

T is a great pleasure to try and tell the readers of this MAGAZINE how I served my apprenticeship as a business man. But there seems to be a question preceding this-Why I became a business man at all; because I am sure that I should never have selected a business career if I had been permitted to choose. eldest son of parents who were themselves poor, I had, fortunately, to begin to perform some useful work in the world while still very young, in order to earn an honest livelihood, and was thus shown even in early boyhood that my duty was to assist my parents, and, like them, become as soon as possible a "bread winner" in the family. What I could get to do, not what I desired, was the question.

When I was born my father was a well-todo master weaver in Dunfermline, Scotland. He owned no less than four damask looms and employed apprentices. This was before the days of steam factories for the manufacture of linen. A few large merchants took orders, and employed "master weavers," such as my father, to weave the cloth, the merchants

supplying the materials.

As the factory system developed handloom weaving naturally declined, and my father was one of the sufferers by the change. The first serious lesson of my life came to me one day when he had taken in the last of his work

to the merchant, and returned to our little home greatly distressed because there was no more work for him to do. I was then just about ten years of age, but the lesson burnt into my heart, and I resolved then that "the wolf of poverty" should be driven from our door some day, if I could do it. The question of selling the old looms and starting for the United States came up in the family council, and I heard it discussed from day to day. It was finally resolved to take the plunge and join relatives already in Pittsburg. I well remember that neither father nor mother thought the change would be otherwise than a great sacrifice for them, but that "it would be better for our two boys." In after life you will look back, as I do, and wonder at the complete surrender of their own desires which parents make for the good of their children, and reverence their memories with feelings akin to worship.

Arriving in Alleghany City—four of us: father, mother, my younger brother, and myself—father entered a cotton factory; I soon followed, and served as a "bobbin boy," and this is how I began my preparation for subsequent apprenticeship as a business man. I received one dollar and twenty cents (\$1.20) a week, and was then just about twelve years

old.

I cannot tell you how proud I was when I received my first week's own earnings. One

dollar and twenty cents made by myself and given to me because I had been of some use in the world. I was no longer dependent upon my parents, but at last admitted to the family partnership as a contributing member and able to help them. I think this makes a man out of a boy sooner than almost anything else, and a real man too, if there be any germ of true manhood in him. It is everything to

feel that you are useful.

I have had to deal with great sums, many millions of dollars have since passed through my hands, but, putting all these together, and considering money-making as a means of pleasure-giving, or of that other feeling much deeper than pleasure—of genuine satisfaction—I tell you that one dollar and twenty cents outweighs all. It was the direct reward of honest manual labour; it represented a week of very hard work, so hard that but for the aim and end which sanctified it, slavery might not be much too strong a term to describe it.

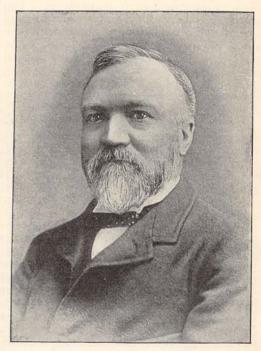
For a lad of twelve to rise and breakfast every morning, except the blessed Sunday morning, and go out into the streets and find his way to the factory and begin work while it was still dark outside, and not be released until after darkness came again in the evening — forty minutes interval only being allowed at noon—was a terrible task. But I was young and had my dreams, and something within always told me that this would not, could not, should not last; I should some day get into a better position. Besides this, I felt myself no longer a boy, but quite "a little man"; and this made me

happy. A change soon came, for a kind old Scotsman who made bobbins, knew some of our relatives, and took me into his factory before I was thirteen. But here for a time it was even worse than in the cotton factory, because I was set to fire a boiler in the cellar, and actually to run the small steam-engine which drove the machinery. The firing of the boiler was all right, for, fortunately, we did not use coal but the refuse wooden chips, and I always liked to work in wood; but the responsibility of keeping the water right and of running the engine, and the danger of my making a mistake and blowing the whole factory to pieces, caused too great a strain, and I often awoke and found myself sitting up in bed through the night trying the steam

But I never told them at home that I was having a "hard tussle." No, no! everything must be bright to them. This was a point of honour, for every member of the family was working hard—except, of

course, my little brother, who was then a child; and we were telling each other only all the bright things. Besides this, no man would whine and give up; he would die We had no servant in our family, and several dollars per week were earned by "the mother" by binding shoes after her daily work was done; father also hard at work in the factory. But my kind employer, John Hay, soon relieved me of this undue strain, for he needed someone to make out bills and keep his accounts, and finding that I could write a plain schoolboy hand, and could "cipher," I became his only clerk, but had still to work hard upstairs in the factory, for the clerking needed but little time.

You know how people are all moaning about poverty as being a great evil; and it seems to be accepted that if people only had money and were rich, that they would be



MR. ANDREW CARNEGIE.
(From a photograph by A. Macintyre, Dunfermline.)

happy and more useful, and get more out of life. There was never a graver mistake. As a rule, there is more happiness, more genuine satisfaction and a truer life, and more obtained from life in the humble cottages of the poor than in the palaces of the rich.

I always pity the sons and daughters of rich men who are attended by servants,

and have governesses at a later age, but am glad to remember that they do not know what they have missed. They think they have fathers and mothers, and very kind fathers and mothers too, and they enjoy the sweetness of these blessings to the fullest, but this they cannot do: for the poor boy who has in his father his constant companion, tutor, and model, and in his mother—holy name—his nurse, teacher, guardian angel, saint, all in one, has a richer, more precious fortune in life than any rich man's son can possibly know, and compared with which all other fortunes count for little.

It is because I know how sweet and happy and pure the home of honest poverty is, how free from care, from quarrels, how loving and how united its members, that I sympathise with the rich man's boy and congratulate the poor man's boy; and it is for these reasons that from the ranks of the poor the great and the good have always sprung, and always must spring. You should go over the list, first of the good men of the world, for such come much before those who are great, if, indeed, one can be truly great without being good. Read the list of the "immortals who were not born to die," and you will find that, almost exclusively, they have been born to the precious heritage of poverty.

It seems, nowadays, a matter of universal desire that poverty should be abolished. We should be quite willing to abolish luxury, but to abolish poverty would be to destroy the only soil upon which mankind can depend to produce the virtues which alone can enable our race to reach a still higher

civilisation than it now possesses.

I come now to the third step in my apprenticeship—for I had already taken two, as you see-the "cotton factory" and then the "bobbin factory," and with the third-the third time is the charm, you know-deliverance came. I obtained a situation as messenger boy in the telegraph office of Pittsburg when I was fourteen. This was a transfer from darkness to light, from the desert to paradise, for here I entered a new world, amid books, newspapers, pencils, pens, and ink, and writing-pads, and a clean office, bright windows, and the literary atmosphere; I was the happiest boy alive. Really, after this change there seemed little left to be desired, for what more does one want in life, and, indeed, what more can one get that is of much consequence? After he has got these things, he has "got it all"; the only tools he needs for anything.

My only dread was that some day I would be dismissed because I did not know the City, for

it is necessary, as you can well understand, that a messenger boy should know all the firms and addresses of men who are in the habit of receiving telegrams, and I was a strange boy in Pittsburg and did not know any. I made up my mind that I should be able to repeat successively each business house in the principal streets, and I was soon able to shut my eyes and begin at one side of Wood Street and call every firm successively to the top, then pass to the other side and call every firm to the bottom, and I was finally able to do this with the business streets generally. My mind was then at rest upon that point, but there was another task that was even harder, because it has never been a trouble to me to memorise.

In these days, when the telegraph line broke the "operator" had to start in a buggy to repair it, for the line was along the highway; and he usually took one of the messenger boys with him, who might have to climb a pole. I was always a poor climber, but fearing that some day I might be called upon to climb, I took every opportunity to practise, but I am sorry to say I was in this a total failure; I never was able to get to the top of a telegraph pole, and this provoked me greatly, because some of the other boys could. However, my usual good fortune attended me; I escaped being called upon, and my deficiency in this respect was never known to the managers.

Of course, every ambitious messenger boy wants to become an "operator," and before the operators arrived in the early mornings the boys slipped to the instruments and practised. This I did, and was soon able to talk to the boys in the other offices along the line, who were also practising. One morning I heard Philadelphia calling Pittsburg, and giving the signal "death message." Great attention was then paid to "death messages," and I thought I ought to try to take this one. I answered and did so, and went off and delivered it before the operator came. After that the operators sometimes used to ask me to work for them.

Having a sensitive ear for sound, I soon learned to take messages by the ear, which was then very uncommon—I think only two persons in the United States could then do it. Now every operator does, so easy is it to follow and do what any other boy can—if you only have to. This brought me into notice, and finally I became an operator, and received the enormous, to me, recompense of twenty-five dollars per month—three hundred dollars a year! This was a fortune, the very sum that I had fixed when I was a factory worker as the fortune I wished to

possess, because the family could live on three hundred a year and be independent. Here it was at last! But I was soon to be in receipt of extra compensation for extra work.

The six newspapers of Pittsburg received telegraphic work in common. Six copies were made, and the gentleman who made these received six dollars per week for

genius Thomas A. Scott was its superintendent. He often came to the telegraph office to talk to his chief, the General Superintendent, at Altoona, and I became known to him in this way. When that great railway system put up a wire of its own, he asked me to be his "clerk and operator," and I left the telegraph-office—in which there is great danger that a young man may be permanently buried,



ENTRANCE HALL, CLUNY CASTLE, BADENOCH.

doing so, and he offered me a gold dollar every week if I would do the work, which I was very glad indeed to do, because I always liked to work with news and scribble for newspapers. The reporters came to a room every evening for the news which I had prepared, and this brought me into most pleasant intercourse with these clever fellows; and besides, I got a dollar a week as pocket-money, for this was not considered family revenue by me. I think this last step of doing something beyond one's task is fully entitled to be considered "business"; the other revenue, you see, was just salary obtained for regular work; but here was a "little business operation" upon my own account, and I was very proud indeed of my gold dollar every week.

The Pennsylvania Railroad shortly after this was completed to Pittsburg, and that as it were—and became connected with the railways.

The new appointment was accompanied by a tremendous increase of salary—it jumped from twenty-five to thirty-five dollars per month. Mr. Scott was then receiving one hundred and twenty-five dollars per month, and I used to wonder what on earth he could do with so much money. I remained for thirteen years in the service of the Pennsylvania Railroad Company, and was at last superintendent of the Pittsburg division, successor to Mr. Scott, who had in the meantime at Philadelphia risen to the office of Vice-President of the railroad.

One day Mr. Scott, who was the kindest of men, and had taken a great fancy for me, asked if I had, or could find, five hundred dollars to invest. Here the business instinct came into play, and I felt that, the door being

opened for a business investment with my chief, that it would be wilful flying in the face of Providence if I did not jump at it, and I answered promptly, "Yes, sir, I think I can." "Very well," he said, "get it. A man has just died who owns ten shares in the Adams Express Company, which I want you to buy. It will cost you sixty dollars per share, and I can help you with a little balance if you cannot raise it all."

Here was a queer position. The available assets of the whole family were not five hundred dollars. But there was one member of the family whose ability, pluck, and resource never failed us, and I felt sure the money could be raised somehow or other. Indeed, had Mr. Scott known our position he would have advanced it himself; but the last thing in the world the proud Scot will do is to reveal his poverty and rely upon others. The family had managed by this time to purchase a small house, and paid for it, in order to save rent. My recollection is that it was worth eight hundred dollars.

The matter was laid before the council of three that night, and the oracle spoke: "Must be done. Mortgage our house. I will take the steamer in the morning for Ohio, and see uncle and ask him to arrange it. I am sure he can." This was done. Of course, her visit was successful—where did she ever fail? The money was procured, paid over, ten shares of Adams Express Company stock was

mine, but no one knew our little home had been mortgaged "to give our boy a start." Adams Express then paid monthly dividends of one per cent., and the first cheque for ten dollars arrived. I can see it now, and I well remember the signature of "J. C. Babcock, cashier," who wrote a big John Hancock hand.

The next day being Sunday, we boys, myself and my ever-constant companions, took our usual Sunday afternoon stroll in the country, and sitting down in the woods, I showed them this cheque, saying, "Eureka! we have found it." Here was something new to all of us, for none of us had ever received anything but from toil. A return from capital was something strange and new. How money could make money; how, without any attention from me, this mysterious golden visitor should come, led to much speculation upon the part of the young fellows, and I was for the first time hailed as a "capitalist." I had never received anything before for nothing, as it were. You see, I was beginning to serve my apprenticeship as a business man in a very satisfactory manner.

A very important incident in my life occurred when one day, in a train, a nice farmer-looking gentleman approached me saying that the conductor had told him I was connected with the Pennsylvania-Railroad, and he should like to show me something. He pulled from a small green bag the model of

the first sleeping car. This was Mr. Woodruff, the inventor. Its value struck me like a flash. I asked him to come to Altoona the following week, and he did so. Mr. Scott with his usual quickness grasped the idea. A contract was made with Mr. Woodruff to put two trial cars on the Pennsylvania Railroad. Before leaving Altoona Mr. Woodruff came and offered me an interest in the venture which I promptly accepted; but how I was to make my payments rather troubled me, for the cars were to be paid for in monthly instalments after delivery, and my first monthly payment was to be two hundred and seventeen dollars and a half, which I had not, and I did not see any way of getting. But I finally decided to visit the local banker and ask him for a loan, pledging myself to repay at the rate of fifteen dollars per month. He promptly granted it. Never shall I forget



MR. ANDREW CARNEGIE AND MR. DAMROSCH AT CLUNY CASTLE.

(From a photograph by Mrs. Carnegie.)

his putting his arm over my shoulder, saying, "O, yes, Andie, you are all right;" and I then and there signed my first note. Proud day this; and surely, now, no one will dispute that I was fast becoming a "business man." I had signed my first note, and, most important of all—for any fellow can sign a note—I had found a banker willing to take it as "good." The subsequent payments were made by the receipts from the sleeping

bank, because my share of the capital was twelve hundred and fifty dollars, and I had not the money, but the bank lent it to me, and we began the Keystone Bridge Works which proved a great success. This company built the first great bridge over the Ohio River, three hundred feet span, and has built many of the most important structures since.

This was my beginning in manufacturing,



MR. CARNEGIE'S BIRTHPLACE, DUNFERMLINE.

cars, and I really made my first considerable sum from this investment in the Woodruff Sleeping Car Company, which was afterwards absorbed by Mr. Pullman, a remarkable man who is now known all over the world.

Shortly after this I was appointed superintendent of the Pittsburg division, and returned to my dear old home, smoky Pittsburg. Wooden bridges were then used exclusively upon the railways, and the Pennsylvania Railroad was experimenting with a bridge built of cast iron. I saw that wooden bridges would not do for the future, and organised a company in Pittsburg to build iron bridges. Here, again, I had recourse to the

and from that start all our other works have grown, the profits of the one works building the other. My "apprenticeship" as a business man soon ended, for I resigned my position as an officer of the Pennsylvania Railroad Company to give exclusive attention to business. I was no longer merely an official working for others upon a salary, but a full-fledged business man working upon my own account.

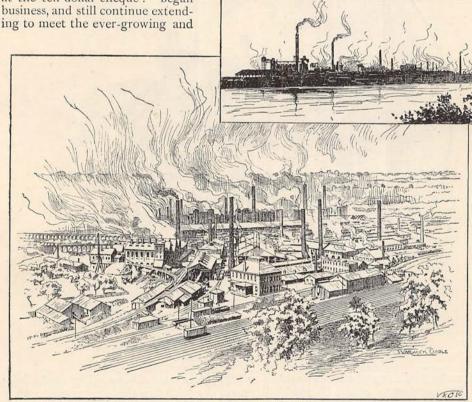
I never was quite reconciled to working for other people. At the most, the railway officer has to look forward to the enjoyment of a stated salary, and he has a great many people to please; even if he gets to be a president he has sometimes a board of directors who cannot know what is best to be done; and even if this board be satisfied, he has a board of stockholders to criticise him, and the property not being his own he

cannot manage it as he pleases.

I always liked the idea of being my own master, and of manufacturing something, and giving employment to thousands of men; and, of course, there is only one thing to think of manufacturing if you are a Pittsburgher, for Pittsburg had even then asserted her supremacy as the "Iron City." So myself and indispensable and clever partners, who had been my boy companions—wasn't that nice, some of the very boys who

had met in the grove to wonder at the ten-dollar cheque?—began business, and still continue extending to meet the ever-growing and ever-changing wants of our most progressive country year after year, always hoping that we need expand no further, yet ever finding that to stop expanding would be to fall behind; and even to-day the successive improvements and inventions follow each other so rapidly that we see just as much yet to be done as ever. When the manufacturer of steel ceases to grow, he begins to decay; so we must keep on extending. The result of all these developments is that three pounds of finished steel are now bought in Pittsburg for two cents., which is cheaper than anywhere else in the world, and that our country has become the greatest producer of iron in the world.

THE BLAST FURNACES FROM THE SOUTH,



STEEL WORKS AND BLAST FURNACES, PITTSBURG.

