

Andrew Carnegie

Until the coming of the train the human race was still traveling by muscle power, just as in ancient time. It was all walking or riding animals or wagons pulled by them.

The coming of steel for train rails, cars and engines changed life. Iron is a very old product. It can be strong but also brittle. It rusts; it breaks.

Andrew Carnegie (born in 1835) and the family lived in Allegheny. Carnegie worked as a bobbin bay in a textile mill 10 hours a day, 6 days a week for \$1.20 (\$34 today)

In the US in 1848 Father and son worked in a cotton mill. The father quit and went back to his loom. Andrew took a new job of making bobbins at \$ 2 a week (\$ 57). The job was hard. He had to run a small steam engine and run up and downstairs checking on it. He was exhausted.

In 1849 Andrew took a job as a telegraph messenger for an Ohio Telegraph Co. at \$2.50 a week (\$74) He memorized locations of businesses and remembered names and face, He paid close attention to the telegraph and learned signals by ear. He was promoted to operator.

Col. James Anderson opened his personal library to working boys. 400 books- open every Saturday night. Andrew was thrilled to take advantage of this.

Next he delivered messages around town for a businessman. He used this as an opportunity to meet and learn names of more businessmen. He took a job as secretary for a railroad executive. When the boss was away on business, there was a train accident with many cars piled up. Carnegie took it upon himself to telegraph "Burn the Cars!" They did, and

when the boss got back, he was amazed. Turned out it became the standard approach to cleaning up train derailments.

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1853 Thomas Scott of the Pennsylvania Railroad hired Andrew Carnegie as secretary and telegraph operator for \$4 a week (\$7.40)

1859 Carnegie hired his brother Tom as his secretary and telegraph operator and his cousin Marie Hogan as the first female telegraph operator. Carnegie had a salary of \$1500 a year (\$41,000) He learned much about management and cost from Scott. John Edgar Thompson and Scott illegally traded stock in companies the railroad did business.

To get money for him to invest, his mother put a mortgage of \$600 on their \$700 home. A few years later Andrew was paid back with a few shares in Thomas' Sleeping car Company. Andrew Carnegie slowly accumulated wealth in insider investments like iron, bridges and rails. George Pullman's Sleeping Car was a great success and profit. Carnegie still worked for the Pa. Railroad President Tom Scott

Spring 1863 Carnegie was appointed in charge of military transportation. He opened lines to DC and fixed the ones that had been cut. He rode the locomotive pulling the first soldiers to reach DC. After defeated troops back north.

1864 Carnegie invested \$40,000 in a farm in Pennsylvania. The oil on the property sold well, yielding 1,000,000 cash dividends in one year.

Carnegie worked with others to establish a steel rolling mill and steel production. He used his connections with Thomas Scott and J. Edgar

Thompson to acquire contracts for rails. He also gave them stock. His first mill was named the Edgar Thompson Works.

Carnegie made his fortune in steel. After the Civil War his center was in Pittsburgh. He had the most extensive integrated iron and steel operation ever owned by an individual in the US. He adopted the Bessemer process which burned away the highest carbon content of the pig iron as a rapid way to make steel. But it was not suitable for buildings or bridges.

Carnegie had a vertical organization of all suppliers of raw material He owned stock and supplied steel for the Eads Bridge across the Mississippi at St. Louis completed in 1874. This marked a new steel-market. In the 1880's Carnegie Steel produced approximately 2,000 tons of pig metal per day.

Three years later he bought Homestead Steel which included coal mines, iron ore fields at the far west end of Lake superior, a line of lake steamships, a 425 mile railway that delivered at the mills Carnegie combined all this into Carnegie Steel Company by 1892.

His steel properties grew to include Edgar Thompson

Lucy Furnace Works

Union Iron Mills

Homestead Works

Keystone Bridge Works

Hartman Steel Works and

Frick Coke Company

Carnegie was closely tied to the railroad industries. They relied on him for steel for track. He also made money from steel transport. Carnegie

spent energy and resources on lobbying Congress for favorable tariffs. From those tariffs Carnegie earned millions of dollars a year. This was revealed during a hearing with the ex-chairman Henry Frick who explained how favorable the tariffs had been.

Carnegie's business attitude included these points

He was never satisfied with himself.

No middle men

Anti-monopoly

Partnership with 40 millionaires

Found experts in each area to work for him or advise him.

Recognized achievements of others== Ex, Charles Schwab

- Hired as a stake driver for \$1.00 per day.
- Age 34 he rose to President of Carnegie with
- An income of \$1.3 million per year.

Make a quality product

Expand in bad times

Consolidate in good times

Carnegie steel was used in the first skyscraper

Brooklyn Bridge

Washington Monument

Armor plate for the US Navy

When Carnegie and his wife were in New York, he arranged to meet with Henry Frick. He offered Frick the deal of a partnership to supply coke to make steel. Henry Frick came from a family that made and marketed Overholt whiskey. He had borrowed \$1500 with no collateral to start a production of coke. He and Carnegie agreed to form a partnership and if either one sold his stock, it had to be sold back to the company.

BUT WHAT ABOUT THE WORKERS AND THE CONDITIONS UNDER WHICH THEY LIVED AND WORKED?

At the beginning of the mills, there were no bridges across the rivers. Either the workers tried to find a room on the same side of the river as the factory or locate a boat to row them over. Carnegie built housing in Braddock, and you can read about it in *Out of This Furnace* by Thomas Bell.

The four room houses had two floors. The houses faced a center court with one outhouse and nearby- a well—to be used by all the workers. There was no hope of grass or a small garden, because the acid rain from the mill killed any hope of greenness. The rent was \$12.00 a month. No heat, no water. Just a shell. The workers rented beds to other workers to make ends meet. But it was one bed for two men. The shift at the mill was 12 hours, 7 days a week. They got 2 days a year off. (I heard this in a lecture, but I don't remember what two days they referenced.) Actually the beds never got cold, because 2 men shared a bed- one rolled out to the mill and the second one rolled into bed. The wife had to do the laundry in the sink, carry in water, do the cooking at all times of the day or night. It had to be a nightmare existence.

Even when I was a kid in Christy Park, the sky was red at night from the dumping of slag in West Mifflin, where they later built Century III Mall.

It is an iron mountain. I don't understand how they ever got trees planted there. If I was dusting a room it would be dusty again by the time I reached the starting point, or maybe you just could never finish. And every few days the town had the sickening smell of rotten eggs from the sulfur dioxide released for the mills.

Carnegie also grew a "world view" about money. He wrote it down in his book *The Gospel of Wealth*.

*The rich should use their wealth to improve society.

(Maybe he chose not to think of those so far gone into poverty that he would have a huge task to help them. Or maybe he thought it was just the fate of the laborer.)

- All is well since all grows better.

(This was truly a narrow view of conditions.)

Subsequently, he contacted Herbert Spencer from Britain.

He was a Social Darwinist who believed in the survival of the fittest. Carnegie liked his writings and invited Spencer to visit Pittsburgh. He wanted to show off his accomplishments. I'll guess Carnegie did not remember how much he himself hated the mills and always had the curtains drawn on the train as he passed through.

He preferred to fix on the idea that the US and British Empire would merge into a Re-United States. It would combine power, keep the peace and achieve disarmament.

Spencer did come, toured the area in Pittsburgh, and saw his ideas distorted by Carnegie. He finally announced to Carnegie "Six months residence here would justify suicide." Carnegie was highly insulted.

Carnegie surely knew that Frick hated the immigrant workers. He delighted in mixing them up so they couldn't understand each other. And still he complained "They all learn too fast."

In 1889 the amalgamated Association of Iron and Steel Workers signed a three year contract. Carnegie wanted to break the union. Frick increased production demands. The union defused. Frick started a lock out, and by July 2 all were discharged.

The union had all the skilled worker, less than 20% of the 3800 workers. The rest voted to strike also. They took over the town also. Carnegie was on vacation at Skibo, his castle in Scotland. Rick ordered a ten foot fence to be built around the factory. But enough workers got inside to get the plant operating again.

Frick was in charge. He ordered 300 Pinkerton detectives to protect the factory. They rowed up the river. On July 6, the 300 met 10,000 strikers. It was an all-day battle The Pinkertons surrendered and had to run the gauntlet. 9 strikers and 7 Pinkertons were killed. Most Pinkertons were injured- some seriously.

The Sheriff had to get the government to send 8000 militia on July 12.

On July 13 Alexander Berkman, a Russian anarchist, broke into Frick's office in downtown Pittsburgh. He shot Frick twice and stabbed him three times. What saved Frick was that it was almost closing time and he told the doctor to take him home to Clayton, his mansion in Point Breeze. He was lucky to recover.

The union was destroyed, Carnegie raised hours and lowered wages.

Carnegie and Frick had a falling out. Frick told Carnegie he would see him in hell. Carnegie was furious that Frick had sold his stock to the company at an inflated price,

Frick now concentrated on his build project in NYC. He built a mansion of 105 rooms. They were such a size that they could serve as a museum. This was intension. It became the Frick Art Museum.

Carnegie did not want to marry while his mother was alive. His mother had been very insulting to his finance. So when his mother died in 1886. Carnegie age 51 married Louise Whitefield age 30. They had a daughter Margaret. Louise now realized how life would be hectic. She said it was very important not to expect any moment to herself. She always had to be on the go with Andrew.

By 1900 Carnegie was making 40 million dollars a year.

Carnegie was also wanting to retire, but how? Louise talked with Charles Schwab about connecting with financier J.P. Morgan to test the waters. Schwab got himself invited to a dinner party in New York in honor of Morgan. Schwab gave a speech praising Morgan as a financier with a view to the future. He was subtle and did not mention Morgan by name. After dinner Morgan invited Schwab to his home after 10pm. They talked all night. Schwab had the details of a deal all worked out in his thoughts.

Next he reported to Louise that he thought Morgan would buy out Carnegie. Schwab next played golf with Morgan and handed him a little note that said 400 million. Morgan kept it. Carnegie was in New York.

He invited Morgan to his home. Morgan said it was just the same distance from Carnegie to his house. Carnegie took the walk. The deal

was closed. Carnegie was retired. But he just had to ask," I wonder if I could have gotten 500 million?" Morgan answered," You would have, if you had asked!"

Morgan had to capitalize his purchase which amounted to the first billion dollar corporation 1901 United States Steel.

Carnegie now pursued gifts to divest his wealth. He was now the second richest man in the world behind Rockefeller. H had already given away \$350,695,653 (approximately \$ 76.9 billion, adjusted to 2015 share of GDP figures) of his wealth.

His donations included

- 7000 pipe organs

- 3000 libraries "Let there be light" over the door.

Carnegie Tech in Pittsburgh – now Carnegie Mellon

Funded a scientific dig for dinosaur bones in Utah. He was thrilled with the result, he has plaster copies made that he gave to museums in Europe and South America. The real one is still in the Pittsburgh museum.

Carnegie Music Hall is open to all because Carnegie owns it.

Carnegie Medal for the best children's literature published in the UK

- Bears his name.

Carnegie Hero Award for outstanding deeds

Many trusts and grant to universities

Carnegie died on august 11, 1919, in Lenox Massachusetts at his Shadow Brook estate, of bronchial pneumonia. After his death, his last

30 million was given away to foundation, charities and to pensioners. He was buried at Sleepy Hollow, New York,. He is buried only a few yards away from union organizer Samuel Gompers, another important figure of the age.