There are three phases to Andrew Carnegie's life. The first is centred in Dunfermline where he was born on the 25<sup>th</sup> November 1835 in the two storey greystone cottage which now stands at the junction of Priory Lane and Moodie Street. The son of William and Margaret Carnegie he was the eldest of three children, having a sister Ann, born 1840 who died as an infant in 1841, and a brother Thomas, born in 1843.



The Birthplace of Andrew Carnegie.

William Carnegie, Andrew's father, was a handloom weaver of fine damask linen. Throughout the 1840's his living was gradually eroded away by competition from factory produced linen and Mrs. Carnegie supplemented the family income by opening a small shop.

Andrew was eight years old before he started school and the tuition he received at Mr. Martin's School in Rolland Street was to be his only formal education. His uncle, George Lauder, played a large part in his education and Andrew believed it was this uncle who taught him to use his memory and gave him his great love of his native land of Scotland. Andrew was to describe his Uncle Lauder as "The man to whom I owe the most, and who was nearest and dearest to me of all men. My uncle and father, for such he was since I reached manhood". Many years later Andrew was to establish a Technical College in Dunfermline which was named after and was opened by George Lauder in 1899.



George Lauder with his wife.

As the industrial revolution gained pace Andrew was to remember the day his father came home and despairingly said "Andra, I can get nae mair work". As a result of this in the winter of 1847 - 48 the family took the decision to emigrate to America where two of Mrs. Carnegie's sisters were already staying in Allegheny City, Pennsylvania.

The family looms and possessions were sold and the preparations were made for the arduous journey ahead. They set off for Glasgow, and on the 19<sup>th</sup> May 1848 sailed from the Broomielaw on board the former whaling ship "Wiscasset" for the fifty day crossing to New York.



A whale's tooth with a drawing of the "Wiscasset"

In America William Carnegie returned to work as a handloom weaver but he was unable to make a success of this and defeated and disillusioned he was forced to take a job in a cotton textile mill. Andrew started his working life at the age of thirteen earning \$1.20 a week as a bobbin-boy in Mr. Blackstock's textile mill, and for a short time

he and his father worked in the same factory. Thus began his education as a businessman. His next move was to Hay's bobbin factory where for \$2.00 a week he tended the steam engine and fired the boiler.

Then in 1849 Andrew was offered a job that made him "wild with delight" working as a telegraph messenger boy for the O'Reilly Telegraph Company. In his autobiography he wrote: "From the dark cellar running a steam engine, begrimed with coal dirt, I was lifted into paradise, yes, heaven, as it seemed to me, with newspapers, pens, pencils, and sunshine about me...I felt that my foot was upon the ladder and that I was bound to climb".

Andrew expressed his optimism about life in America in a letter to his Uncle Lauder: "Although I would like to be back in Dunfermline...it is far better for me that I came here...In Dunfermline I would have been a poor weaver all my days, but here I can surely do something better than that, if I don't it will be all my own fault, for anyone can get along in this country".



Andrew, aged 16, with his brother Tom.

Quick minded, cheerful and willing, he soon won promotion to telegraph operator when it was discovered that he had taught himself to decipher the telegraph messages by ear - he was one of the first people in America to be able to do this. In 1853 he became personal assistant to Thomas A. Scott, Superintendent of the Pittsburgh Division of the Pennsylvania Railroad Company. Under Mr. Scott's tutelage Andrew advanced rapidly within the Pennsylvania Railroad Company and by 1859 Andrew had been promoted to Superintendent of the Pittsburgh Division and was able to employ his own brother, Tom, as his personal assistant.

It was Thomas Scott who was to lay the foundations of the huge fortune Andrew was to make later in life when in 1856 he advised Andrew to purchase shares in the Adams Express Company. When he subsequently received his first dividend cheque for \$10 he exclaimed "Eureka! Here's the goose that lays the golden eggs". In 1858 Thomas Scott requested that a one eighth interest in a company making sleeping cars for the Railroad Companies be set aside for his young

protégé. Andrew borrowed the money - \$1,250 - for this investment from the bank, but it was quickly repaid from the dividends he received. By 1860 this investment in sleeping cars was bringing Andrew in an annual income of \$5,000.



Andrew Carnegie in 1863, from a painting by John Earle.

The next few years saw an expansion of Andrew's investments into oil and iron while all this time he was working for the Pennsylvania Railroad Company. At the outbreak of the American Civil War Thomas Scott and Andrew were seconded to the War Department in Washington to organise the Military Telegraph Service and the transport of supplies by rail to the Union forces. It is hardly surprising that the physical and mental demands of all this work were to take their toll and in 1862 he broke down. He was granted three months leave and with his mother they returned to Dunfermline, in his autobiography he wrote: "No change ever affected me so much as this return to my native land. I seemed to be in a dream... I felt as if I could throw myself upon the sacred soil and kiss it".

On his return to America he threw himself wholeheartedly back into his work and at the age of thirty, with the Civil War at an end, he resigned from the Pennsylvania Railroad Company to devote his time and energy to his expanding

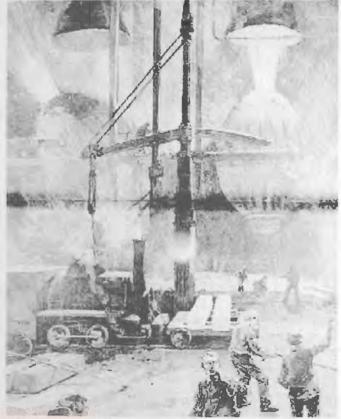
business interests, particularly those associated with the iron industry. He had decided to "put all good eggs in one basket and watch that basket". These business interests by 1865 were producing an annual income for him of \$50,000.

As the American economy expanded after the Civil War railroads criss-crossed the country as the frontier was pushed back and the continent was linked from coast to coast. Andrew Carnegie invested in companies manufacturing for the railroads producing wheel axles, rails and bridges. It was during a trip to London selling bridge bonds that he first saw the Bessemer process for the mass production of steel and he realised almost immediately just how important this discovery was to be.

Up to this time iron was the metal used for most purposes and steel which is iron minus its impurities could only be produced in small quantities and at great expense. However, in 1856

an English inventor - Henry Bessemer - discovered a way of converting molten iron to molten steel by blowing cold air through the molten iron in a

special crucible or converter.

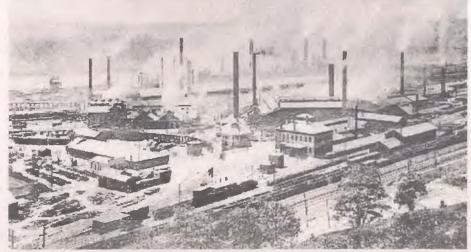


The Bessemer 'blow'

The process was improved and by the late 1860's Bessemer converters were producing steel in England. Several American manufacturers experimented unsuccessfully with the new process but it has a drawback as steel can only be produced in the converters if the iron ore contains less than 4% of phosphorous. The discovery of iron ore deposits in America which were virtually free of phosphorous opened the way for Andrew Carnegie to invest in the new process. The age of iron was about to be replaced by the age of steel.

On the 1<sup>st</sup> January 1873 the steel rail company of Carnegie, McCandless & Co. was formed to build the new steel mill. The chosen site was Braddock's Field which gave the mill access to both the Pennsylvania Railroad and the Baltimore & Ohio Railroad. Later that year, while the mill was being built, a financial crisis in America threatened to halt the building works as many banks and businesses crashed. Several of Andrew's partners in the steel mill had to pull out and he took over

their shares by selling his stake in the sleeping car company and by selling other securities. The end result was that Andrew Carnegie controlled the majority of the stock in the steel mill.



The Edgar Thomson Steel Rail Mill.

The mill was completed in 1874 and it was named the Edgar Thomson Steel Rail Mill as an honour to the then President of the Pennsylvania Railroad Company who had not only invested in the mill but was to become one of the first customers of the steel rails the mill would produce. In the first month of operation the Edgar Thomson mill produced profits of \$11,000 and profits increased in each subsequent month. By 1880 the Edgar Thomson mill was producing 1/7<sup>th</sup> of all the Bessemer steel produced in America.

In 1886 Andrew suffered a double blow when his mother and brother died within a few days of each other. Their deaths were not reported to Andrew as he too was very ill from typhoid and there were fears for his own life.



Margaret and Tom Carnegie.

He recovered slowly and in the following year, when he was fifty-one, he married Louise Whitfield, daughter of a New York merchant.



Andrew and Louise during their honeymoon.

Their honeymoon was spent on the Isle of Wight and in Scotland where Louise "soon became more Scotch" than Andrew, thereafter every summer was spent in Scotland.



Louise with the eight day old Margaret.

With the birth of their only daughter, Margaret, in 1897 Louise requested Andrew to purchase a home for them in the Highlands of Scotland.

The estate and castle of Skibo on the Dornoch Firth was bought as their summer home. The castle was completely rebuilt using Carnegie steel, sandstone from the Evelix quarry and all the modern comforts, such as electric light, were installed.



Skibo Castle under construction.

The new Laird and his Lady also spent great sums of money on the estate enabling the repair and construction of new roads, the repair and building of new houses for the estate tenants and heralded a new economic era for the area.



Laying the foundation stone for the re-building of Skibo Castle.

It is sometimes hard to believe that Andrew Carnegie only spent half the year in America, the sunstroke which led to the breakdown of his health in 1862 made him unable to tolerate the heat of the American summers and he spent his time in Europe. Much of the success of the company was

due to the 'partners' who ran it in his absence. Many of these 'partners' had risen through the ranks and had been hand-picked by Andrew Carnegie for many of the executive and managerial positions. On proving their worth they were given a small share in the company, sometimes as little as 1/9<sup>th</sup> of one per cent. In an address to the British Iron and Steel Institute Andrew Carnegie used the following illustration: "I never see a fishing fleet sail without pleasure, thinking it is based upon the form which is to prevail generally. Not a man on the boat is paid fixed wages. Each gets his share of the profits. That seems to me the ideal...A crew of employees versus a crew of partners would not be in the race". This enabled Andrew Carnegie to bind the 'partners' to the company and he used this to spur them on to greater efforts.

The profits of all the Carnegie Companies were used to fund the introduction of any new development or technology which would increase productivity. Profits were also enhanced by

controlling the means of production through investment in iron ore fields, coal fields, coke ovens, limestone deposits and transport systems.

In a ruthlessly competitive age, production costs and the price of the finished steel were cut - "I am in business to make money" - and the Carnegie Steel Company fed America's appetite for the steel needed from bridges and railroads to structural steel and armour plate. Andrew Carnegie had a paternalistic outlook towards his workmen but he had little sympathy for organised labour.



The Homstead Steel Works.

The bitter strike at the Homestead Steel Works in 1892 during which several men were killed and many injured brought Andrew Carnegie severe public criticism and seriously tarnished his reputation. In his autobiography he wrote: "Nothing I have ever had to meet in all my life, before or since, wounded me so deeply. No pangs remain of any wound received in my business career save that of Homestead. It was so unnecessary".



The scene in Homestead after the battle as the defeated Pinkerton agents are marched through the town.

Steel poured from the furnaces of Pittsburgh and by the end of the 1890's the Carnegie Steel Company was making almost half of the steel produced in America and was producing almost as much as the entire output of the British steel industry. The annual profits kept rising and by 1900 the profits of the Carnegie Steel Company were 40 million dollars.

In 1901 the Carnegie Steel Company was sold for \$480,000,000 and amalgamated with other steel companies to become the United States Steel Corporation. The financier Junius P. Morgan organised the sale and after the completion of the deal he grasped Andrew Carnegie's hand and said: "I want to congratulate you on being the richest man in the world". Andrew Carnegie's personal share was close to \$250,000,000 which he received in 5% bonds of the newly formed United States Steel Corporation. The struggle to accumulate wealth was over and the more difficult and serious task of wise distribution could begin.



Cartoon "When Mr. Carnegie's money is gone".

By the end of his life it was calculated that he had given away over three hundred and fifty million dollars. The fortune that was shed "for the improvement of mankind" continues to fund education, research, the promotion of peace and the general good of society. The combined incomes of the Trusts and Foundations he established enables them to spend over one hundred and fifty dollars every minute. Andrew Carnegie was the man who changed charity (the giving of money to relieve specific ills) into philanthropy (the use of money to reform and change society on a long-term basis). A common thread links most of Andrew Carnegie's gifts and benefactions - they provide educational opportunities, informal and formal, for people who want to improve themselves - as Mr. Carnegie believed education would help to break down the barriers of class, race, and religion thereby making conditions better in society as a whole.

What marked Andrew Carnegie out from other very successful men was the self analysis which led him from 1868 to question the purpose of the accumulation of wealth. In 1889 with the publication of "The Gospel of Wealth" he outlined the principles of the proper administration of wealth, "The man of wealth thus becoming the mere trustee and agent for his poorer brethren, bringing to their service his superior wisdom, experience and ability to administer, doing for them better than they would or could do for themselves... The man who dies thus rich, dies disgraced". These principles were to guide him for the rest of his life as he systematically proceeded to give his huge fortune away.

He became best known for his gifts of money to erect free public libraries, 2811 were built around the world at a cost of over 60 million dollars, "I choose free libraries as the best agencies for improving the masses of the people because they only help those who help themselves. They never

pauperise, a taste for reading drives out lower tastes". The first Carnegie Free Library was gifted to his hometown of Dunfermline. Andrew's mother laid the foundation stone in 1881 and the demonstrations of appreciation they received from the townsfolk were recorded in a painting which Andrew commissioned.



"The Dunfermline Demonstrations" by Andrew Blair and William Geddes

His philanthropy, however, extended beyond libraries to the establishment of a remarkable range of trusts and foundations in the USA, Britain and Europe. These include the Carnegie, Pittsburgh (a centre for science, music and art), the Carnegie Trust for the Universities of Scotland, the Carnegie Institution of Washington (a scientific research foundation), the Carnegie Dunfermline Trust for the benefit of the citizens of that town and the Carnegie United Kingdom Trust.



A cartoon showing Andrew as a 'Peace Cop'

The cause of peace was very important to him, and his gift of money in 1903 enabled the International Court of Justice at the Hague (the Peace Palace) to be built. Seven years later the Carnegie Endowment for International Peace was established "to hasten the abolition of international war, the foulest blot upon our civilisation". In all, he was to spend more than \$25 million to promote peace.



The MacMillion, a cartoon drawn after the Carnegie Trust for the Universities of Scotland was established.

As a result of his philanthropic activities Andrew Carnegie was seldom out of the limelight and he received much public acclaim and had civic and academic honours showered upon him. He had received his first Freedom in 1877 from Dunfermline and he went on to collect over fifty Freedoms from towns and cities throughout the British Isles. Peace, however, could not be bought with money, and the outbreak of the World War in 1914 was a shattering blow. Andrew and his wife and daughter left Scotland to return to America, and he was never to see his beloved Skibo again. In the preface to his autobiography Louise wrote: "Optimist as he always was and tried to be, even in the failure of his hopes, the world disaster was too much. His heart was broken. A severe attack of influenza followed by two serious attacks of pneumonia precipitated old age upon him". Andrew Carnegie died on the 11th August 1919 at Lenox, Massachusetts

