Carnegie, Andrew (25 Nov. 1835-11 Aug. 1919), industrialist and philanthropist, was born in Dunfermline, Scotland, the son of William Carnegie, a handloom weaver, and Margaret Morrison. William Carnegie was sufficiently prosperous to have four looms in his shop and to employ three apprentices. Although shunning political activism, he was an enthusiastic supporter of the political views of his wife's father, Thomas Morrison, Sr., an early leader of the Chartist movement and a friend of William Cobbett to whose journal, *Cobbett's Register*, Morrison was a frequent contributor. Margaret Carnegie's brother, Tom, Jr., preferred the soapbox to the pen by which to disseminate the same radical views of abolishing the monarchy and the House of Lords, disestablishing the state church, and nationalizing all lands in Britain. One of Andrew's earliest memories was being awakened by a neighbor shouting that Tom had just been hauled off to jail for disturbing the peace with his incendiary harangues in the public square. Andrew later confided to a friend that he then determined to "get to be a man and kill a king."

Another of Andrew's uncles, George Lauder, a fairly prosperous shopkeeper, exerted a different influence on the boy by reciting to him heroic sagas of Scotland's past and by requiring him to memorize Robert Burns's poems. Under Lauder's tutelage, Andrew became incurably romantic in his love of all things Scottish.

Promised by his indulgent parents that he need not attend school until he was ready to do so, Andrew was nearly eight before he indicated he wanted to go, prompted perhaps by the birth of his brother Tom. Andrew was sent to a Lancastrian one-room school in the neighborhood and quickly made up for lost time. Teacher Martin acquired his brightest pupil, and Andrew's classmates gained a conspicuous "teacher's pet" to taunt.

The year 1844 marked a turning point in the family's fortunes. Industrialism was only then revolutionizing the linen textile trade. The recent arrival of a steam-power loom factory was rapidly making the Dunfermline handloom weaver obsolete. One by one William's looms were sold and his apprentices dismissed. There was barely enough demand to keep one loom operating. Andrew's mother supplemented the family's income by selling ha'penny candy and mending shoes, a skill she had learned from her father. Still hoping for a Chartist Utopia, William Carnegie at first refused to listen to his wife's urging that they join her two sisters who had earlier emigrated to America. In the harsh winter of 1847-1848, however, poverty finally crushed his resistance, and the Carnegies made plans for the "flitting," as many other Scots had already done. From that moment, Margaret became the true head of the family. It was she who sold off their few possessions and borrowed the additional funds necessary to take them across the Atlantic. "I'll make a spoon or spoil the horn," was her terse epigrammatic response to those who scoffed at her plans.

On 17 May 1848 the Carnegies departed from Glasgow on the small sailing vessel *Wiscasset*. After an arduous ten-week journey, they reached Pittsburgh. They were provided with two rooms rent-free in a house that sister Annie owned on a back alley in Allegheny, across the river from Pittsburgh. One glance at their new home must have convinced even the determined Margaret that she had indeed "spoiled the horn," for here was slum poverty that exceeded anything she had ever seen in Scotland. But there could be no retreat. Her husband must swallow his pride and take a job in a cotton textile factory, and twelve-year-old Andrew must join him as a bobbin-boy in the same factory, earning \$1.20 a week. The four years at Teacher Martin's school would be all the formal education Andrew Carnegie would ever have.

The boy was not disheartened. He was proud to be earning his own keep, and he never questioned his ability for self-advancement. This optimism was bolstered by his discovery that Allegheny's richest citizen, Colonel James Anderson, had opened his personal library free of charge to any working boy, and Andrew became the colonel's most frequent customer. Arriving in the United States in the midst of the 1848 presidential election, Andrew was an avid observer of American democracy in operation. In one of his frequent letters to his cousin George "Dod" Lauder, Jr., he pictured his new country as the realization of their family's political dream. "We have perfect political equality . . . We have the Charter which you have been fighting for for years as the Panacea for all Britian's [sic] woes, the bulwark of the people" (18 Aug. 1853, Carnegie papers, Library of Congress, vol. 1).

No record of the Carnegie family's ever having taken out naturalization papers exists, but Andrew simply assumed American citizenship, and in record time he became as thoroughly Americanized as any child whose family had been in residence for two centuries. Carnegie's flag-waving patriotism would earn for him the sobriquet "the Star-Spangled Scotsman."

William Carnegie could not adapt to factory routine and returned to the hand loom, weaving linen tablecloths that he himself peddled from door to door in the forlorn hope of finding customers. Andrew left the mill to take a job as a steam engine tender for two dollars a week. Release came from this hated job when he became a messenger boy at a local telegraph office, where he quickly earned the reputation of being the company's fastest delivery boy, having memorized the location of every business office in Pittsburgh. He was next promoted to telegraph operator, excelling

again and becoming one of the first operators in the country who could take messages directly by ear from the sound of the clicking key rather than waiting to translate the message from the printed tape the receiver produced. This remarkable talent caught the attention of Thomas A. Scott, superintendent of the Western Division of the Pennsylvania Railroad. Scott promptly hired him to be his personal telegrapher and private secretary at \$35 a month.

Carnegie was fortunate to become the protégé of one of the country's most able and daring railroad executives. Scott gave him valuable lessons in business management and stock investment. When Carnegie received his first dividend from the ten shares of Adams Express stock that Scott had loaned him the money to buy, he shouted, "Eureka! Here's the goose that lays the golden eggs." It was the first money that anyone in his family had ever received that had not been earned, as he said, "by the sweat of the brow."

So rapidly did "Scott's Andy" learn all of the intricate details of managing a railroad line that when Scott in 1859 returned to Philadelphia to become general superintendent of the Pennsylvania Railroad, Carnegie was appointed his successor as superintendent of the Western Division. At twenty-two, Carnegie now had a salary that enabled him to make other investments: an oil well in western Pennsylvania and a one-eighth ownership of Theodore Woodruff's sleeping car company.

At the outbreak of the Civil War, Scott was appointed assistant secretary of war in charge of military transportation. He brought Carnegie to Washington to head up telegraphic communications with the army. But Carnegie suffered a sunstroke early in the war and returned to his railroad duties in Pittsburgh.

Although Carnegie would later make famous the aphorism "put all your eggs in one basket and then watch that basket," in these mid-century years he became wealthy by placing his eggs in so many baskets that he soon had neither time nor interest in remaining a salaried employee. In March 1865 he resigned as superintendent of the Western Division to devote full time to his various business ventures. With <u>George Pullman</u> he fashioned the Pullman Palace Car Company in 1867. At the same time he was investing heavily in the Pacific & Atlantic Telegraph Company, which he later sold to Western Union at great profit. He also made several trips to Europe to sell railroad bonds for <u>Junius Morgan</u>, and in 1862 he organized a bridge company to build the United States's first iron railroad bridges, most notably the Eads Bridge in St. Louis.

William Carnegie died in 1855, but Margaret Carnegie reveled in her son's prosperity. Carnegie had promised his mother that someday she would ride pridefully in her own carriage and that never would he leave her as long as they both lived. When Carnegie moved from Pittsburgh to New York in 1867 to tend to the increasing complexities of his financial affairs, his mother went along to share his palatial suite in the St. Nicholas hotel.

Carnegie's parents had instilled in him two quite different sets of values. His father had given him his political views--a commitment to social equality and grass roots democracy. His mother gave him her hard realistic appraisal of life as a brutal struggle for existence. Only those tough and determined enough to take advantage of every opportunity, shrewd enough to cut corners at every turn, and brutal enough to elbow themselves to the head of the line would survive and prosper. These contradictory philosophies of humanitarian idealism and self-centered realism continued to coexist, and they created a persistent tension in his life.

Late in December 1868 Carnegie totaled up his assets. It was an impressive account--\$400,000 in stocks and bonds, giving him an annual income of \$56,110. He had come a long way in the twelve years since he had received his first \$10 dividend check. This realization brought him pleasure, but it also raised nagging doubts as to what he was doing with his life. Having assessed his net worth, he promptly wrote himself a memorandum:

Thirty-three and an income of 50,000\$ per annum . . . Beyond this never earn--make no effort to increase fortune, but spend the surplus each year for benovelent [sic] purposes . . . Man must have an idol--The amassing of wealth is one of the worst species of idolitary [sic]. No idol more debasing than the worship of money. Whatever I engage in I must push inordinately therefor should I be careful to choose that life which will be the most elevating in its character. To continue much longer overwhelmed with business cares and with most of my thoughts wholly upon the way to make more money in the shortest time, must degrade me beyond hope of permanent recovery. I will resign business at Thirty five . . . (copy of the original in the Carnegie papers, New York Public Library).

Carnegie wrote this memorandum only for self-admonition. He did not intend for it to be seen by anyone else, most certainly not his mother. Over the next thirty years none of his business associates would suspect that he had ever entertained such thoughts, for Carnegie continued to "push inordinately" until he had amassed one of the world's greatest fortunes. But that memorandum, lying undisturbed in his desk drawer, was not forgotten. It continued to disturb his self-esteem.

Only by chance did Carnegie find the one big basket in which to collect his fortune. Early in the war two of his boyhood friends, Tom Miller and Henry Phipps, had entered into partnership with a German immigrant, Andrew Kloman, who owned a small forge shop producing railcar axles. Carnegie's younger brother Tom had subsequently been invited into the firm only to discover that there were serious personal disagreements among the three partners, especially between Miller and Phipps. Tom asked his brother to step in as arbiter. Reluctantly, Andrew did so, but without success. His involvement, however, had brought Carnegie directly into the iron business where before he had only been a customer for rails and structural beams. It then occurred to Carnegie that here might be the opportunity for his Keystone Bridge Company, which had now become his major interest, to produce its own iron beams. He proposed to Miller that since there appeared to be no hope for harmony within the Kloman company the two of them should pool their resources and form a rival iron company. Miller jumped at this opportunity to destroy his former partners. In October 1864 the Cyclops Iron Company was created, and an iron mill was rapidly constructed a half mile from the Kloman plant. Cyclops was a larger and more efficient mill and could have proved a deadly competitor to Kloman. Carnegie, however, did not want to destroy; he wanted to expand, for now he was committed to the iron trade. Always eager to acquire good men, Carnegie wanted the mechanical skills of Kloman and the business acumen of Phipps. Against the protests of Miller, Carnegie offered them not competition but consolidation. Seeing no alternative, Kloman and Phipps agreed, and in March 1865 the two companies merged to form the Union Mills. Carnegie's efforts to keep Miller in the partnership were to no avail. Miller sold his shares to Carnegie, who now found himself with a controlling interest in an iron company he had initially entered into only as an arbiter. It was a control he would not relinquish for the next thirtyfive years.

In later years Carnegie was to coin another famous adage for business management, "Pioneering don't pay," but this was hardly applicable to his rise as an iron and steel entrepreneur. No one proved to be a more adventurous pioneer than Carnegie as he pushed ahead in this new field. He was at first determined to keep iron in its long-held preeminence as the basic material for rails. He tried to sell the railroad companies the Dodd, and later the Webb, process of facing iron rails with a thin coating of steel, but neither process proved satisfactory. Railroad managers were looking to England for the Bessemer all-steel rails, because though steel rails cost more, they lasted far longer than Carnegie's processed substitutes. To meet British competition, Carnegie began plans for the construction of the largest Bessemer steel plant in the United States. A site was selected a dozen miles south of Pittsburgh. Carnegie named his mill after the president of the Pennsylvania Railroad, J. Edgar Thomson, in the expectation that the railroad would be Carnegie's best customer.

Construction had barely begun when the depression of 1873 brought most business expansion to an abrupt halt. Carnegie, however, regarded the depression as an opportunity. With prices tumbling, he was able to build his blast furnaces and rolling mills at only three-fourths the amount they would have cost two years earlier. In this period of low wages and unemployment Carnegie could also attract the skilled workmen he needed, and at a time when no one else was building, he could employ the world's greatest Bessemer engineer, <u>Alexander Holley</u>, to design the most modern and efficient steel mill. Holley brought with him a young Welshman, Captain William Jones. Over the next two decades Captain Bill became the best and most inventive steelmaker in the history of the industry. With Holley to design his plant and Jones to get production rolling, Carnegie was ready to dominate the steel trade when prosperity returned.

In later years Carnegie credited his success to what he called the "young geniuses" whom he employed. "Take from me all the ore mines, railroads, manufacturing plants," he said, "but leave me my organization, and in a few years I promise to duplicate the Carnegie company." Holley and Jones certainly were geniuses, and in later years, Henry Clay Frick and Charles M. Schwab also were worthy of that title. It was, however, typical Carnegie hyperbole to dub most of his partners young geniuses. Most were quite ordinary men who could be, and frequently were, easily replaced. Carnegie's success must be attributed to other factors, not the least of which was Carnegie himself. It was the intensity of his drive, his greed for ever more production, his brilliant competitive tactics, and his spectacular good luck in being in the right place at the right time that made him, as one associate called him, the Napoleon in the battle for industrial supremacy.

At a time when big business was adopting the modern corporate structure, managed by highly paid executives but owned by absentee stockholders, Carnegie maintained a simple partnership and made it pay. His partners had to be active managers of the company; instead of big salaries, they received a small percentage of the ownership. This bound them as firmly to the future growth of the company as a medieval serf was bound to the land. Partners who proved successful could not be lured away by high salaries because they would then forfeit their interest in the company. Partners who failed on the job were summarily ousted, receiving only the minuscule book value instead of the true worth of their interest.

With no outside stockholders to pressure him for dividends, Carnegie could put profits back into the plant. Profits for Carnegie were never the end but only the tool for development. What mattered were costs. To reduce costs, he would

quickly scrap any machine, process, or even an entire mill in favor of more efficient operations. He would also reward a partner with a larger percentage of ownership if that young genius could reduce the cost of a particular operation by even a fraction of a cent per ton.

Initially interested only in the manufacture of steel ingots and converting those ingots into steel rails and structural beams, Carnegie was obsessed with the cost of production. He was thereby led to extend the principle of "verticality" by gaining control of the ingredients used in the manufacture of steel and the transportation facilities to get those raw materials to the mills. Never holding less than 52 percent of the total capitalization of his company, Carnegie did not fear that his partners would gainsay his policies.

It was Carnegie's drive for verticality that brought Henry Clay Frick into the company in 1881. Frick had begun buying up coal lands near Connellsville in 1870 and in less than a decade had emerged as Coke King of Pennsylvania. Carnegie needed Frick's coke for the manufacture of steel, and Frick in turn needed Carnegie's capital to further expand his own operations. From this union, Frick in a very short time held a 6 percent interest in the Carnegie partnership, the second largest holding of any of Carnegie's partners, while Carnegie's interest in the Frick Coke Company was increased to 50 percent. Carnegie wrote to Frick soon after the latter became chairman of Carnegie Brothers Steel, "I have found THE MAN," as indeed he had, but unlike Carnegie's previous managers, a man who would remain his own man.

Under Frick's supervision, Carnegie's steel empire in the 1880s made spectacular advances. Homestead, a potentially dangerous rival, was purchased in 1883; Hartman Steel, a finishing mill for wire and nails, was acquired in the same year; and in 1889 the Duquesne steelworks was added. Giving no heed to his own stricture against pioneering, Carnegie continued to welcome advances in the technology of steel manufacture, including the Gilchrist Thomas process for removing phosphorus from iron ore and the Siemens open hearth furnace to produce steel to precise specifications. Carnegie also was the first to employ an academically trained chemist as a permanent member of his staff. These innovations paid handsomely, and by 1890 the company's annual profits had reached \$4.5 million.

Carnegie had "pushed inordinately" to reach this pinnacle of success, but that old memorandum of 1868 still haunted him with the fear that his empire-building had indeed degraded him "beyond hope of permanent recovery." Only by directing his increasing surplus toward benevolent purposes could he hope for moral recovery. As a first step he sought to fulfill the dream of his father and grandfather by giving to Britain the charter of democracy they had striven for in vain fifty years earlier. In the early 1880s he formed a newspaper syndicate of seven daily and ten weekly journals covering a territory that extended from Portsmouth on the southern coast of England to Newcastle in the northeast. All of these papers promoted the same Carnegie-Morrison radical liberalism aimed at the disestablishment of the state church and the creation of the Republic of Great Britain. It was one of Carnegie's few ventures in which he lost money. After only three years as a newspaper proprietor, he beat a hasty retreat. Having failed in his appeal to British politicians to adopt the charter, Carnegie then attempted to persuade the people that democracy was in their best economic interest. In 1886 he published *Triumphant Democracy*, which he would always consider his magnum opus. His argument, bolstered by statistical tables, was that political forms determine material success. By establishing a democracy the United States was achieving economic supremacy over outdated European monarchies. The book became a bestseller both in the United States and in Britain.

Carnegie also published two articles in 1886 on labor policies in *Forum* proclaiming the right of labor to organize and decrying the use of strikebreakers. "There is an unwritten law among the best workers: 'Thou shalt not take thy neighbor's job,' " Carnegie pontificated. These articles created a sensation on both sides of the Atlantic. Labor hailed Carnegie's pronouncements as a new Magna Carta for the workingman, while the managerial class and the conservative press heaped scorn on him as a traitor to free enterprise. Only six years later, however, Carnegie betrayed his own noble sentiments regarding the rights of labor. Before leaving for his annual summer vacation in Scotland in April 1892, he told Frick that he wanted the union at Homestead broken when its contract came up for renewal in June, an order that Frick was happy to carry out. As the 30 June deadline approached, negotiations with the Amalgamated Association of Iron and Steel Workers were abruptly terminated, and the plant was closed. Frick then attempted to bring in Pinkerton guards to protect scab workers entering the plant to take their neighbors' jobs. The result was a bloody battle on the banks of the Monongahela River on 6 July 1892. The Homestead strike became for labor everywhere the symbol of the perfidy and cruelty of the capitalist boss. Carnegie blamed Frick for having hired Pinkertons and strikebreakers, and this was the beginning of the rift between the two men. But Carnegie's efforts to shift the responsibility for the fiasco onto others did not convince the public. He was called the "arch-hypocrite of the age," and no amount of self-exculpation could efface the scar that Homestead left on his reputation.

It was not until he published his "Wealth" articles in the *North American Review* for June and December 1889 that Carnegie at last was satisfied that he had found a way to reconcile plutocracy with democracy and thus earn final absolution from self-reproach. His two-part essay was promptly reprinted in England under the title "Gospel of Wealth."

Carnegie argued that the accumulation of great wealth was justified in the modern industrial society providing the holders regarded themselves only as trustees of that wealth and returned it to society from whence it came. "Don't shoot the millionaire for he is the bee that gathers the honey," was his counsel to the populists. The honey, however, must be returned to the hive only in the ways that Carnegie specified. Ideally, the accumulator himself should dispense his largesse and not leave the task to others. The most reprehensible practice, but unfortunately the most common, was to will it to one's own family. Nor should the millionaire waste his fortune on gifts of individual charity to those whom Carnegie called "the submerged tenth." Better to throw one's dollars into the sea than drop them into the tin cup of beggary. According to Carnegie society benefits only when wealth is used to provide opportunities for that "swimming tenth" determined to advance itself by its own ambitious drive.

Carnegie obligingly provided a list of "the best fields of philanthropy." In descending order of importance they were universities and other institutions "to encourage investigations, research and discovery"; free public libraries; medical education and health service facilities; parks and arboretums; concert halls; public swimming baths; and churches. The specificity of his list aroused a storm of criticism, particularly from the clergy, who resented being provided for last, just after swimming baths. But Carnegie was sure that through this gospel he had found salvation. As he so succinctly stated, here was "refuge from self-questioning."

Carnegie had made his first gifts of a library and a swimming bath to his native town of Dunfermline in 1881, followed by gifts of a library to Braddock, Pennsylvania, and a pipe organ to the small Swedenborgian church his father had attended in Allegheny. After his retirement from business in 1901 Carnegie would begin in earnest to practice what he had preached in 1889.

Although Carnegie's business activities and writing projects might explain why he was not a conspicuous figure on the New York social scene, the truth was he never had any interest in high society nor, unlike most wealthy men, was he a collector of art, rare books, or antique furniture. He did, however, always find time for the kind of recreation he enjoyed--travels around the world, coaching trips in Britain, and long summers of relaxation at his cottage in Cresson, high up in the mountains of western Pennsylvania. Carnegie was no recluse, but the company he sought was not that as defined by Ward McAllister's New York 400. He sought friendship with those who could provide intellectual stimulation, and he found most businessmen exceedingly dull. The one thing he had gained of value from his newspaper venture was an introduction into an elite circle of the British intelligentsia. His money gained him admission but his quick wit, insatiable curiosity, and political views let him move with ease in the company of a diverse group of notables such as William Gladstone; Matthew Arnold; Rudyard Kipling; his mentor, the social evolutionist Herbert Spencer; the eccentric editor of the *Pall Mall Gazette*, W. T. Stead; and his closest friend of all, the historian and statesman John Morley. In the United States he collected an equally distinguished and eclectic list of companions, including Mark Twain; Senator James G. Blaine; Theodore Roosevelt; Cornell University president Andrew White; and the African-American educator Booker T. Washington. This immigrant with only four years of schooling now dared to tread where other American businessmen not only feared but had no desire to go.

In Carnegie's busy schedule of making money and cultivating men of distinction there seemed to be little time for female companionship other than that of his mother, who continued to live with him both in New York and at their Cresson summer home as well as accompanying him on his numerous trips to Britain. In 1880, however, Carnegie met Louise Whitfield (Louise Whitfield Carnegie), the daughter of a New York merchant. They discovered a mutual interest in horseback riding, and on their frequent early morning rides through Central Park, to his own surprise, at forty-five Carnegie found himself in love. It was a troubled and protracted courtship, for although Whitfield, twenty-two years his junior, was happy to accept his proposal of marriage, she soon realized that their union could never be so long as Margaret Carnegie held the tie that truly bound her son.

In the late summer of 1886, while at the Cresson cottage, Margaret died of pneumonia. At the time Carnegie was seriously ill of typhoid fever and lay for weeks in a semiconscious state, unaware that his mother had died. When he had recovered enough by November to learn of his mother's death, he at once scrawled a note to Louise, "I am now wholly yours--all gone but you . . . Till death, Louise, yours alone" (24 Nov. 1886, letter in possession of the Carnegie-Miller family).

On 22 April 1887, Andrew, at the advanced age of fifty-one, and Louise were married. At the even more advanced age of sixty-one, Carnegie became the father of his only child, a daughter.

Carnegie never returned to Cresson following the death of his mother, but his sensitivity to heat forced him to seek out another summer retreat. For the first ten years of their marriage, the Carnegies leased Cluny Castle in the Scottish Highlands for six months every year. Following the birth of their daughter, Louise insisted that they have their own castle, and Carnegie purchased the ancient estate of "Skibo" on Dornoch Firth in northeastern Scotland. The old castle

was rebuilt and greatly enlarged, and every summer Skibo became the kind of social center that Carnegie most enjoyed. Through its impressive portals passed educators, poets, artists, politicians, pacificists, and--of least interest to Carnegie--business associates of both continents. There Carnegie also did much of his writing--articles on history, economics, foreign policy for leading journals, his biography of James Watt, his collected essays on *Problems of Today*, and in the last years of his life, his autobiography. From 1881, when his first book, a travel journal of his trip around the world appeared, until 1916, Carnegie produced sixty-three articles and eight books--a bibliography that his academic friends might well have envied.

The winters in New York were largely devoted to his business affairs. Expansion remained the key word, and with Frick as chairman and Charles Schwab as president of Carnegie Steel, Carnegie had found the right team to carry out his orders. In the 1890s the rich iron ores of the Mesabi range in Minnesota were acquired by the company, and Carnegie constructed his own railroad from Pittsburgh to the dock facilities on Lake Erie, allowing him to escape the monopolistic stranglehold in which the Pennsylvania Railroad had long held his mills.

Although Carnegie's respect for Frick's managerial skills remained high, their personal relationship cooled after the Homestead strike and became even chillier in 1899 when Frick attempted to buy Carnegie Steel at Carnegie's asking price of \$320 million by forming a syndicate with three of the most notorious stock manipulators on Wall Street, John "Bet a Million" Gates and the two Moore brothers, William and James. The syndicate was given three months to raise the money, which it was unable to do. Carnegie, to Frick's disgust, kept the deposit of one million dollars, which he had insisted on as a pledge of good faith. The final break between Carnegie and Frick came soon thereafter when the Frick Coke Company attempted to raise the price of coke sold to Carnegie Steel from \$1.35 a ton to \$1.75 a ton. Even though this was still considerably below the price other steel companies were paying, Carnegie insisted he had a gentleman's agreement with Frick that Carnegie Steel would never have to pay above \$1.35 a ton. There was, however, no formal contract to that effect, and Frick refused to budge. With his majority interest in both companies, Carnegie in retaliation forced Frick out of the chairmanship of Carnegie Steel and pushed through a contract with the coke company establishing the fixed price he demanded. Not content with that, using the "Iron Clad Agreement" that all of his partners had had to sign, Carnegie attempted to buy out Frick's 11 percent in Carnegie Steel at the book value of \$5 million, only a fraction of its real worth. Frick took the matter to court in a suit that became a national sensation. Pressure from the entire business community as well as the Republican party facing an election in 1900 brought about an out-of-court settlement. In the terms of the settlement, the Frick Coke Company and Carnegie Steel were merged into the Carnegie Company, capitalized at \$320 million. Frick kept his 11 percent interest in the new company, now worth \$30 million instead of the \$5 million previously offered, but could never hold any position within the new company. Schwab, the big winner, became chief executive officer with an enlarged interest.

At sixty-five Carnegie appeared to have emerged from this imbroglio with Frick eager for a new start and with no thought of retirement. To meet the threat of a powerful new combine of steel plants, Federal Steel, which J. P. Morgan had recently effected, Carnegie proposed to push verticality still farther by producing finished steel products on a massive scale. Schwab was put in charge of building such a plant at Conneaut, Ohio, even though Carnegie's associates had little enthusiasm for this new venture. The older partners--Phipps and Lauder in particular--were eager to get out with their long-promised but not yet realized fortune, and Schwab was more than ready to take over. It was he who served as the negotiator between Morgan, greatly disturbed by Carnegie's proposed Conneaut venture, and Carnegie to bring about an amalgamation of their interests. In early January 1901, with the enthusiastic support of Louise Carnegie, Schwab informed Carnegie that Morgan had asked for him to name his price. Carnegie scrawled on the back of an envelope the figure \$480,000,000, which Schwab rushed back to Morgan. Without a moment's hesitation, Morgan said, "I accept the price." Just that simply the largest merger in American industrial history to that time was accomplished. Carnegie's own share amounted to more than \$225 million in 5 percent gold bonds, secured by a first mortgage on all the properties of the forthcoming giant steel trust. On 2 March 1901, the United States Steel Corporation was born, America's first billion-dollar corporation, with Schwab as president.

Carnegie could at last turn to the task of putting into practice his gospel of wealth. With this fortune he could cover most of the seven items on his list of "the best fields of philanthropy." His personal priority was free public libraries. He provided 2,811 libraries to the English-speaking world, including 1,946 in the United States, 660 in Great Britain, and 156 in Canada, at a total cost of over \$50 million. Carnegie donated only the buildings, and gave solely to those communities willing to tax their citizens for the purchase of books and the cost of operation. Libraries proved to be the best known and most popular of all of Carnegie's philanthropies. He liked to boast that the sun never set on his chain of libraries reaching from northern Scotland to the Fiji islands. In addition to libraries, his first gifts following his retirement went to a pension fund for his former steelworkers and to pensions for college teachers distributed by the Carnegie Foundation for the Advancement of Teaching. The Carnegie Institution of Washington was created in 1902 to advance scientific research and discovery. Even churches, last on his list of best fields, were remembered with gifts of 7,689 pipe organs.

Although Carnegie had insisted there was no place for sentiment in his concept of "scientific" philanthropy, nevertheless, Scotland and especially his native Dunfermline received very special consideration. The Carnegie-Dunfermline Trust, established in 1903, was to give the town, in addition to the library and swimming bath already donated, the Pittencrieff estate, containing the historic ruins of Scotland's first capital, a technical college, a medical clinic that provided free care for the children of the town, a Women's Institute, and a concert hall. For all of Scotland he endowed a trust to provide free tuition to the four Scottish universities. For all of Great Britain, he established the United Kingdom Trust, a counterpart to the Carnegie Institution of Washington. Pittsburgh also got special recognition-the Carnegie Institute, which provided for an art gallery and concert hall as well as a library and the Carnegie Institute of Technology.

Carnegie's initial giving was as highly diverse as had been his earliest ventures in capitalism. But just as he had found the single basket of steel on which to concentrate his interest, so he was now to find in philanthropy a single specialty-world peace. In his pursuit of international justice and the abolition of war, Carnegie created four foundations: the Carnegie Endowment for International Peace, the Carnegie Hero Fund to reward civilian heroes who saved lives, the Church Peace Union, and the Simplified Spelling Board in the belief that if the spelling of English could be made more phonetic it would become the universal tongue for the promotion of international understanding. He also built what he called his three "Temples of Peace": the Pan American Union building in Washington for the promotion of peace in the Western Hemisphere, the Central American Court of Justice in Costa Rica to arbitrate differences among those five frequently quarreling little republics, and, most important, The Hague Peace Palace in the Netherlands to house the World Court.

Carnegie had entered into this last great enterprise of his life with high enthusiasm. He loved the fanfare that accompanied his gifts, and he was to set an all-time record of receiving more Freedom of the City awards in Britain (fifty-seven in all) than any other person, including Winston Churchill. It came as a shock to Carnegie to discover, however, that his generous giving aroused more public criticism than had his aggressive getting. How Carnegie got his wealth, most believed, was his own business; how he gave it away was everybody's business. There was also the sobering fact that as fast as he dispensed his fortune his remaining bonds were earning more. "The final dispensation of one's wealth preparing for the final exit," he wrote his Scottish solicitor, John Ross, "is I found a heavy task--all sad . . . You have no idea the strain I have been under" (11 Feb. 1913, Carnegie papers, Library of Congress, vol. 213). He gratefully accepted his friend the statesman Elihu Root's suggestion that he create one great philanthropic foundation in which to place the remainder of his fortune. The Carnegie Corporation of New York was established in 1911 with an endowment of \$125 million. Carnegie had once written, "The man who dies thus rich, dies disgraced." Carnegie had finally found grace by dispensing nine-tenths of his fortune.

Carnegie had begun his quest for peace in the naive belief that with his wealth he could buy international justice and harmony for the world. Prospects for that achievement never seemed brighter to him than in what proved to be his last summer at Skibo. Carnegie subscribed to the Carlylean view of history that every age finds its great hero, and in that summer of 1914, he believed he had found two heroes of peace. Given his commitment to republicanism, his choices were curious--the Democratic president of the United States, <u>Woodrow Wilson</u>, and the emperor of Germany, Wilhelm II. Carnegie was just finishing the last chapter of his autobiography in which he sang the praises of Kaiser Wilhelm when he received the news that world war had begun. He hastily added a postscript to the manuscript: "The world convulsed by war as never before! Men slaying each other like wild beasts. I dare not relinquish all hope." As Louise Carnegie was to write in a preface to the autobiography, published posthumously in 1920, "the world disaster was too much. His heart was broken." Carnegie died five years later at his new summer home in Lenox, Massachusetts, and was buried in Sleepy Hollow cemetery, Tarrytown, New York.

Carnegie made significant contributions in his three major areas of interest. As an industrialist, he emphasized the importance of cost of production over the value of profits, he pushed for verticality within his company structure, and he welcomed technological innovation. As a philanthropist, he attempted a scientific analysis of the art of giving, pioneered in the development of the modern philanthropic foundation, and placed education and free inquiry as primary fields of importance in creating a better society. Finally, as a pacifist, Andrew Carnegie pushed for a summit meeting of the great powers, Great Britain, the United States, and Germany, long before such meetings would become a common occurrence in the late twentieth century, and he correctly saw the arbitration of international disputes as the only rational option to the irrational recourse to war.

Bibliography

The major collection of Andrew Carnegie's papers (239 volumes) is in the Manuscript Division of the Library of Congress. Another important collection, consisting of letterbooks of his business correspondence prior to 1881, is the USX Corporation collection in the Annandale Archives, Boyers, Pa. Smaller collections are in the Manuscript Division of the New York Public Library and in the Carnegie Museum, Dunfermline, Scotland. Personal letters from Carnegie to his mother and brother (1865-1866) and letters between Carnegie and Louise Whitfield prior to their marriage (1880-1886) are in the possession of the Carnegie-Miller family.

Carnegie's own writings were edited and published by Burton J. Hendrick in ten volumes in 1933. Included in this series are Carnegie's books, with first publication dates in parentheses: *Round the World* (1881), *An American Four-in-Hand in Britain* (1883), *Triumphant Democracy* (1886), *James Watt* (1903), *Problems of Today* (1908), and *Autobiography of Andrew Carnegie* (1920). Carnegie's articles also are republished in this series under the titles *The Gospel of Wealth*, *The Empire of Business*, and *Miscellaneous Writings of Andrew Carnegie* (2 vols.). A collection of Carnegie's writings published in a single volume is *The Andrew Carnegie Reader*, ed. Joseph F. Wall (1992).

Secondary sources on Carnegie's career are legion. Two biographies covering all aspects of his life are Joseph Frazier Wall, *Andrew Carnegie* (1970; repr. 1989), and Burton J. Hendrick, *The Life of Andrew Carnegie* (1932). Books that emphasize his business career but are strongly biased against Carnegie are John K. Winkler, *Incredible Carnegie* (1931), and James H. Bridge, *The Inside History of the Carnegie Steel Company* (1903; repr. 1991). A more balanced account of Carnegie as an industrialist is Harold C. Livesay, *Andrew Carnegie and the Rise of Big Business* (1975). Books dealing with Carnegie's business associates are William B. Dickson, *History of the Carnegie Veterans Association* (1938); Robert Hessen, *Steel Titan: Charles M. Schwab* (1975); and Jeanne McHugh, *Alexander Holley and the Makers of Steel* (1980). Much has been written on the Homestead strike; especially important are David Brody, *Steel Workers in America: The Non-Union Era* (1960); Paul Krause, *The Battle for Homestead 1880-1892* (1992); and David P. Demarest, Jr., ed., *"The River Ran Red": Homestead 1892* (1992). Carnegie's philanthropies are detailed in *A Manual of the Public Benefactions of Andrew Carnegie*, comp. Carnegie Endowment for International Peace (1919); Robert M. Lester, *Forty Years of Carnegie Giving* (1941); and Simon Goodenough, *The Greatest Good Fortune* (1985). Books dealing with Carnegie's personal life are John B. Mackie, *Andrew Carnegie: His Dunfermline Ties* (1916); Burton J. Hendrick and Daniel Henderson, *Louise Whitfield Carnegie* (1950); and Joseph F. Wall, *Skibo* (1985). An obituary is in the *New York Times*, 12 Aug. 1919.

Joseph Frazier Wall