Carnegie as a Metal Worker

"There is no doubt," said Mr. Carnegie, in reply to a question from me, "that it is becoming harder and harder, as business gravitates more and more to immense concerns, for a young man without capital to get a start for himself, and in the large cities it is especially so, where large capital is essential. Still it can be honestly said that there is no other country in the world, where able and energetic young men and women can so readily rise as in this. A president of a business college informed me, recently, that he has never been able to supply the demand for capable, first-class [Mark the adjective.] bookkeepers, and his college has over nine hundred students. In America, young men of ability rise with most astonishing rapidity."

"As quickly as when you were a boy?"

"Much more so. When I was a boy, there were but very few important positions that a boy could aspire to. Every position had to be made. Now a boy doesn't need to make the place,—all he has to do is to fit himself to take it."

Early Work And Wages

"Where did you begin life?"

"In Dunfermline, Scotland, during my earliest years. The service of my life has all been in this country."

"In Pittsburgh.?"

"Largely so. My father settled in Allegheny City, when I was only ten years old, and I began to earn my way in Pittsburgh."

"Do you mind telling me what your first service was?"

"Not at all. I was a bobbin boy in a cotton factory, then an engine-man or boy in the same place, and later still I was a messenger boy for a telegraph company."

"At small wages, I suppose?"

"One dollar and twenty cents a week was what I received as a bobbin boy, and I considered it pretty good, at that. When I was thirteen, I had learned to run a steam engine, and for that I received a dollar and eighty cents a week."

"You had no early schooling, then?"

"None except such as I gave myself."

Colonel Anderson's Books

"There were no fine libraries then, but in Allegheny City, where I lived, there was a certain Colonel Anderson, who was well to do and of a philanthropic turn. He announced, about the time I first began to work, that he would be in his library at home, every Saturday, ready to lend books to working boys and men. He had only about four hundred volumes, but I doubt if ever so few books were put to better use. Only he who has longed, as I did for Saturday to come, that the spring of knowledge might be opened anew to him, can understand what Colonel Anderson did for me and others of the boys of Allegheny. Quite a number of them have risen to eminence, and I think their rise can be easily traced to this splendid opportunity."

(It was Colonel Anderson's kindness that led Carnegie to bestow his wealth so generously for founding libraries, as he is now doing every year.)

His First Glimpse Of Paradise

"How long did you remain an engine-boy?"

"Not very long," Mr. Carnegie replied; "perhaps a year."

"And then?"

"I entered a telegraph office as a messenger boy."

Although Mr. Carnegie did not dwell much on this period, he once described it at a dinner given in honor of the American Consul at Dunfermline, Scotland, when he said:—

"I awake from a dream that has carried me away back to the days of my boyhood, the day when the little white-haired Scottish laddie, dressed in a blue jacket, walked with his father into the telegraph office in Pittsburgh. to undergo examination as an applicant for a position as messenger boy.

"Well I remember when my uncle spoke to my parents about it, and my father objected, because I was then getting one dollar and eighty cents per week for running the small engine in a cellar in Allegheny City, but my uncle said a messenger's wages would be two dollars and fifty cents.... If you want an idea as to heaven on earth, imagine what it is to be taken from a dark cellar, where I fired the boiler from morning until night, and dropped into an office, where light shone from all sides, with books, papers, and pencils in profusion around me, and oh, the tick of those mysterious brass instruments on the desk, annihilating space and conveying intelligence to the world. This was my first glimpse of paradise, and I walked on air."

"How did you manage to rise from this position?"

"I learned how to operate a telegraph instrument, and then waited an opportunity to show that I was fit to be an operator. Eventually my chance came."

The truth is that James D. Reid, the superintendent of the office, and himself a Scotchman, favored the ambitious lad. In his "History of the Telegraph," he says of him:—

"I liked the boy's looks, and it was easy to see that, though he was little, he was full of spirit. He had not been with me a month when he asked me to teach him to telegraph. He spent all his spare time in practice, sending and receiving by sound and not by tape, as was the custom in those days. Pretty soon he could do as well as I could at the key."

Introduced To A Broom

"As you look back upon it," I said to Mr. Carnegie, "do you consider that so lowly a beginning is better than one a little less trying?"

"For young men starting upon their life work, it is much the best to begin as I did, at the beginning, and occupy the most subordinate positions. Many of the present-day leading men of Pittsburgh., had serious responsibility thrust upon them at the very threshold of their careers. They were introduced to the broom, and spent the first hours of their business life sweeping out the office. I notice we have janitors and janitresses now in offices, and our young men, unfortunately, miss that salutary branch of early education. It does not hurt the newest comer to sweep out the office."

"Did you?"

"Many's the time. And who do you suppose were my fellow sweepers? David McBargo, afterwards superintendent of the Allegheny Valley Railroad; Robert Pitcairn, afterwards superintendent of the Pennsylvania Railroad; and Mr. Mooreland, subsequently City Attorney of Pittsburgh. We all took turns, two each morning doing the sweeping; and now I remember Davie was so proud of his clean shirt bosom that he used to spread over it an old silk handkerchief which he kept for the purpose, and we other boys thought he was putting on airs. So he was. None of us had a silk handkerchief."

"After you had learned to telegraph, did you consider that you had reached high enough?"

"Just at that time my father died, and the burden of the support of the family fell upon me. I earned as an operator twenty-five dollars a month, and a little additional money by copying telegraphic messages for the newspapers, and managed to keep the family independent."

An Expert Telegrapher

More light on this period of Mr. Carnegie's career is given by the "Electric Age," which says:—"As a telegraph operator he was abreast of older and experienced men; and, although receiving messages by sound was, at that time, forbidden by authority as being unsafe, young Carnegie quickly acquired the art, and he can still stand behind the ticker and understand its language. As an operator, he delighted in full employment and the prompt discharge of business, and a big day's work was his chief pleasure."

"How long did you remain with the telegraph company?"

"Until I was given a place by the Pennsylvania Railroad Company."

"As an operator?"

"At first,—until I showed how the telegraph could minister to railroad safety and success; then I was made secretary to Thomas A. Scott, the superintendent; and not long afterwards, when Colonel Scott became vice-president, I was made superintendent of the western division."

Colonel Scott's attention was drawn to Carnegie by the operator's devising a plan for running trains by telegraph, so making the most of a single track. Up to this time no one had ever dreamed of running trains in opposite directions, towards each other, directing them by telegraph, one train being sidetracked while the other passed. The boy studied out a train-despatching system which was afterwards used on every single-track railroad in the country. Nobody had ever thought of this before, and the officials were so pleased with the ingenious lad, that they placed him in charge of a division

office, and before he was twenty made him superintendent of the western division of the road.

What Employers Think Of Young Men

Concerning this period of his life, I asked Mr. Carnegie if his promotion was not a matter of chance, and whether he did not, at the time, feel it to be so. His answer was emphatic.

"Never. Young men give all kinds of reasons why, in their cases, failure is attributable to exceptional circumstances, which rendered success impossible. Some never had a chance, according to their own story. This is simply nonsense. No young man ever lived who had not a chance, and a splendid chance, too, if he was ever employed at all. He is assayed in the mind of his immediate superior, from the day he begins work, and, after a time, if he has merit, he is assayed in the council chambers of the firm. His ability, honesty, habits, associations, temper, disposition,—all these are weighed and analyzed. The young man who never had a chance is the same young man who has been canvassed over and over again by his superiors, and found destitute of necessary qualifications, or is deemed unworthy of closer relations with the firm, owing to some objectionable act, habit or association, of which he thought his employers ignorant."

"It sounds true."

"It is."

The Right Men In Demand

"Another class of young men attributes failure to rise to employers having near relatives or favorites whom they advance unfairly. They also insist that their employers dislike brighter intelligence than their own, and are disposed to discourage aspiring genius, and delighted in keeping young men down. There is nothing in this. On the contrary, there is no one suffering more for

lack of the right man in the right place as the average employer, nor anyone more anxious to find him."

"Was this your theory on the subject when you began working for the railroad company?"

"I had no theory then, although I have formulated one since. It lies mainly in this: Instead of the question, 'What must I do for my employer?' substitute, 'What can I do?' Faithful and conscientious discharge of duties assigned you is all very well, but the verdict in such cases generally is that you perform your present duties so well, that you would better continue performing them. Now, this will not do. It will not do for the coming partners. There must be something beyond this. We make clerks, bookkeepers, treasurers, bank tellers of this class, and there they remain to the end of the chapter. The rising man must do something exceptional, and beyond the range of his special department. He must attract attention."

How To Attract Attention

"How can he do that?"

"Well, if he is a shipping clerk, he may do so by discovering in an invoice an error with which he has nothing to do and which has escaped the attention of the proper party. If a weighing clerk, he may save for the firm in questioning the adjustment of the scales, and having them corrected, even if this be the province of the master mechanic. If a messenger boy, he can lay the seed of promotion by going beyond the letter of his instructions in order to secure the desired reply. There is no service so low and simple, neither any so high, in which the young man of ability and willing disposition cannot readily and almost daily prove himself capable of greater trust and usefulness, and, what is equally important, show his invincible determination to rise."

"In what manner did you reach out to establish your present great fortune?" I asked.

"By saving my money. I put a little money aside, and it served me later as a matter of credit. Also, I invested in a sleeping-car industry, which paid me well."

Sleeping-Car Invention

Although I tried earnestly to get the great iron-king to talk of this, he said little, because the matter has been fully dealt with by him in his "Triumphant Democracy." From his own story there, it appears that one day at this time, when Mr. Carnegie still had his fortune to make, he was on a train examining the line from a rear window of a car, when a tall, spare man, accosted him and asked him to look at an invention he had made. He drew from a green bag a small model of a sleeping-berth for railway cars, and proceeded to point out its advantages. It was Mr. T. T. Woodruff, the inventor of the sleeping-car. As Mr. Carnegie tells the story:—

"He had not spoken a moment before, like a flash, the whole range of the discovery burst upon me. 'Yes,' I said, 'that is something which this continent must have,'

"Upon my return, I laid it before Mr. Scott, declaring that it was one of the inventions of the age. He remarked: 'You are enthusiastic, young man, but you may ask the inventor to come and let me see it.' I did so, and arrangements were made to build two trial cars, and run them on the Pennsylvania Railroad. I was offered an interest in the venture, which I gladly accepted.

"The notice came that my share of the first payment was \$217.50. How well I remember the exact sum. But two hundred and seventeen dollars and a half were as far beyond my means as if it had been millions. I was earning fifty dollars per month, however, and had prospects, or at least I always felt

that I had. I decided to call on the local banker and boldly ask him to advance the sum upon my interest in the affair. He put his hand on my shoulder and said: 'Why, of course, Andie; you are all right. Go ahead. Here is the money.'

"It is a proud day for a man when he pays his last note, but not to be named in comparison with the day in which he makes his first one, and gets a banker to take it. I have tried both, and I know. The cars furnished the subsequent payments by their earnings. I paid my first note from my savings, so much per month, and thus I got my foot upon fortune's ladder. It was easy to climb after that."

The Mark Of A Millionaire

"I would like some expression from you," I said to Mr. Carnegie, "in reference to the importance of laying aside money from one's earnings, as a young man."

"You can have it. There is one sure mark of the coming partner, the future millionaire; his revenues always exceed his expenditures. He begins to save early, almost as soon as he begins to earn. I should say to young men, no matter how little it may be possible to save, save that little. Invest it securely, not necessarily in bonds, but in anything which you have good reason to believe will be profitable. Some rare chance will soon present itself for investment. The little you have saved will prove the basis for an amount of credit utterly surprising to you. Capitalists trust the saving man. For every hundred dollars you can produce as the result of hard-won savings, Midas, in search of a partner, will lend or credit a thousand; for every thousand, fifty thousand. It is not capital that your seniors require, it is the man who has proved that he has the business habits which create capital. So it is the first hundred dollars that tell."

An Oil Farm

"What," I asked Mr. Carnegie, "was the next enterprise with which you identified yourself?"

"In company with several others, I purchased the now famous Storey farm, on Oil Creek, Pennsylvania, where a well had been bored and natural oil struck the year before. This proved a very profitable investment."

In "Triumphant Democracy," Mr. Carnegie has expatiated most fully on this venture, which is so important. "When I first visited this famous well," he says, "the oil was running into the creek, where a few flat-bottomed scows lay filled with it, ready to be floated down the Alleghany River, on an agreed-upon day each week, when the creek was flooded by means of a temporary dam. This was the beginning of the natural-oil business. We purchased the farm for \$40,000, and so small was our faith in the ability of the earth to yield for any considerable time the hundred barrels per day, which the property was then producing, that we decided to make a pond capable of holding one hundred thousand barrels of oil, which, we estimated, would be worth, when the supply ceased, \$1,000,000.

"Unfortunately for us, the pond leaked fearfully; evaporation also caused much loss, but we continued to run oil in to make the losses good day after day, until several hundred thousand barrels had gone in this fashion. Our experience with the farm is worth reciting: its value rose to \$5,000,000; that is—the shares of the company sold in the market upon this basis; and one year it paid cash dividends of \$1,000,000—upon an investment of \$40,000."

Iron Bridges

"Were you satisfied to rest with these enterprises in your hands?" I asked.

"No. Railway bridges were then built almost exclusively of wood, but the Pennsylvania Railroad had begun to experiment with cast-iron. It struck me that the bridge of the future must be of iron; and I organized, in Pittsburgh.,

a company for the construction of iron bridges. That was the Keystone Bridge Works. We built the first iron bridge across the Ohio."

His entrance of the realm of steel was much too long for Mr. Carnegie to discuss, although he was not unwilling to give information relating to the subject. It appears that he realized the immensity of the steel manufacturing business at once. The Union Iron Mills soon followed as one of the enterprises, and, later, the famous Edgar Thompson Steel Rail Mill. The last was the outcome of a visit to England, in 1868, when Carnegie noticed that English railways were discarding iron for steel rails. The Bessemer process had been then perfected, and was making its way in all the iron-producing countries. Carnegie, recognizing that it was destined to revolutionize the iron business, introduced it into his mills and made steel rails with which he was enabled to compete with English manufacturers.

Homestead Steel Works

His next enterprise was the purchase of the Homestead Steel Works,—his great rival in Pittsburgh. In 1888, he had built or acquired seven distinct iron and steel works, all of which are now included in the Carnegie Steel Company, Limited. All the plants of this great firm are within a radius of five miles of Pittsburgh. Probably in no other part of the world can be found such an aggregation of splendidly equipped steel works as those controlled by this association. It now comprises the Homestead Steel Works, the Edgar Thompson Steel Works and Furnaces, the Duquesne Steel Works and Furnaces, all within two miles of one another; the Lucy Furnaces, the Keystone Bridge Works, the Upper Union Rolling Mills, and the Lower Union Rolling Mills.

In all branches, including the great coke works, mines, etc., there are employed twenty-five thousand men. The monthly pay roll exceeds one million, one hundred and twenty-five thousand dollars, or nearly fifty thousand dollars for each working day. Including the Frick Coke Company, the united capital of the Carnegie Steel Company exceeds sixty million dollars.

A Strengthening Policy

"You believe in taking active measures," I said, "to make men successful."

"I believe in anything which will help men to help themselves. To induce them to save, every workman in our company is allowed to deposit part of his earnings, not exceeding two thousand dollars, with the firm, on which the high interest rate of six per cent. is allowed. The firm also lends to any of its workmen to buy a lot, or to build a house, taking its pay by installments."

"Has this contributed to the success of your company?"

"I think so. The policy of giving a personal interest to the men who render exceptional service is strengthening. With us there are many such, and every year several more are added as partners. It is the policy of the concern to interest every superintendent in the works, every head of a department, every exceptional young man. Promotion follows exceptional service, and there is no favoritism."

Philanthropy

"All you have said so far, merely gives the idea of getting money, without any suggestion as to the proper use of great wealth. Will you say something on that score?"

"My views are rather well known, I think. What a man owns is already subordinate, in America, to what he knows; but in the final aristocracy, the question will not be either of these, but what has he done for his fellows? Where has he shown generosity and self-abnegation? Where has he been a father to the fatherless? And the cause of the poor, where has he searched that out?"

That Mr. Carnegie has lived up in the past, and is still living up to this radical declaration of independence from the practice of men who have amassed fortunes around him, will be best shown by a brief enumeration of some of his almost unexampled philanthropies. His largest gift has been to the city of Pittsburgh., the scene of his early trials and later triumphs. There he has built, at a cost of more than a million dollars, a magnificent library, museum, concert hall and picture gallery, all under one roof, and endowed it with a fund of another million, the interest of which (fifty thousand dollars per annum) is being devoted to the purchase of the best works of American art. Other libraries, to be connected with this largest as a center, are now being constructed, which will make the city of Pittsburgh. and its environs a beneficiary of his generosity to the extent of five million dollars.

While thus endowing the city where his fortune was made, he has not forgotten other places endeared to him by association or by interest. To the Allegheny Free Library he has given \$375,000; to the Braddock Free Library, \$250,000; to the Johnstown Free Library, \$50,000; and to the Fairfield (Iowa) Library, \$40,000. To the Cooper Institute, New York, he has given \$300,000. To his native land he has been scarcely less generous. To the Edinburgh Free Library he has given \$250,000, and to his native town of Dunfermline, \$90,000. Other Scottish towns to the number of ten have received helpful donations of amounts not quite so large. He has given \$50,000 to aid poor young men and women to gain a musical education at the Royal College of Music in London.

"The Misfortune Of Being Rich Men's Sons"

"I should like to cause you to say some other important things for young men to learn and benefit by."

"Our young partners in the Carnegie company have all won their spurs by showing that we did not know half as well what was wanted as they did. Some of them have acted upon occasions with me as if they owned the firm and I was but some airy New Yorker, presuming to *advise upon what I knew very little about*. Well, they are not now interfered with. *They were the true bosses,*—the very men we were looking for."

"Is this all for the poor boy?"

"Every word. Those who have the misfortune to be rich men's sons are heavily weighted in the race. A basketful of bonds is the heaviest basket a young man ever had to carry. He generally gets to staggering under it. The vast majority of rich men's sons are unable to resist the temptations to which wealth subjects them, and they sink to unworthy lives. It is not from this class that the poor beginner has rivalry to fear. The partner's sons will never trouble you much, but look out that some boys poorer, much poorer, than yourselves, whose parents cannot afford to give them any schooling, do not challenge you at the post and pass you at the grand stand. Look out for the boy who has to plunge into work direct from the common school, and begins by sweeping out the office. He is the probable dark horse that will take all the money and win all the applause."

(Mr. Carnegie's recent retirement from business, and the sale of his vast properties to the Morgan Syndicate, marks a new era in his remarkable career; and it gives him the more leisure to consider carefully every dollar he bestows in the series of magnificent charities that he has inaugurated.)