered. It was his moral flexibility on the issue of unions, wages, and work rules that allowed Carnegie to continue to fill his orders and further embittered relations between him and his colleagues.

When Frick became a partner, however, their differing philosophies of labor brought them into continual conflict. The first came in 1887, during a strike in the coal fields, when Carnegie ordered Frick to grant the union's demands. Frick, who was the mineowner's leader in these negotiations, was mortified, but had no choice. He complied, and submitted his resignation to Carnegie the day the strike was settled,

saying that he objected to “so manifest a prostitution of the Coke Company’s interests in order to promote your steel interests.”³ Carnegie, who wanted to retain Frick’s “positive genius” in management, went out of his way to smooth Frick’s ruffled feathers, so that the latter rescinded his resignation after a few months. Part of the reason for this, evidently, was that he was led to believe that Carnegie would support him in any further labor confrontations.

The next test of Carnegie and Frick came in 1890 when the unions in the coke fields called for a strike to force acceptance of a new general wage scale in the industry. The mineowners decided to resist with every fiber of their being, and Frick, as the largest owner, took his accustomed position as leader of the struggle. He prepared for a long and violent siege, having filled the coke bins at Carnegie Steel and reduced orders to the plants. Frick refused to negotiate with the unions and began bringing strikebreakers into the mines. The enraged strikers responded with violence and terrorism, but to no avail. As a result, the strike was thoroughly crushed after three months and the union was driven from the region. Since Carnegie had refused to intervene on the workers’ behalf, Frick quite naturally assumed that he would have his full support in all future labor negotiations.

Frick’s confidence in this matter was also enhanced by what had happened earlier at Homestead. As Bridge notes in the same chapter, in 1889 Carnegie had tried to put the Homestead men on the same sliding scale as at the Duquesne and Edgar Thomson plants, resulting in a 25 percent reduction in wages for the men. The union struck the works in response, and Superintendent William L. Abbott, intimidated by violent encounters at the plant, signed a three-year agreement with the union which amounted, in certain respects, to a nearly complete capitulation. This occurred at a time before Frick had complete control of the Carnegie operations, and he was gratified to learn that Carnegie shared his anger at Abbott for making this compromise. Carnegie forced Abbott out of the firm, and the way was paved for Frick to have greater control of every aspect of Carnegie’s operations, including labor relations.

3. George Harvey, *H. C. Frick: The Man* (New York: privately printed, 1936), pp. 85–86.

It is, therefore, not surprising that Frick assumed he had been given a free hand in all these matters by the usually absent Carnegie. Bridge in Chapter 14 provides an interesting account of the relations between Carnegie and Frick in the months just prior to the Homestead battle. He reprints several letters and notes from Carnegie to Frick and other company officials in which he expressed his determination to rid the plant of union influence. These letters and memoranda are designed to demonstrate to the reader the degree to which Carnegie shared complicity in the strong anti-union stance taken by Frick.

In the next chapter, Bridge tells of the dramatic attempt on Frick's life by Alexander Berkman. Although his account is generally accurate, it is designed to garner sympathy for Frick and to make a martyr and hero of the man whom most workers blamed for the strike and the violence that surrounded it. He also takes pains to connect Carnegie with the decisions made by Frick concerning the strike, to show that Carnegie was always aware of what was happening and approved Frick's actions. He does this to demonstrate the great dichotomy between what Carnegie wrote and what he practiced with regard to unions; his hypocrisy, in other words, compared to the rugged, unyielding rectitude of Frick.

Although the reader should be aware of Bridge's bias, it must be recognized that he is generally correct in his portrayal of the roles of Carnegie and Frick in these events. Joseph Wall, in his biography of Carnegie, relies heavily on Bridge for the relationship between the two men at the time of the Homestead strike, and at only one fairly inconsequential point does he contradict Bridge's version of events.⁴ Carnegie, who had at first solidly supported Frick in his actions at Homestead, began backing away from this as public condemnation of the company began pouring in. Bridge accurately portrays Carnegie's extreme sensitivity to public opinion, but does, somewhat grudgingly, show that Carnegie, whatever his private doubts, gave Frick his full and complete endorsement in 1893 when he addressed Homestead's workers.

In Chapter 17 Bridge provides details for a number of developments at Carnegie Steel under Frick's management during the three years after the Homestead lockout. The most important was Frick's acquisition of iron

4. Wall, *Carnegie*, pp. 576-77.

ore lands on Lake Superior from Henry Oliver, despite the vigorous initial protests of Andrew Carnegie. Although Carnegie Steel controlled, through Frick Coke, its own fuel supplies, and through Pittsburgh Limestone plentiful limestone deposits, Carnegie for some reason did not think it important for the firm to control its own supply of iron ore. Frick thought this was ridiculous, and Bridge colorfully recounts the story of how he came to join with Henry Oliver to provide this resource. As Bridge tells us, Oliver was one of the most dynamic and successful businessmen in Pittsburgh and was a boyhood friend of Tom Carnegie's. But Oliver had also incurred the enmity of Andrew Carnegie, who considered him a "speculator," the worst epithet he could hurl at someone. It is not clear just why Carnegie was so against speculation, since he had made a good deal of his own fortune that way, but Oliver epitomized for him the very lowest form of this species.

When Oliver approached Frick with his proposal to become partners in purchasing ore lands, Frick contacted Carnegie. As Bridge notes, Carnegie replied from Europe that "Oliver's ore bargain is just like him — nothing in it." Frick, however, would not back down and ultimately persuaded Carnegie to purchase a 50 percent interest in Oliver's ore lands. The deal was sealed none too soon. As Bridge points out, John D. Rockefeller moved into the Mesabi range shortly afterward, bought up the rest of the holdings, and set up a fleet of ore boats on the Great Lakes. The holdings Frick persuaded Carnegie to buy with Oliver, however, protected the Carnegie firm from Rockefeller's power, and ultimately Carnegie and Rockefeller reached an agreement. *Iron Age* called this latter agreement Carnegie's greatest achievement, but there is little question that Bridge is correct in his analysis: without Frick's pressure to make the earlier deal with Oliver, there would have been no agreement with Rockefeller.

The final five chapters in Bridge's book deal with the bitter conflict and split between Carnegie and Frick. It is a complicated affair that can only be given a brief explication in this space. In the years after the Homestead lockout, Frick found himself increasingly alienated from Carnegie and believed that his once unquestioned power in the company was being undercut by the emergence of Carnegie's new "young men."

The situation became particularly difficult for Frick after 1897. In that year Charles M. Schwab was made president of Carnegie Steel, replacing J. G. A. Leishman, who was fired by Carnegie for speculation. Frick had watched his own power continually compromised and diminished over the years after 1894. Carnegie had removed him as president of the Carnegie operations and also reduced his share of the company from 11 percent to 6 percent. But these actions were softened by the fact that Frick was allowed to choose his own replacement. Frick, who was named chairman, had picked Leishman, precisely because of his ability to dominate such an easy-going man. This allowed Frick to continue to have a good deal of power in company decisions. Leishman's replacement, Charles Schwab, however, was a dedicated Carnegie loyalist who was less willing to listen to Frick's advice. Frick, therefore, found his former "supreme power" beginning to disintegrate. He decided that he wanted to leave the Carnegie enterprises, but he was stymied by the Iron Clad Agreement.

The Iron Clad Agreement, as Bridge notes, had an interesting history. It was, rather ironically, given the later controversy, the brainchild of Henry Phipps, Jr. Its genesis came in 1887. At that time Tom Carnegie was dying of pneumonia, and Andrew Carnegie was also gravely ill with typhoid fever. Tom held an interest in the Carnegie firms second only to his brother's, and Andrew's stood at 54.5 percent in Carnegie Brothers and 52.5 percent in Carnegie, Phipps. Henry Phipps, whose share was equal to Tom Carnegie's was desperately worried about the potential consequences if both men died: "Tom Carnegie is sick with pneumonia," he complained, "and is going to die. Andrew Carnegie is sick with typhoid fever and is going to die too. That's going to leave Carnegie Brothers in a nice mess. You know our finances are not in any too good condition. We shall be called upon to settle with their estates and it will ruin us."⁵ As it turned out, Andrew recovered from his illness, though Tom died, but the situation badly frightened Phipps, who in 1887 drew up the first of the famous "Iron Clad" agreements.

There were essentially two parts of these agreements. The first

5. *Ibid.*, pp. 490–91.

stipulated that for any interest in the company that exceeded 4 percent, the company would have up to fifteen years to pay it off to the estate's heirs, thereby giving it a sufficient grace period to raise the necessary funds. But Phipps's agreement went beyond that; it also provided that the firm could repurchase this interest at book rather than market value (i.e., at a much lower price) any time persons controlling 75 percent of the shares demanded its sale back to the company. This clause could not be applied to Andrew Carnegie's share, since he always held over 50 percent himself, thereby frustrating any attempt to garner 75 percent against his interest. Thus, the Iron Clad was used primarily to force recalcitrant minority members out of the company at bargain rates, and only secondarily to protect those minority holders from bankruptcy in case of the death of Andrew Carnegie. One of the ironies of this agreement is that Phipps, who was its architect and greatest advocate, was one of those to feel its pinch most painfully. Another was that both Frick and Phipps, along with Andrew Carnegie, used the Iron Clad rather gleefully during the 1880s to get rid of unwanted partners. Little did they imagine it would one day be used against them.

Phipps, like Frick, was becoming increasingly frustrated with the situation at Carnegie Steel. He had been with the firm from its very beginnings in the 1860s and had been a loyal and hardworking factotum of Andrew Carnegie's; now he wanted to ease into semiretirement, to live a life of leisure and travel as Carnegie himself was enjoying. But Carnegie insisted on pouring money back into the company, rather than paying it out in dividends, and Phipps felt increasingly victimized by this situation. His frustration was further intensified after Schwab became chairman. In 1897 Schwab announced a vast expansion plan that would cut even more deeply into dividends. Phipps protested to Carnegie, but the Scotsman dismissed his complaints. Phipps then decided that he wanted to withdraw from the firm, but recognized that Carnegie could simply use the Iron Clad Agreement to force him to accept book value for his share — a price that was only a fraction of what it was actually worth.

Phipps and Frick thus became allies in a crusade to find a buyer for Carnegie Steel who would allow them to emerge with their potentially vast fortunes intact. Frick and Phipps put out feelers to Wall Street in 1899

and found that William H. Moore and his associates were willing to offer \$330 million for a company whose book value was just \$50 million. Frick and Phipps thus stood to make gigantic profits if they could pull off the sale. Working in their favor was the fact that Andrew Carnegie had been talking about retiring for a number of years, but the disadvantage was that he had also vowed he would never sell his steel firm to “speculators,” and Frick and Phipps knew well that Carnegie regarded Moore as one of the worst of the Wall Street speculators. So they had to keep Moore’s identity a secret from Carnegie. Their ruse was only partially successful. Carnegie did agree to sell the firm, but demanded that cash be put up for the option, which had to be picked up in ninety days. The Moore syndicate was able to provide only \$1 million, leaving Frick and Phipps to pay \$170,000 out of their own pockets. They did so, confident that the sale would go through and that they would not only be able to sell their shares at a premium price, but that they would also share a \$5 million commission for their services. But disaster soon struck for the two conspirators: first, Carnegie found out that Moore was the potential buyer, which infuriated him; and second, Moore was unable to raise the necessary cash on Wall Street. The deal fell through, meaning that Phipps and Frick lost their \$170,000. Bridge, who tries to put a good face on all this, makes the point that Carnegie had promised the two men that he would return their deposit to them if the deal was not consummated, but this was before he found out Moore was the purchaser. Years later, Carnegie would brag to visitors at Skibo Castle in Scotland that it was a “gift” from his “friend” Henry C. Frick.

Carnegie could forgive his old friend Phipps for this transgression, but not Frick. Carnegie was by then determined to force Frick out of the firm, as Bridge graphically recounts in the latter chapters of the book. A series of complicated issues arose between the two men, involving the price of coke and a mill site Carnegie Steel was planning to buy at Peter’s Creek. As a result of these conflicts, Carnegie in 1899 demanded Frick’s resignation as chairman of the board, and in January 1900 invoked the Iron Clad Agreement against him, demanding that Frick relinquish his shares at book value. Frick was furious and flew into a towering rage, screaming at Carnegie: “For years I have been convinced that there is not an honest

bone in your body. Now I know that you are a god damned thief. We will have a judge and jury of Allegheny County decide what you are to pay me.”⁶ And so he did.

Frick, in a nearly unprecedented action, took Carnegie to court. Frick and Phipps jointly sued Carnegie over the provisions of the Iron Clad, stating that the books of Carnegie Steel were not a fair representation of the value of the company. Frick pointed out that on the basis of book value, his 6 percent of the company was worth just under \$5 million, whereas he felt its actual value was closer to \$15 million. (See the book’s appendix for the presentation of Frick’s case against Carnegie. Somewhat ironically, when Carnegie finally settled, Frick got some \$31 million, twice as much as even he thought his share was worth.) What followed was the most sensational lawsuit in American industrial history, and the press had a field day with it. As the public and press became aware of the enormous profits made by Carnegie Steel (\$25 million in 1899, and an anticipated \$40 million in 1900) there were demands for an end to the protective tariff on iron and steel products, and much fuel was added to the argument to break up large “trusts” like Carnegie Steel. Thus, there was increasing pressure put on Carnegie by his partners and by other industrialists like George Westinghouse to settle the suit quickly and quietly. To do so, Carnegie first created a new holding company, called Carnegie Corporation, capitalized at over \$300 million. The new firm automatically eliminated the old Iron Clad, so that both Phipps and Frick could sell their interest at market value. The last stage in all this, as Bridge notes, was the sale of Carnegie Steel to J. P. Morgan as the cornerstone of the massive U.S. Steel Company. With a total capital of \$1.4 billion, it was the world’s largest corporation.

Bridge’s *Inside History* is an interesting and important document of its age. The product of a bitter controversy between two of America’s most powerful capitalists, it opens a window on the normally secret world of Big Steel. The window is not perfectly clear, certainly not without distortion, and the picture should therefore be used with care, but Bridge’s story

6. Ibid, p. 753.

remains a fascinating glimpse at a world of power, greed, ambition, and accomplishment. It is more than a little ironic that after almost ninety years, this book still provides one of the best insights into Carnegie Steel and the steel industry at the turn of the century. Whereas other major industries and firms have been subjected to scholarly, detailed, in-depth analysis, the steel industry, by withholding its archives from historians and other researchers, has remained unexamined.

It is well recognized among historians of business that the automobile industry is one of the best researched in America. Starting with the superb works of Allan Nevins on the Ford Motor Company, there has been an increasing number of detailed and conceptually sophisticated works on the industry. The steel industry is the exact antithesis. For an industry as seminal as that of steel to the economy and to American development, its intense secretiveness is a tragedy. Until the massive records of USX are opened to researchers, Bridge's book will stand as one of our most important sources on the industry.

It also provides rare insight into the ideas and emotions of Pittsburgh's independent iron and steel makers and other members of Pittsburgh's older upper class. Often ignored by historians, this group receives its just due in Bridge's work. Historians know in a general way that Carnegie was dismissed as an upstart and outsider by this older group, but that vision has been substantially obscured by the fact that Carnegie, ever the skillful propagandist, has succeeded in leaving an image of himself as a beloved philanthropist and a liberal thinker on issues of wealth and labor. Bridge's book provides stark evidence of how little Andrew Carnegie was liked or even respected among his supposed peers in Pittsburgh. He reminds us that Carnegie's contemporaries were less impressed with his posturing than were many journalists, and if the picture of Carnegie that emerges in Bridge's writing is not wholly accurate (and it is not) it certainly is valuable to counter the self-serving image we get from Carnegie's own *Autobiography*.

At least until USX Corporation opens up the Carnegie Steel archives to researchers, Bridge's *Inside History* will remain a valuable document of industrial history. It is a careful, though biased, account of a one of America's largest, most important and powerful firms, and of a titanic

struggle for control within that giant company. As such, it makes interesting and rewarding reading; it allows us to get inside the corridors of power and experience the raw and naked thoughts and feelings of some of the country's most powerful industrialists.

PREFACE

THIS book is the outcome of a magazine article undertaken at an editor's request. Having spent a number of years in the closest intimacy with one of the owners of the great steel works, and enjoyed exceptional opportunities of becoming acquainted with the men who had wrought their success, I entertained little doubt as to my fitness for the task. So recalling the stories I had heard the partners tell, and adding a few I found in the writings of Andrew Carnegie, I wrote my article, and found I had enough material left for a couple more. These also were written, and in due time published.

To my surprise they brought an avalanche of dissent and protest. From distant Oregon and near-by Meadville, from Pittsburg and New York, came word from unknown correspondents that my conventional story was only a repetition of similar publishings, all faulty and all designed to glorify some individual at the expense of his associates. One letter contained an expression so vigorous that it has won a place for itself in this book: "They have filched their laurel wreaths from the tombs of the dead." Another assured me that what I had deemed honorable success was but the outcome of "Macchiavelian astuteness." I was told by one who had played an important part in the early history of the enterprise that "the bad faith, treachery, and chicanery that lie at the bottom of many great fortunes had their parallel in the history of the Carnegie interests." "Dear me!" sighed an unknown Pittsburg correspondent, "the humbug of greatness is so grotesque in the careers of those we know that it makes one wonder at the accidents which happen to men—accidents which elevate mediocrity

and the commonplace to Olympian heights." In other letters were references to "porcine proclivities," "pachyderm entities," "a vainglorious medley of contradictions."

Under this interesting stimulus I determined to go to Pittsburg and stay there until I had got at the core of things Carnegian. My experience was at once a disappointment and an encouragement. With documentary proof before me I found that almost every man who had written a line about the events I was investigating had blundered; one in dates, another in sequence of happenings, a third in the placing of credit for inventions and improvements; and of them all I found Andrew Carnegie's own narrative the least trustworthy. Knowing how excellent is his verbal memory, it puzzled me to find him mistaking his own birth-year; claiming to have been the first in America to operate the Bessemer process of steel-making; to have originated iron railway bridges; to have been the founder of the business that bears his name; to have been ever on the alert to adopt new processes and mechanical improvements; to have maintained without a break the friendliest of relations with his partners; to have been the principal factor in the gigantic growth of the business; to have fervently tried to carry his high ideals concerning labor into his own works. Instead of this I everywhere found proof of the contrary; and when, finally, I was notified that I must agree to submit my manuscript to the usual Carnegie revision before I could count on any assistance of the present officers of the company, my disillusionment was complete.

But it made my work more interesting. To write a conventional history from the official records of the company, with the aid of the company's press agent and under the guidance of an official censor, was a thing any journalistic fledgling could do. To dig into the secrets of the great corporation, to expose its enormous profits, reveal its peculiar business methods, its ways of heading off competitors, its internal strife, to get its first annual reports and even its later balance sheets, and to do

all this openly and without a bribe or the betrayal of a confidence, to involve no employee in a covert act or breach of faith—this was a task of no small difficulty. It is for the reader to judge of my success.

Thus disadvantaged, I have not hesitated to use personal letters and private documents as I might not otherwise have done. Whenever an interesting fact has come to my knowledge, properly authenticated, I have used it without regard to its implications. Yet I have stated nothing that cannot be verified. Often I have risked being tedious in order to quote a corroborative document. In other cases I have kept the proofs by me in case my accuracy should be called into question.

From this independence has resulted a narrative more-truthful than it could otherwise have been. Had the official representatives of the Carnegie Steel Company revised this story, it is certain that many of the statements it contains would never have seen the light of day. More than once the company has accepted a large monetary loss rather than disclose its secrets in court. If, therefore, this book has any value it owes it to its frankness. While the author expects censure for some of his revelations, he is willing to accept it in the cause of truth. The conventional history of the concern, based on benevolent aphorisms and platitudinous maxims about thrift, industry, genius, and super-commercial morality, has been written a hundred times, and will probably be written again and again.

The Carnegie Steel Company, as will be seen from this narrative, is not the creation of any man, nor indeed of any set of men. It is a natural evolution; and the conditions of its growth are of the same general character as those of the "flower in the crannied wall." Andrew Carnegie has somewhere said, in effect: Take away all our money, our great works, ore-mines, and coke-ovens, but leave our organization, and in four years I shall have re-established myself. He might have gone a step further and eliminated himself and his organization; and in less than four years the steel industry would have recovered from

the loss. This is not the popular conception of industrial evolution, which demands captains, corporals, and other heroes; but it accords with evolutionary conceptions in general.

This inevitableness of industrial growth is frankly recognized by the most far-seeing but least talkative member of the group. "The demands of modern life," says Mr. Frick, "called for such works as ours; and if we had not met the demands others would have done so. Even without us the steel industry of the country would have been just as great as it is, though men would have used other names in speaking of its leaders." This is a frank acknowledgment, from one of themselves, that the kings of industrialism have no divine right.

Little is here said on the subject of the tariff. The book is neither a protectionist's pleading nor a free-trader's argument. It is simply the story of the growth of a great industry, and the author deems his mission fulfilled in setting forth the facts as he finds them, leaving the reader free to make his own deductions.

As this is not a political tract, neither is it an ethical treatise; and the author considers it no part of his duty either to extenuate or accentuate the lapses from a high moral plane which may occasionally have been suffered by some of the individuals whose efforts are here described. The men who were instrumental in building up this great business were, originally at least, none of them philanthropists. There was hardly a step in their progress which had not the impulse of unqualified selfishness; and if, in the light of retrospection, some of their actions seem inconsistent with a book morality, it must be remembered that in the fight for industrial life, as in that earlier struggle for physical existence, the victory is not to the gentle and the tender-hearted, but to the others. No great business has yet been built on the beatitudes; and it is not all cynicism that condenses a negative decalogue into a positive exhortation to be successful—"somehow!"

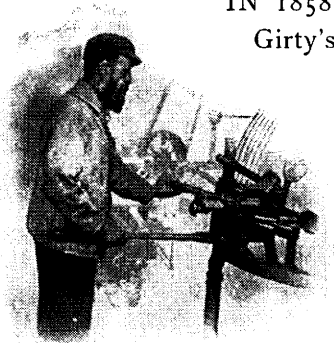
AUTHOR'S NOTE
TO THE THIRD EDITION

To meet certain criticisms which have been made concerning the propriety of his publishing this book, Mr. Bridge wishes to say that he was never Mr. Carnegie's "private secretary" as that term is usually understood. For several years he assisted Mr. Carnegie in literary work, especially in the preparation of *Triumphant Democracy*; and during this time he had neither the opportunity nor the inclination to learn the business secrets of the steel companies. This book does not contain a single fact that was acquired by Mr. Bridge in a confidential capacity; nor has any fact been included that was improperly obtained by anyone else.

THE INSIDE HISTORY
OF THE
CARNEGIE STEEL COMPANY

CHAPTER I

THE HUMBLE BEGINNING



IN 1858 a small forge was started at Girty's Run in Millvale, Duquesne Borough, now a part of Allegheny. It stood on the edge of the straggling village, and a muddy road ran past it along the river-bank. Judged by modern standards it was an insignificant affair, with a little engine and a wooden trip-hammer—that

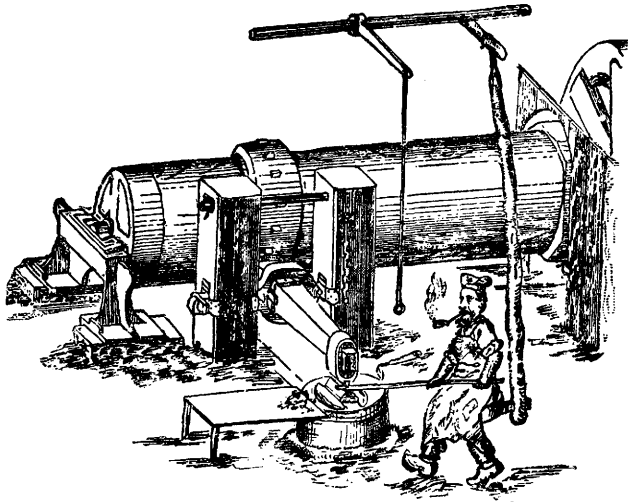
first cumbrous mechanical substitute for the sledge-hammer. The building was a light wooden construction, about a hundred feet long and seventy wide; but even in these narrow limits the scanty machinery seemed at first lost. It had been brought from the basement of a near-by dwelling where the business was started five years before. In the course of time the vacant corners and empty spaces were gradually filled with axle-bars, small forgings, and iron scrap of various kinds, and the place took on a busy air.

The men who owned this little shop were typical blacksmiths, deep-chested, muscular fellows, who had grown up in the light of the smithy and the music of the anvil. They were Andrew Klowman and his brother Anton, who had come from

Treves in Prussia a few years before. In time the superfluous "w" of their name was dropped, and Anton became Anthony.

This little place, which its owners valued, good-will and stock, at \$4,800, was the beginning of one of the greatest industrial aggregates in the world, valued and bought, forty-three years later, for nearly five hundred million dollars!

In character the Kloman brothers were very different. Andrew was a steady, plodding man of preternatural gravity, earnest in his manner and watchful of every detail of cost and



A German trip-hammer.

From the American Manufacturer.

profit. Anthony, although the elder, had no high sense of responsibility. He was careless and free with both money and time; and the beer-can was often raised to his perspiring face. Andrew preferred water, not only as costing less, but as leaving him in better shape for bargaining. And in little things he was a shrewd bargainer. He had been trained in a school where a pfennig—the tenth of a cent—was the unit of expenditure and a mark the equivalent of a dollar. Like the Prussian workmen among whom his youth had been spent, he was suspicious, and, at the outset of his career, more prone to insistence

on his own rights than solicitous about those of others. Later, he outgrew this; but the trait led to great happenings.

The workmanship of Kloman Brothers, however, was faultless; and they soon won a reputation for a reliable product. Their specialty was axles, which they forged out of scrap-iron, and sold to railroads and car-builders in and around Pittsburg. The peculiarity of their product was caused by alternately reversing the direction of the fibres while forging the iron, which gave their axles a superiority soon recognized by the trade. The practice was original with Andrew Kloman.

Among their clients was the Pittsburg, Fort Wayne and Chicago Railway, then called the Ohio and Pennsylvania, which had shops and offices at Allegheny. The purchasing clerk of this company was Thomas N. Miller, who was born in Allegheny in 1835 and had grown up with a group of boys who were destined to leave a deep impress upon the industry of their town. Miller early recognized Andrew Kloman's abilities, and frequently put business in his way by introductions and recommendations to manufacturers using axles and forgings; and a certain intimacy was thus established between them.

In 1859 Kloman came to Miller, and told him that his business was growing so rapidly that, if he could get money to install a second trip-hammer, he could double his output and easily market it. He estimated the cost of this addition at \$1,600; and he offered Miller a third of the profits of Kloman Brothers if he would put this sum into the business. As Miller was purchasing clerk for a company which dealt with the Kloman Brothers, he had some doubts about the propriety of directly associating himself with them; and he so expressed himself to Kloman. "But I have a young friend," he added, "who might represent me; and if you like I'll introduce him to you." Kloman consented; and Henry Phipps was brought into the negotiation."

Henry Phipps at this time was just twenty years of age, having been born in Philadelphia on September 27th, 1839. His

father was a shoemaker who had moved during Henry's childhood to Allegheny City, where he set up a little shop for himself in Rebecca Street. At the age of thirteen young Phipps was earning a dollar and a quarter a week as general utility boy with a jeweller named Barton, who had a small shop at the corner of Cherry Alley and



Young Phipps, trudging along the canal bank on his way to Kloman's.

Liberty Avenue, Pittsburg. In 1856 he entered the office of Dilworth & Bidwell, who had something to do with iron and iron spikes, and were also the local agents of the Dupont Powder Company. First he was office boy, and later became bookkeeper. In a few years the firm was dissolved, Dilworth taking the spike-mill and Bidwell the powder business; and young Phipps was taken by

the latter into partnership. He was, however, still bookkeeper for Dilworth & Bidwell when Miller proposed that he should take an interest in the Kloman forge.

Young Phipps readily agreed to join Miller in the enterprise, and set out to raise his share of the \$1,600 required by Kloman. The problem was not easy; and it was only temporarily solved when the elder Phipps agreed to mortgage his house for \$800; for, not knowing that this \$800 would grow into \$50,000,000, he presently regretted his offer, and showed such distress that his son felt obliged to release him from his promise. Finally it was arranged that Miller should pay the whole of the \$1,600 required by Kloman, and that Phipps should refund half of this out of his profits in the business. In return he was to have half of Miller's interest, which, for propriety's sake, was put in

the name of Phipps. In addition, Phipps was to keep the Kloman books.

This arrangement proved very satisfactory to all parties; and, the second trip-hammer having been installed, the business grew rapidly. Miller secured the Klomans the preference of the Fort Wayne business, and recommended them to new firms building cars for the railroad, such as Whittaker & Phillips of Toledo, Haskell & Barker of Detroit, Jessup Kennedy & Co. of Chicago, Barney Parker & Co. of Dayton, and others, from whom the bulk of their trade was soon received. Phipps, with the energy which has always characterized him, walked three miles out to the Kloman shop after his day's work at Dilworth's, posted up the books, and then trudged back along the dark towing-path of the Pennsylvania canal to his father's house on Rebecca Street. And Kloman, with his sleeves rolled up, worked with his brother and half-a-dozen men in the forge.

Then the war broke out, and axles, which had been selling for two cents a pound, jumped to twelve cents a pound. And when it came to filling government orders for parts of gun-carriages, there was no limit to price for quick deliveries. The making of railway supplies dwindled; and soon the firm was working almost exclusively on high-priced government orders.

Under this stress of prosperity the primitive forge in Girty's Run was found inadequate before the war was a year old. A new and larger mill was therefore decided upon, and the firm was reorganized. Here are the articles of partnership:

Articles of agreement made and concluded this sixteenth day of November, A.D. 1861, by and between Andrew and Anthony Kloman, of Duquesne Borough, of the first part, and Henry Phipps, Jr., of Allegheny City, of the second part, all of Allegheny County and State of Pennsylvania, witnesseth:

That the said parties have agreed, and by these presents do agree, to associate together as equal copartners in the business of manufacturing, selling, and vending axles, iron forgings, and the rerolling of scrap into iron bar, and the general work of an iron-mill and all things pertaining thereto.