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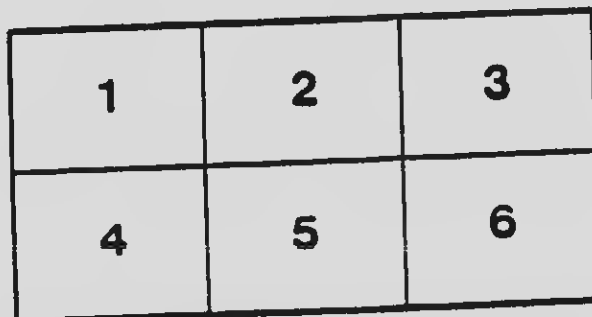
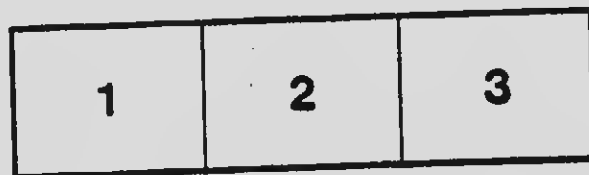
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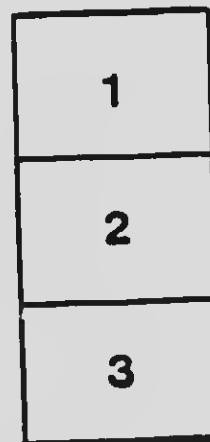
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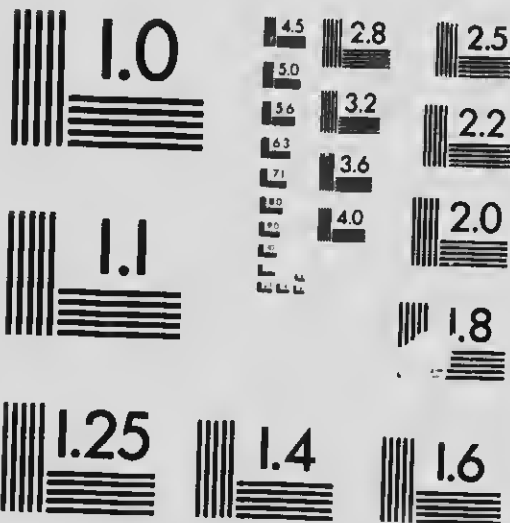
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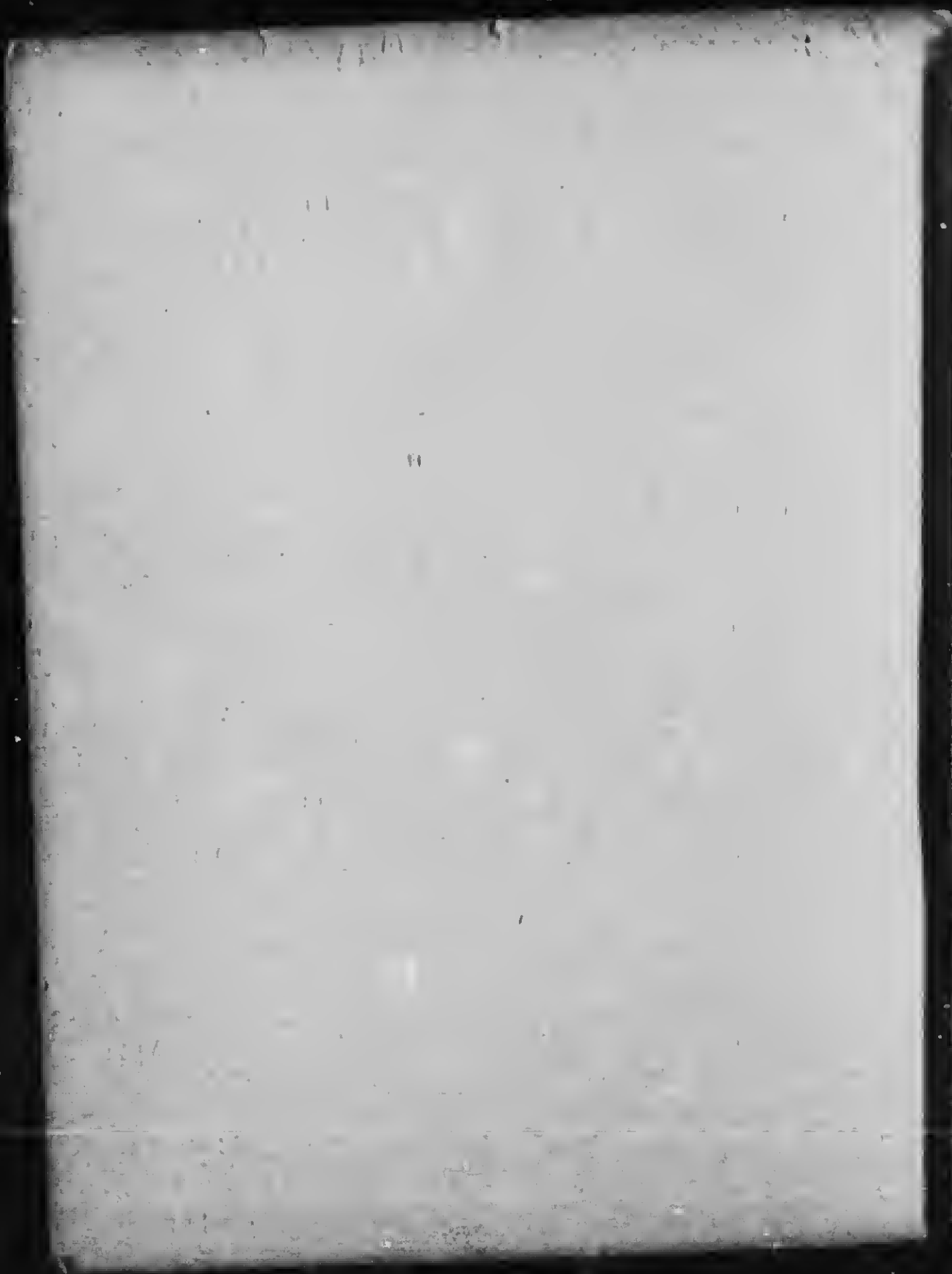
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SUCCESS

by

Frederick W. Taylor



SUCCESS

BY

FREDERICK W. TAYLOR



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Frederick W. Taylor, who died in 1915, was one of the greatest and most successful engineers of his generation.

This article by him is a striking exhibit of his practical common sense. It is full of wisdom on some of the problems which confront the average young man who is just starting out to make a place for himself.

We are glad of an opportunity to pass this along to our Dealers' Salesmen, believing that they will appreciate its helpfulness.

VICTOR SAW WORKS, Ltd.

I WANT to speak to you on success; success for the ordinary man, not success for the genius or the unusual man. I do not doubt that among you there are many geniuses, and those among you who are geniuses will more than likely be a law unto themselves. I should not, however, advise anyone very strongly to start out to be a genius. The genius is usually an indirect product, not a direct one. What I have in mind, then, is to try to be of some help to the ordinary, every-day engineer in obtaining success.

The young man, up to the time that he leaves college, is chiefly engaged in absorbing and assimilating knowledge for his own use. The moment he leaves college he begins directly the opposite, namely, using what knowledge he has for the benefit of others.

Up to the time that the young man

leaves college practically all those around him have been serving him. His parents have been supporting, guiding and disciplining; his teachers have been helping him to get an education. The moment he leaves college, however, he begins his life's work of serving others.

Now I use this word "serving" advisedly. Practically every man engaged in active, useful work is engaged in serving someone else, and this is equally true of the president of the company and the office boy. Everyone is serving someone else.

The work of the young man until he leaves college has been that of getting an education. There are, however, three by-products of this process of getting an education, any one of which, for success in life, is more important than the education itself. These by-products are:

Common sense,
Character, and
Integrity.

Common sense is the ability to decide as to the relative importance of things—the ability to select from among the several possible lines of action which lie before you the one act which is best, the one act which will yield the largest return.

Character is the ability to control yourself, body and mind; the ability to do those things which your common sense tells you you ought to do; the ability, above all, to do things which are disagreeable, which you do not like. It takes but little character to do difficult things if you like them. It takes a lot of character to do things which are tiresome, monotonous and unpleasant.

By Integrity I do not mean merely the kind of integrity which will keep a man out of jail. I mean that straightforward honesty of purpose which makes a man truthful, not only to others but with himself, which makes a man high-minded, gives him high aspirations and high ideals.

Now, I wish to emphasize the fact that each of these three by-products counts for far more in success than the more brilliant and interesting qualities of intellect, knowledge and mental attainments.

During the process of getting an education your success has depended mainly upon yourself, and this will, of course, remain true at all times. It is clear, however, that during your life work of serving other people *your success must also depend to a large extent upon your ability to please the man you are serving, and you will do this by serving him his way, not yours;* by doing the things which *he* wants, not the things which *you* want.

For success, then, let me give one simple piece of advice beyond all others: Every day, year in and year out, each man should ask himself, over and over again, two questions: First, "What is the name of the man I am now working for?" and having answered this definitely, then, "What does this man want me to do, right

now?" Not, "What ought I to do in the interests of the company that I am working for?" Not, "What are the duties of the position that I am filling?" Not, "What did I agree to do when I came here?" Not, "What should I do for my own best interest?" but, plainly and simply, "What does this man want me to do?"

Perhaps these two questions sound very much alike, but let me assure you that there is a vast difference between the two. The question, "What does this man want me to do?" implies that I propose leaving this decision to him. The question, "What ought I to do for the interest of the company?" implies that you propose making this decision yourself, and it should be clear to you that if you expect to please the man whom you are serving you must leave this most important decision to him.

Bearing in mind, then, that your success will depend mainly upon your ability to please the man whom you are serving,

it becomes of the greatest importance to know exactly what will please him, and I am sure that you will find certain general principles of use in making this decision.

When I was about to begin to serve my apprenticeship, an old gentleman who had been very successful sent for me to come to see him. What he had to say took but three or four sentences. He said:

"If you want success in your work, do what I say. If your employer wants you to start work at seven o'clock in the morning, always be there at ten minutes before seven. If he wants you to stay until six o'clock at night, always stay until ten minutes past six. Now, if you haven't sense enough to know what I mean by this, you haven't sense enough to succeed, anyway."

He also said:

"Whatever happens, however badly you may be treated, however much you

may be abused, never give up your job until you have taken forty-eight hours to think it over; and if possible don't talk back to the man who is over you until you have time to cool off."

Now, in the first of these recommendations there is a broad and general principle involved which is not altogether apparent on the surface. At least, it took me several years fully to grasp what the old man meant when he said: "If your employer wants you to start work at seven o'clock in the morning, always be there at ten minutes of seven."

There are two ways of giving orders, and in all cases the young man must use his common sense and a small amount of brains to decide in which of these two ways the order has been given.

The first of these ways is: "Take that chair in your left hand. Carry it over into the corner and lean it against the wall."

The second of these ways is: "That

chair wants to be put away. Go and do it."

Now, when a man tells you precisely and exactly and minutely what he wants you to do, it is because he wants you to do just that, and nothing else. When, however, as is the case in perhaps nine times out of ten, a man gives the second type of order, then he expects you not only to do what he says, but perhaps also to do a little better than he says, and in giving the man you are serving a little more than he expects lies, more than in anything else, the key to rapid success.

Throughout life it is the small, unexpected, unasked-for acts of courtesy and kindness that give especial pleasure. *It is the little gift, the small piece of un-called-for generosity, that charms, that makes life worth living*—and remember, your employer is no exception to the rest of mankind in his appreciation of this.

Quite a large proportion of young men set out deliberately to do barely

enough to satisfy their employer—in fact, many of them would feel happy to do as little as they can and still satisfy their employer. Another set of men propose to do just what their employer wants. They, however, are at all times exceedingly careful to guard their own rights and not to give a single thing in the way of service that they are not paid for. About one man, however, in twenty takes the real, quick road to success. He makes up his mind deliberately that in all cases he will not only give his employer all that he wants, but that he will surprise him with something unexpected, something beyond what his employer has any right to ask or expect, and this is astonishing how fast this line of action leads to success.

To do this, then, it is perfectly clear that as a foundation the decision of what you are to do must rest in all cases with your employer, and not with yourself. This seems exceedingly simple, and yet

most men, if they ever learn it, learn it by having it pounded into them.

Let me tell you how it was pounded into me. I was foreman of a machine shop, more than half of the work in which was that of repairing and maintaining the machinery in a large steel works. Of course, my chief interest and hope in life was that of doing some great thing for the benefit of the works I was in. My head was full of wonderful and great projects to simplify the processes, to design new machines, to revolutionize the methods of the whole establishment. It is needless to say that ninety-nine out of one hundred of these projects were impracticable, and that very few of them ever came to anything; but I was devoting every minute of my spare time at home and on Sunday, and entirely too much of my time in the works, to developing these wonderful and great projects.

Now the superintendent of the works, who had been a warm friend of mine for

years, wanted me to keep all of the machines going with the minimum loss of time, and kept telling me this over and over again. I, however, knew much better than he what was for the interest of the works. I did not daily ask myself, "What does this man want me to do?" but I daily told myself just what I ought to be doing. He stood this as long as he could (which was a great deal longer than he ought to have stood it), and finally came into my office one day and swore at me like a pirate. This had never happened before, and I, of course, at once made up my mind that I should get right out, wouldn't stand any such treatment. I, however, remembered my early advice, and waited forty-eight hours before doing anything. By that time I had very greatly cooled off, but for two or three weeks at regular intervals my friend, the superintendent, repeated this process of damning me up and down hill, until he finally beat it into my dumb head that I

was there to serve him, and not to work in the interests of the company according to my own ideas when these conflicted with his; and from that time on I made quite rapid progress toward success.

What your employer wants is results, not reasons. He wants you to *get there*, and he is not interested in your explanation of why you failed to get there. There is one saying which we have all used since childhood, and which has had no little part in the failure of unsuccessful men. We have all of us said: "I have done the best that I know how; no one could expect any more of me." Now, whenever a man fails to get the results that his employer asks for he should feel intense chagrin and disappointment, instead of feeling satisfied because he has done the "best he knows how." *What we are in the world for is continually to learn to do better than we know how.* And be sure that in ninety-nine out of one hundred cases your employer has very

little interest in hearing that you have done the "best you know how," when you have failed.

Andrew Carnegie came back from England one summer and found that one of his superintendents had made an unusually large profit in his plant. He wrote this man a check for fifteen thousand dollars as a gift. Another of his superintendents had lost money, and when this man started to explain to Mr. Carnegie the reason for his loss, Carnegie said: "Oh, John, don't bother about telling me any reasons. One single reason is good enough. Just tell me that you are a fool; that'll do."

Now, this sounds brutal, and yet it forcibly expresses the mental attitude shared by perhaps the majority of employers when they are given *reasons* instead of *results*. Let me tell you how this fact was driven home in my case:

A workman came up to my house in the middle of the night to tell me that a

valve had broken and shut down one of the large departments in the works. I took the earliest train, at six o'clock, down into Philadelphia, hired a carriage and drove all over the city to every dealer who might possibly have the valve on hand, and also to all the establishments who were users of this kind of valve. I failed, however, to find it in Philadelphia. About noon I returned to the works, feeling very well satisfied that I had left no stone unturned in my hunt for the valve. I started to explain to the superintendent just how thoroughly I had done my work, when he turned on me:

"Do you mean to say that you haven't got that valve?"

"Yes, sir."

"Get out of this and *get that valve!*"

So I went to New York and got the valve. Not reasons, but results, are wanted.

There, however, is one exception to the rule that you should do just what your

employer wants. You, of course, must do nothing mean or dishonest for your employer. If your employer wants you to do anything of this sort, get a new employer.

But what I want particularly to call your attention to is that, in almost all cases, success is due not to the brilliant qualities, but to the plain, ordinary, homely virtues—to grit, determination, perseverance; to the willingness and the character required to do ordinary disagreeable things; to the ability to take a licking and come up smiling, over and over again.

I think I am through now with personal illustrations. I have tried to emphasize the fact that for success, character, common sense and integrity count, and that the most important idea should be that of serving the man who is over you *his* way, not yours; and that this lies, generally speaking, in giving him not only what he wants, but also giving him

a little extra present of some kind, of doing something for him which he has no right either to ask or expect.

In an engineering establishment there were ten or fifteen young college men who were all trying to work up into good positions. Among them there was one man of no especial ability. He appears to have been endowed, however, with fully the ordinary amount of common sense. At any rate, he saw an opportunity for advancement which the other young men failed to see.

Most of the departments of the works ran night and day, so that every Saturday night and Sunday urgent repairs were required to keep the place running. Naturally, the work of making these repairs was in no way sought for by these young college fellows. They all had something much more interesting to do on Sunday—either choir practice or tennis or social engagements of some kind. So that the superintendent in charge of

repairs had a hard time to get the men whom he wanted. One of these young college men, however, went to the repair superintendent and told him that he didn't mind Sunday work at all, in fact he rather liked it. He said he had served his apprenticeship as a machinist and didn't mind being called upon at any time. This was such a new experience to the repair superintendent that he sent for him to come in on the following Sunday. He did so well that he kept him at work practically every Sunday throughout the year, and also quite frequently all of Saturday night, and, contrary to what usually happened, he never had any kicks or complaints from this young man. All of this man's friends, however, laughed at him and remonstrated with him for being so foolish as to take much more than his share of Sunday work. His parents, his social friends, also told him that he was nothing but a fool to work in this way. However, by the end of a year, practi-

cally every superintendent throughout the establishment wanted this young man in his department, and as a result he was promoted with great rapidity. At the end of two or three years all of the other college graduates were wondering why this man, who really was not as smart as some of them, was given all the promotions, all of the good jobs, all of the best positions.

In another establishment a young man, also a college graduate, had worked up to be at the head of one of the departments. A drain which ran underneath this mill became clogged up. He sent his best foreman and a gang of men to clean it out. After they had tried to do it with jointed rods of all kinds, they reported to him that the only thing to do was to dig down, break open the drain and clean out the obstruction. Now this drain was some twenty or thirty feet below the mill and ran underneath the foundation, which made it extremely difficult to dig, and certainly involved the loss of several days in the operation of the mill.

This young man made up his mind that the drain must be cleaned, so he took off all of his clothes, put on overalls, tied shoes on his elbows, shoes on his knees, and leather pads on his hips to keep from getting cut in the drain, and then crawled in through the black slime and muck of the drain. Time and again he had to turn his nose up into the arch of the drain to keep from drowning. After about one hundred yards, however, he reached the obstruction, pulled it down, and when the water had partly subsided backed out the same way that he had come in. He was covered with slime, perhaps half an inch thick, which had to be scraped off with a scraper, and his skin was black for a week or two where the dirt had soaked in. He was, of course, very much laughed at, and finally the anecdote was told as a good joke at a meeting of the board of directors. The president of the company, however, realized that this was just the kind of joke that his company appre-

ciated. He realized that the company had been saved perhaps one or two thousand dollars in profits by the grit of this young man.

A few weeks afterward the president sent for him to come to his office and said:

"I have tried to get the oil out of the cylinders of our steam hammers. I know that you are not in the hammer department. Are you able to keep the oil out of those cylinders?"

"Yes, sir, providing you will give me the necessary authority to do it."

The president wrote him a letter, stating that he had authority to discharge anyone who disobeyed his orders in the matter of keeping the oil out of the cylinders; armed with this letter, he returned to the works and appointed a hammerman on day shift and one on night shift, for each hammer, part of whose duty it was to see that no oil got into the cylinder of his hammer. He showed the president's letter and said that if any oil was

found in the cylinder of a steam hammer on his shift he would discharge him, whether he put it there, allowed it to get there or not.

In addition to this, he chained up the various inlets to the cylinder and locked them with heavy padlocks, so as to make it difficult to get at the cylinders to oil them. Before starting to do this, however, he wrote a letter to the president of the company telling him that he believed it was a mistaken policy to keep the oil out of the cylinders; that it was his personal conviction that the cylinders would cut without oil and be ruined. The president answered that he had had a steam engine in one of his other establishments running for some twenty years without any oil in the cylinder and that he would, therefore, take the personal responsibility of the matter himself.

About three or four months later the company paid a bill of many thousands of dollars to have the cylinders of its

steam hammers rebored. They had almost all cut for lack of oil.

This young man, however, had proved by these two incidents, first, that he had common sense enough to recognize the fact that his employer wanted him above all things to save money, and, second, that he had the grit and pluck required to do disagreeable things, and, third, that he could obey orders even if he personally disagreed with the policy; and these incidents marked the starting point in the career of one of our most successful engineers and managers.

Now, as an illustration of what plain, everyday persistence will do, many years ago, when I was a foreman of a machine shop, there was a young man at the head of one of the rather unimportant departments who had been dropped from Annapolis. He didn't have brains and scholarship enough to keep up with his class. My chief business at the head of this department was that of making re-

pairs and keeping the place running, and all of the heads of the other departments came to me one after another with their breakdowns. They were all in a hurry, and I had to use my best judgment in deciding which repair was of the greatest importance. This young Annapolis failure came into my office one day and explained that he had to have a certain repair made right away.

"Well, I'm sorry, but I can't do it. There are a lot of things that are ahead of you."

"Well, what are they?"

"Oh, I haven't time to go all over it. I'm too busy."

He said: "Won't you tell me what other repairs are ahead of mine?"

"No, I haven't time. I'll make your repair as soon as I have a chance."

"Well, what machine are you going to put my broken piece on to repair it?"

"Onto the slotter."

"What work is ahead of that slotter?"

"Oh, I can't tell you; I have too many other things on hand."

So my friend went out of my office, walked all of the way across the works, about a quarter of a mile, to the central office, found the superintendent of the company and placed before him a piece of paper for his signature, which read:

Mr. Taylor: Please tell Mr.——what pieces of work will go onto the slotter in advance of his breakdown. I am desirous of having Mr.——'s work done as quickly as possible.

He walked all the way back again to my office and gave me that piece of paper. I of course wrote at once the names of the parts which were ahead of his. He again walked back to the central office and again returned to my office, with a second piece of paper, reading: "Mr. Taylor: Please do work on the slotter in the following order," stating exactly the time which his work came on.

He practiced this same scheme on me enough times for me to find that it paid

better to drop all work when he came into the office and answer his questions, rather than to waste time in finally having to write the whole thing out.

Now this quality of persistence certainly is not a very brilliant one and surely requires comparatively little brains, and yet it was just that quality which has placed this young man at the head of a works employing some five thousand men.

Brilliant suggestions as to new, great, and revolutionary changes and improvements are the last things that your employer wants. He has enough of these at all times to last him for years. He is not looking for someone to tell him what to do. He is looking for someone to carry out his plain, simple, everyday, much-needed improvements which are always in sight.

One simple idea is enough to last a successful man a lifetime. During the Centennial Exhibition, held in Philadelphia

in 1876, I left my apprenticeship to take charge of a lot of New England machines that were exhibited. One day an old gentleman came into my exhibit, and I saw at once by the questions which he asked that he was a fine mechanic. I took every pain to explain our machines and tried to sell him some. After a while he sat down and asked me to sit alongside of him. He said:

"What is your idea for success in life?"

I said I didn't know, that I had no particular idea.

"Why," he said, "You must have something that you are working for."

I said: "Yes, sir, I have; I am working to get to be a machinist and to earn two dollars and a half a day."

"Oh, no," he said, "I don't mean that. When I was your age and before I was out of my apprenticeship I had made up my mind just what I was going to do. I decided that I was going to learn how to do work just a little more accurately than

any of the other apprentices around me, and when I had succeeded in doing this, then I decided that I would learn to do it still more accurately than I had done before. Throughout my whole life that has been my one idea. I have never cared so much about the rapidity of the work—although I worked about as fast as other people—but I have always been determined to do a little better work than anyone else around. That is what I am still aiming at to-day, to do better work next year than I am doing this year." He added: "I suppose you know who I am?"

"No."

"I am 'Old Man Sharpe,' at the head of the Brown and Sharpe Company of Providence, Rhode Island."

Now, this simple idea has been enough to build up and keep through two generations the great Brown and Sharpe Company, at the head of all the companies in this country who are doing accurate work, and probably no finer work, on the

whole, is done in any company throughout the world.

Remember that the kind of engineering that is most wanted is that which saves money; that your employer is, first of all, in business to make money, not to do great and brilliant things, and he wants you to help him in making money, rather than in doing great and brilliant things.

In a great establishment which had enlarged very rapidly, but without a plan which was originally carefully laid out, it became a matter of the greatest difficulty to lay out tracks which were capable of taking care of the traffic, incoming and outgoing, and also between the various departments. The problem of locating these tracks was given in succession to the best three engineers in the establishment, men who were finely educated and experienced engineers. Now laying out tracks is a distinctly monotonous and uninteresting piece of work, with no glory in it

whatever, and whether each of these men did his best or not, at any rate they one after another gave up the problem and said that the buildings were so located that it was practically impossible to make a proper layout of the tracks.

In the drafting-room was a young man who had merely an ordinary school education—in fact, very little of that even—who was working making cheap drawings, tracings, etc. He saw these men try the problem one after another and give it up, and after they were through he applied to the superintendent for permission to tackle the track problem. The superintendent said:

“Why, certainly, my boy, go right ahead. Do what you can.”

In about three months this young man had laid out the tracks so as to solve the traction problem in a complete and satisfactory way. And this is the incident that started on his upward career a man whom I am sure you would all recognize as cer-

tainly the combined engineer and machinist who has made the largest pecuniary success of anyone in this country.

There is one rock upon which many a bright and ingenious man has stranded, and perhaps the greatest temptation to the engineer who loves his profession is that of indulging his inventive faculty. Many of our brightest men practically spend their lives in worrying over the great improvements and inventions which they have in their minds, and they squander all of their own and their friends' money in trying to make them successful in a moneyed way after they have been perfected. Now, for the average man, no invention can be looked upon as a legitimate invention which is not an improvement on mechanism or processes or appliances which are already in existence, and which are successful. It is thoroughly illegitimate for the average man to start out to make a radically new machine, or method, or process, new from the bottom

up, to do things which have already been done in the past. Legitimate invention should be always preceded by a complete study of the field, to see what other people have already done. Then some one or more defects should be clearly recognized and analyzed, and it is entirely legitimate for an engineer to use his ingenuity and his inventive faculty in remedying these defects, and in adding his remedy to the existing elements of the machine or the process which have already been found to work well. Any other invention than this should be looked upon as illegitimate, since it is almost sure to waste the money of your employer, as well as your own, and to result in partial, if not complete, disaster.

Don't kick, certainly don't kick unless you are sure of accomplishing your result. Your kick, in perhaps nine cases out of ten, will result merely in aggravating your employer, whether it is just or unjust, and your common sense should tell

you that it is foolish to aggravate him unless some good is to come of it.

William Sellers ranked undoubtedly in his time as the most noted engineer in this country. It was my good fortune to work under him for several years. During this time I was badly treated by one of the superintendents who was over me. I stood it for a long time, and then decided to go to Mr. Sellers about it. He listened and agreed with what I told him, and then turned to me and said:

"Do you know that all of this impresses me with the fact that you are still a very young man? Long before you reach my age you will have found that you have to eat a bushel of dirt, and you will go right ahead and eat your dirt until it really seriously interferes with your digestion."

Does all of this sound humdrum and commonplace? Yes, it does, but remember that I have been trying to point out the implements and methods which are to be used in obtaining success, and that im-

plements and methods are almost always commonplace. But back of this each engineer should have, at all times, the hope, the ambition, the determination, to do great things.

In your desire to do great things, however, do not try for the impossible. Let your common sense guide you. Keep your eyes wide open all the time to see and clearly recognize defects in the machines, apparatus and methods that are immediately around you and in the line of your regular duties in those machines and processes which you understand best, not in someone else's field that you don't understand.

Next, clearly define this defect and, if possible, describe it in words.

Then use your ingenuity to find the simplest possible remedy for it, and, lastly, your common sense to see how, under existing conditions, the remedy can be applied with profit to your employer.

If conditions prevent your doing it this

year, then do it next year, and if not next year, then five years from now. Have patience and grit, and don't give it up.

Now, as I here have laid so much stress on common sense and character as factors in success, it may well be asked where education comes in. I will tell you.

Young college men who work in any first-class establishment soon find that many of the workmen who cannot talk grammatically, that men who chew tobacco, slouch along the street with greasy overalls on, who hardly look up, who are scarcely willing to speak to you politely as you pass them, are intellectually as clear as they are.

I remember very distinctly the perfectly astonishing awakening at the end of six months of my apprenticeship when I discovered that the three other men who were with me in the pattern shop were all smarter than I was. Now, when a young man gets it clearly in his head that he is made of the same kind of clay, physically

as well as mentally, as these other men, then he finds that his only hope of outstripping them in the race lies in getting a better education—in *knowing* more than they do.

But your knowledge will avail you nothing without energy, grit, pluck, determination, ability to stick to it, character.

Of all the habits and principles which make for success in a young man, the most useful is the determination to do, and to do right, all those things which come his way each day, whether they are agreeable or disagreeable; and the ability to do this is best acquired through long practice in doggedly doing, along with that which is agreeable, a lot of things which are tiresome and monotonous, going out of your way, if necessary, to find them.





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