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*** START OF THE PROJECT GUTENBERG EBOOK LETTERS FROM AN OLD RAILWAY OFFICIAL TO HIS SON, A DIVISION SUPERINTENDENT ***

RAILWAY OFFICIAL

TO HIS SON, A DIVISION SUPERINTENDENT

Charles DeLano Hine

LETTERS FROM AN OLD RAILWAY OFFICIAL TO HIS SON, A DIVISION SUPERINTENDENT

 \mathbf{BY}

CHARLES DELANO HINE

WITH A POSTSCRIPT BY FRANK H. SPEARMAN

CHICAGO THE RAILWAY AGE 1904

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To the railway officials and employes of America: Their intelligence is an inspiration; their steadfastness, a psalm.

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Letters From A Railway Official

LETTER I.

A WORD OF CONGRATULATION.

March 20, 1904.

My Dear Boy:—The circular announcing your appointment as division superintendent has just been received, and it brings up a flood of thoughts of former years. I felt that you had made a mistake in leaving us to go with the new system, but it has turned out all right. I can appreciate the fact that you would rather work away from me, so as to make people believe that you can go up the official hill without having a pusher behind you.

This should be one of the proudest periods of your life. You are now in a position to do good to your company, to your fellow man, and incidentally to yourself. No matter how highly organized a road may be, the importance of the office of division superintendent is in direct proportion to the ability and earnestness of the incumbent. The position is little or big, restricted or untrammeled, just as you make it. Many a superintendent has had to double the hill of a swelled knob, and run as a last section into the next promotion terminal. You have too much of your mother's good sense ever to cause anybody else to put up signals for you on this account. Therefore do not lose your democratic manner. Keep your heart warm and regard the wider field as an opportunity to get more friends on your staff. Try to call every employe in your territory by name, as Cæsar did his soldiers; for all the traffic of goodwill must run in a direction toward you if you want maximum results, as they call efficiency nowadays. Good old rule 121 of the standard code says: "When in doubt take the safe course and run no risks," which, in the case of acquaintance, means if uncertain whether you know a man or not, speak to him and give him the glad hand anyway. You will have to discipline men, but that can be done without parting company with your good manners. Remember that the much-abused word "discipline" comes from the same root as the word "disciple," a pupil, a learner, a follower. It is always easier to lead men than to drive them.

When you go over the division do not try to see how many telegrams you can send, but how few. It is usually a pretty safe rule after writing a telegram on the hind end of a train to carry it by two or three stations to see if you would rather not take it back to the office yourself. The dispatchers used to tell your old dad that they couldn't have told he was out on the line as far as his messages were an indication. Another thing, do not try to plug your whistle and muffle your bell. Let everybody know you are coming. The "Old Sleuth" stunt is for criminals, not for honest employes. Be on hand so frequently that your coming is taken as a matter of course. Never hunt quail with a brass band, but bear in mind that men, unlike quail, rather like to perch on a band wagon. If you are tempted to wait behind box cars to see if the men on a night pony have gone in the hay, do not yield, but get out, see that the switches are lined up, and count the ties in front of the headlight until somebody gives her steam; just as Napoleon walked post for the sleeping sentinel. Then, if you administer a polite jacking up it will be twice as effective, even if the delay to the work that one time has continued. Remember that things are not as they should be, and it is probably your own fault if, under normal conditions, a particular movement depends upon your personal efforts. Any routine action that you take should be calculated to help many trains, or one train many times; or to help many men, not merely the trains or men in question. It is all right, in emergencies, to jump in and do the work of a conductor, of an engineman, of a switch tender, or of any other employe. The great trouble is in discriminating between an emergency and a defect which can better be remedied in some other way. The smaller the caliber of the official the more numerous the emergencies to his mind.

You should try to arrange your work so as to stay up all night at least once a week, either in the office, or better, on the road or in the yards. You will keep better in touch with the men and the things for which you, asleep or awake, are always responsible. You remember when your sister Lucy was little how we asked her why she said her prayers at night but usually omitted them in the morning. Her answer which so tickled you was, "I ask God to take care of me at night, but I can take care of myself in the daytime." It is much the same way with a railroad. From your point of view it will take pretty fair care of itself as a daylight job, but at night that proposition loses its rights. The youngest dispatcher, by virtue of being the senior representative awake, is to a certain extent general manager. The least experienced men are in the yards and roundhouses. The ever-faithful sectionmen are off the right of way. The car inspector's light and the engineman's torch are poor substitutes for the sun in locating defects. The most active brains are dulled by the darkness just before dawn. Then it is that a brief hour may side-track or derail the good work of many days. It is this responsibility, this struggle with nature, this helping God to work out the good in men, that makes our profession noble and develops qualities of greatness in its members.

Next time I shall try to tell you something about helping your train dispatchers.

With a father's blessing, ever your own,

LETTER II.

HELPING THE TRAIN DISPATCHERS.

March 27, 1904.

My Dear Boy:—I promised in my last to say something about helping your train dispatchers. The way to help any man is first to encourage him and by showing that you appreciate his good qualities give him confidence in himself. When you come in off the road tell the dispatcher, if such be the case, "Nice meeting point you made yesterday for 15 and 16; I was there and they both kept moving almost like double track." If your division has been badly handled, the dispatcher, unaccustomed to such appreciation, will at first think this is a sarcastic prelude to having the harpoon thrown into him; but your sincerity will soon disabuse his mind of such a notion. Sarcasm in official intercourse or toward one's subordinates should never be tolerated. It is an expensive kind of extra that should never be run. When you praise a man it will add to his good feeling if some one else happens to be present. If you have to censure anyone, whether directly or through the channels, do it privately and spare the recipient all unnecessary humiliation. The official who remembers to mention good work will find his rebukes and criticisms much more effective in remedying poor work than the official whose theory and practice are to take up failures and to let successes be taken for granted.

Another way to help a man is to lead him away from the pitfalls that are peculiar to his path of work. The official who is an old dispatcher has to fight in himself the temptation to be the whole cheese. He has to learn to trust subordinates with details. Every position entails some inherent temptations. The absolute, unquestioned authority given a dispatcher in train movements breeds a temptation to be autocratic and unreasonable, to put out too many orders, to give too many instructions. Therefore, try to get your dispatchers in touch with your crews. If the former are in a skyscraper uptown, get authority to build an office for them at the terminal where most of the crews live. Personal contact is much better than long-distance communication by wire. There is enough of the latter from the very nature of the business without causing an unnecessary amount by artificial conditions.

The temptation of a legislator is to make too many laws; of a doctor to prescribe too much medicine; of an old man to give too much advice; and of a train dispatcher, once more, to put out too many orders. It used to be thought by some that the best dispatcher was the one who put out the most orders. The later and better idea is that, generally speaking, the best dispatcher puts out the fewest orders. It is always easier to give orders of any kind than it is to execute them. It is a far cry from an O.S. on a train sheet to getting a heavy drag into a sidetrack and out again. It often takes longer to stop a train and get an order signed and completed than the additional time given in the order amounts to. Even a judicious use of the beneficent nineteen order involves more or less delay. One of the lessons a dispatcher has to learn is to know when he is up against it; when he has figured badly; and when not to make a bad matter worse by vainly trying to retrieve a hopeless delay. A good dispatcher will know without being told that he has made a poor meeting point. Educate him to consider that as an error to be avoided under like conditions in the future; not as a mistake to be made worse by putting out more orders that may fail to help the stabbed train enough, and may result in having every fellow on the road delayed. If any train must be delayed, let it be one that is already late rather than one that is on time. Above all get the confidence of your dispatchers so that they will not try to cover up their own mistakes or those of others. Teach them that, in the doubtful event of its becoming necessary, the superintendent is able to do the covering up act for the whole division.

Every superintendent and higher official should remember that if the same train order is given every day there must be something radically wrong with the time table. All over this broad land, day after day, hundreds of unnecessary train orders are being sent because many time tables are constructed on the models of forty years ago. At that time, in fact as in name, there were two classes of trains, passenger and freight. To-day there are in reality at least two distinct classes of passenger trains and two classes of freights, or at least four in all. On most of the roads in the country passenger trains of whatever nature or importance are all shown in one class, the first. As a result every limited train in the inferior direction on single track has to be given right by train order over opposing local passenger trains in the superior direction. In other words, the working time table, by definition a general law, has no more practical value, as between such trains, than an advertising folder. A train order by its very nature is an exception to the general law, the time table. When the exception becomes the rule it is high time to head in or to put out a thinking flag. Some years ago your old dad after much persuasion induced his superiors to let him make four classes of trains on a pretty warm piece of single track. The result directly and indirectly was to reduce the number of train orders by twenty or twenty-five per day. Every train order given increases the possibility of mistake and disaster; the fewer the orders the safer the operation. The change was made without even an approach to a mistake or the semblance of disaster. The dispatchers being less occupied were able to give more attention to local freights, and the general efficiency of the train service was greatly increased. The wires could go down and the most important trains would keep moving. It has stood the test of years and if the old method were resumed a grievance committee would probably wait on the management.

Successful politicians and public speakers have long since learned not to disgust their hearers by trying to talk in language ridiculously simple and uncultured. For us to say that the intelligent employes of to-day cannot keep in mind four or even five classes of trains is to confuse them with the comparatively illiterate men of a bygone generation. The public school and the daily newspaper have made a part of our problem easier. We are paying higher wages than ever before, but is it not partly our own fault if we fail to get full value received?

Therefore, see if your time tables appeal to tradition or to reason; if they belong to a period when women wore hoopskirts, or to a time when women ride wheels and play golf. In brief, before you take the stylus to remove the dirt ballast from the dispatcher's eye, be sure that there are no brakebeams stuck in your own headlight.

Affectionately, your own

LETTER III.

HANDLING A YARD.

April 3, 1904.

My Dear Boy:—You have asked me to give you some pointers on handling a yard. You will find that nearly all situations in a yard hark back to one simple rule, which is: When you get hold of a car move it as far as possible toward its final destination before you let go of it.

The training of a switchman is usually such that, if let alone, he will stick the car in the first convenient track and wait to make a delivery until he can pull every track in the yard and put with it all other cars with the same cards or marks. By this time some other fellow with a similar honesty of purpose but differently applied will come along and bury the car or block the first man in so that one engine has to stand idle. A yardmaster has to learn to keep his engines scattered and to hold each foreman responsible for the work of an engine. A good yardmaster knows instinctively where to be at a certain time to minimize the delay incident to engines bunching. The old switchman who becomes a yardmaster often proves a failure because he cannot overcome his inclination to follow one engine and take a hand in the switching himself. By so doing he may perhaps increase the work accomplished by that one engine, possibly five per cent; but in the meantime the other engines, for want of comprehensive, intelligent instructions, are getting in each other's way and the efficiency of the day's service is decreased maybe twenty per cent.

Good yardmasters are even harder to discover or develop than good train dispatchers. The exposure, the irregular hours for the yardmaster's meals in even the best regulated yards make a good conductor leery about giving up a comfortable run to assume the increased responsibility of a yard. The pay of a yardmaster is little more than that of a conductor and is sometimes less. Right here is a chance for some deep administrative thought. It is so much easier to get good conductors than good yardmasters, should we not make the latter position more attractive? Some roads have done this by making it one of the positions from which to promote trainmasters, and seldom have such appointees fallen down. However, there are hardly enough promotion loaves and fishes to go around. Men get tired of living on skimmed milk on earth for the sake of promised cream in heaven. Every switch engine worked costs the company several hundred dollars per month, and the yardmaster whose good figuring can save working even one engine is more than earning his salary.

The closer you can get your yardmasters to your official family the better your administration. Pick up a yardmaster occasionally and take him to headquarters with you so that he will keep acquainted with the dispatchers. This will hold down friction and save the company's good money. A dispatcher naturally wants to get all the trains he can into a terminal, while a yardmaster is doing his level best to get trains out. With such radically different points of professional view there is a big opportunity for the superintendent and the trainmaster to do the harmonizing act, to keep pleasantly before employes the fact that all are working for the same company, that all do business with the same paymaster. Blessed are the peacemakers doesn't mean necessarily there must first be trouble. Peace carried in stock is better than that manufactured on hurry-up shop orders.

If you are looking for talent to run a yard, consider some ambitious dispatcher. Too few dispatchers have become yardmasters. The same cool head, the same quick judgment, the same executive ability are needed in both positions. The man who has successfully filled both is usually equipped to go against almost any old official job, without having to back up and take a run for the hill. The curse of modern civilization is over-specialization. The world grows better and produces stronger, better men all the while. Perhaps this is in spite of rather than on account of highly specialized organization. No industry can afford to be without the old-fashioned all around man who is good anywhere you put him.

The work of the yardmaster is more spectacular than that of the dispatcher. To come down to a congested yard among a lot of discouraged men blocked in without room to sidetrack a handcar is like sitting down to a train sheet with most of the trains tied up for orders. In either case let the right man take hold and in a few minutes the men involved will tell you who it is has assumed charge. Without realizing it and without knowing why, they redouble their efforts; things begin to move, and the incident goes down in the legends of the division to be the talk of the caboose and the roundhouse for years to come. To the man whose cool head and earnestness are bringing it all about comes the almost unconscious exhilaration that there is in leading reinforcements to the firing line. He feels with the Count of Monte Cristo, "The world is mine," I have the switches set to head it in.

Get out of your head the young brakeman's idea that yard jobs are for old women and hasbeens.

Affectionately, your own

LETTER IV.

DISTANT SIGNALS ON CHIEF CLERKS.

April 10, 1904.

My Dear Boy:—You write me that you have been kept very much in your office of late because the general superintendent has taken your chief clerk for the same position in his own office. You hope that your friend, the auditor, may be able to furnish you a good man who has such a thorough knowledge of accounts that you will be able to give less attention to such matters and therefore be out on the road that much more. You will pardon a father's severity, but you are running on bad track, and my interest prompts me to put out a slow order for you. You have had the division a short time, it is true, but that is only a partial excuse for not having better organization than your letter unwittingly admits. You have been there long enough to have sized up the men on the division, and you should know where to put your hand on a man for practically any position. A good organizer does not wait for a vacancy to occur or even come in sight before thinking of the next incumbent. He is always into clear on such a proposition. He has thought it all out beforehand. He has in mind two or three available men for every possible vacancy that can occur, for every job on the pike, including his own. Wherever possible by judicious changing of men he not only has a man in mind, but he has given him some preliminary training for, perhaps some actual experience in, the position to be permanently filled.

The tone of your letter is half complaining because the general superintendent has taken your good chief clerk. Away with such a feeling; it is unworthy. You should feel flattered that your division had a chance to fill the vacancy. You should rejoice in the advancement of your faithful subordinate. Some divisions, like some officials, are known the country over as developers of talent.

Youth is proverbially quick, and I think sometimes that you youngsters are quicker at getting into a rut than are we old fogies. Why for a chief clerk must you necessarily have a man with office experience? Does it not occur to you that your office will be in better touch with its responsibilities if it is in charge of a man who has worked outside along the road? Why not look among your trainmen, your yardmen, your dispatchers, your agents, your operators, or even among your section foremen? Experience is a great teacher, but it can never entirely supply the place of native ability, of natural adaptability. Brains and tact are the essentials and each is comparatively useless without the other. Both must be developed by training, but such training does not necessarily have to take the same course for all men. Railroading as a business is only seventy-five years old, and as a profession is much younger than that. It is too early in the game to lay down iron-clad rules as to the best channels for training and advancement. Common sense demands that such avenues be broad and more or less definite. The danger is that they will be only paths and so narrow that they will wear into ruts.

Do not delude yourself into thinking that by going out on the road you can get away from the accounts. They are a flagman that is never left behind to come in on a following section. You can never get beyond watching the company's dollars and cents any more than a successful musician can omit practice. Some officials think that the way to examine a payroll or a voucher is to see that all the extensions are accurately made, that the columns are correctly added. This mechanical clerical work is about the last thing an official should have to do. He should know how, but his examination should be from a different viewpoint. Primarily he must look to see if the company is getting value received for money expended. He must know that the rolls and vouchers are honestly made up, that agreements involved, if any, are carried out to the letter. The agreements may not be to his personal liking, may not accord with his ideas of justice, but the responsibility for that part is his superior's, not his own. There is a proper channel for him to follow in attempting to protect the company's interests, but that channel is not the one of a petty ruling on a minor question involved in a voucher or a payroll. Overtime, for example, is not a spook but a business proposition. If earned according to the schedule it should be allowed unhesitatingly. Before you jack up a yard-master for having so much overtime, see if the cutting out of that overtime will mean the greater expense of working another engine. The constant thought of every official is how to reduce expenses, how to cut down payrolls. This habit of mind, commendable as it is, has its dangers. In any business we must spend money to get money. The auditor's statements do not tell us why we lost certain traffic through relatively poor service. Their silence is not eloquent upon the subject of the business we failed to get. Figures must be fought with figures and many a good operating official has had to lie down in the face of the auditor's fire because, from lack of intelligent study of statistics on his own part, he had no ammunition with which to reload. Do not feel that if you happen to advocate an increase of expense you are necessarily a discredit to the profession, a dishonor to the cloth.

There are few roads that would not save money in the long run by allowing each division say one hundred dollars per month for developing talent. The expense distributed to oil for administrative machinery would express the idea. It would then be up to the superintendent to work out original methods for spending this money to the best advantage. A bright young fellow with the ear marks of a coming official could be given training in various positions. While he is acting in a certain position, the regular incumbent could be sent to observe methods elsewhere or be given training in some other department. For example, while your candidate is running a yard, the yardmaster could be an understudy for a supervisor. A station agent could take the place of a section foreman, an operator the place of a chief clerk, and so on indefinitely. Do not understand me as advocating a wholesale shakeup or the doing away with permanency of tenure. The limitations of the majority of men are such that they are better left in one fixed groove. We grow to be narrow in our methods because men are narrow. What I want is for us to be broad enough in method to keep from dwarfing the exceptions in the ranks, and at the same time keep the parts of our administrative machine interchangeable. The original entry into the service is more or less a matter of accident as to department entered. Let us not leave a good man the creature of accident all his days. The company is the loser as well as the man. We complain because the trades unions advocate a closed shop, a restricted output, a limited number of apprentices. Is not their attitude a logical development of the example we have set? Like master, like man.

Let your new chief clerk understand that he is never to use your signature or initials to censure or reprimand any employe, either directly or by implication. That is a prerogative you cannot afford to delegate. It is all right if a complaint comes in for the chief clerk to investigate by writing in your name and saying: "Kindly advise concerning alleged failure to do so and so;" or, "We have a complaint that such and such happened and would like to have your statement;" but he should stop right there. It is all wrong for him or for you to add, "We are astonished at your ignorance of the rules;" or, "You must understand that such conduct will not be tolerated." Wait until both sides of the case are heard. Then you alone must act. The division will not go to pieces while such matters await your personal attention. While you are learning that even a brakeman's unpaid board bill may be satisfactorily explained, the brakemen are learning that even a superintendent can find the time to be fair and just. A lack of development of the judicial quality in chief clerks and their superiors has cost the railroad stockholders of this country many a dollar.

Affectionately, your own

LETTER V.

SAFETY OF TRAINS IN YARDS.

April 17, 1904.

My Dear Boy:—I have yours saying that my letter on yard work omits mention of the most important feature, the safety of trains in yards; that the letter is much like a cup of lunch-counter coffee—very good, what there is of it, and plenty of it, such as it is.

I admit that you have caught me not only foul of the main, but outside the switches. I appreciate your consideration in so politely pulling the whistle cord for me, when you would have been justified in setting the air. We all like to be with good company and pull the president's special, and in this case I seem to have with me no less distinguished companions than the American Railway Association. That able body has been detoured too long around this important matter of rules governing trains in yards. Before I leave their varnished cars and climb into the gangway of a switch engine to run into the yards, I want the conductor to throw off a register slip setting forth my admiration for the great work already done by that brainy organization. I take off my hat to the American Railway Association. When I take off said hat, especially to a lady, I always keep both eyes open. Adoration should not be too blind or one may overlook some other meeting points and land clear off the right of way.

Long ago some bright minds, whose identity is lost in the rush of the years, hit upon the happy expedient of dividing trains into two kinds, regular and extra; just as early theology divided mankind into the two convenient classes of saints and sinners. This designation of trains, doubtless like all innovations opposed at first, soon acquired the sacredness that time brings to all things. At that period when we got a car over the road and into the terminal we felt that its troubles were about ended, as did the contemporary novelist whose terminal was always a betrothal scene. Under modern conditions a car reaching a terminal, like a couple leaving the altar, finds that its problems have only fairly begun. Less romance, more progress.

Did you ever try to explain to an intelligent traveling man just what a train is? Did he not ask you some questions that kept you guessing for a week? Did he not remind you that outsiders usually make the inventions that revolutionize operation? Radical changes in methods of warfare are seldom necessitated by the inventions of military men. A druggist invented the automatic coupler. Railroad men did not patent the air brake or devise the sleeping car. All this is natural, because in any profession where one attains excellence in a given method his mental vision may become contracted; he may reason in a circle.

Every once in a while we are appalled by a terrible collision in a terminal, the result perhaps of some poor devil of an employe not appreciating fully the meaning of "all trains." To the innocent bystander the switch engine and cars are just as much a train as the Pullman flyer with its two little green markers on the last car. After such accidents, for a brief period, we hear a great deal about act of Providence, presumptuousness of man, fallibility of the human mind, surprise checking, discipline of employes, company spirit, governmental supervision and a lot of other more or less unrelated subjects. Are we not to blame for not having met the issue squarely? Is it not time that we legislated to recognize the scores of engines chasing through our terminals, from freighthouse to yard, from engine house to station? Are they outcasts? Do the millions of dollars of investment they represent come through a different treasury?

To the human mind an engine or a motor is a train, while a cut of cars without motive power is only a piece of a train, and goes to the brain as an idea of something incomplete. All the artificial definitions of the standard code cannot alter this state of facts. What do you think of the following proposed designations and tentative definitions?

Train.—An engine (or motor) in service, with or without cars. Two or more engines (or motors) may be combined as one train.

Regular Train.—A train represented on the time table. It may consist of sections. A section derives its running existence from a train order requiring a regular train or the proper section thereof, to display prescribed signals.

Extra Train.—A train not represented on the time table, but deriving its running existence from train order.

Yard Train.—A train neither represented on the time table nor created by train order, but deriving its running existence from rules governing movements within prescribed limits.

You will find if you work these definitions through the standard code the changes will be slight, but the results comprehensive and satisfactory. This will do as a starter, but you will live to see

trains handled on single track without train orders as we now understand the term.

If this answers your signal, suppose we call in that flag we whistled out when we stopped to talk it over.

Affectionately, your own

LETTER VI.

STANDARDIZING ADMINISTRATION.

April 24, 1904.

My Dear Boy:—While backing in on a branch idea I bumped into a load consigned to the American Railway Association which, with your permission, I wish to bring in behind the caboose to save a switch. Yes, I have tied a green flag on the rear grabiron for a marker. When the hind man has dropped off to shut the switch and has given the eagle eye a high sign, I shall make a note on the wheel report to the effect that there is not a much better daylight marker than the caboose itself. Some people doubt the necessity for green flags on freight trains or work trains unless the caboose does not happen to be the last car. Night markers are unquestionably necessary, but are not a source of additional expense, as the same oil answers for both the rear red signal and the marker.

The idea in question is that the American Railway Association might well afford to pay salaries to more of its officials and let certain ones give their entire time to committee work and the general welfare. It is too much to expect that men, probably already overworked on their own roads, can find the broadest solution of problems in the very limited time allowed. It might be possible to work out a plan whereby election to certain positions in the association would mean that the individual elected was to be loaned to the association for his term of office, say two years, and then return to service with his own company. A permanent body of officials in such an organization would be undesirable, save of course the able secretary, for the reason that too long a separation from active service would beget an indifference to practical operating conditions. Under such a plan officials would have to be elected by name to prevent a company from unloading any old rail on the association. You know that some statistician has figured out that the average official life of a railroad man in any one position is only about two years. Rearrangement of the staff on the return of an official from such broadening special duty should not be a difficult matter. But, as a man once said to me, "You will not bring all these reforms about until the old fogies die off, and by that time you will be an old fogy yourself and it will not make any difference."

There is almost no limit to the number of matters in railway administration that can be made standard and uniform for all roads. A great deal has been done, but to a coming generation the present stage of accomplishment will seem to have been only a fair beginning. The hopeful feature is that roads now meet each other in a much broader spirit than ever before. The fortress that parleys is half taken, and when negotiations looking to uniformity are once begun a long stride forward has been taken. Take the wage agreements of a dozen roads at a large terminal. All twelve are intended to mean practically the same thing, yet the wording of no two will be found alike. This probably is not due so much to a disinclination to get together as to a lack of time for working out uniform details.

Some roads are noticeable for the clearness, conciseness and brevity of their instructions. Others employ a lot of surplus words which are as expensive and annoying in operation as dead cars in a yard. On every road there are a few men in the official family who have a faculty of expression, either inborn or acquired. Some day when we more fully overcome the prejudice against sending officials to school we shall utilize the services of such valuable men as instructors in style. When this is done, especially in the traffic and legal departments, we shall materially reduce our telegraph expenses. The mere thought of the thousands of unnecessary words flying over the railroad wires every day is enough to give one telegrapher's cramp. Some roads occasionally censor telegrams with a view to reducing their number and their length. These efforts, like municipal reform, are apt to be too spasmodic to prove of lasting value. Success in anything depends upon keeping most everlastingly at it. You notice that I do not confine this remark to our own profession. Carry a flag for me against the man who always says: "In railroading you have to do thus and so, for it's not like other business." All must admit that conditions in railroading are intense; that, except in an army in time of war, there is no profession that is more strenuous or calls for better staying qualities. These facts, however, do not put us in a class by ourselves, a little lower than the angels, a few car lengths ahead of perfection. As Oliver Cromwell said, some things are fundamental. One of them is that good organization and administration depend upon certain basic principles which hold true for any industry. Whatever one's religious views, he must find that the Bible is one of the best books of rules ever written, one of the best standard codes on organization that has been devised. Men were organizers on a large scale centuries before railroads were built.

When, after months of deliberation, the convention had finally agreed upon the provisions of the Constitution of the United States, the document was referred for revision to a committee on style

and expression. The result has been the admiration of the English speaking race. The caller's book does not show that the American Railway Association has ordered a run for such a committee. Should a claim of that sort be made it would hardly be advisable to file the last standard code as an exhibit.

Affectionately, your own

LETTER VII.

THE NEW TRAINMASTER AND CIVIL SERVICE.

May 1, 1904.

My Dear Boy:—I have your letter telling about your new trainmaster. You feel that a man from another division has been forced on you by the general superintendent; that you have suffered a personal affront because the promotion you recommended on your own division has not been approved. I am sorry to rule against you, but from your own story if anybody deserves six months twice a year, it is you and not the general superintendent. The latter may have been lacking in tact; he may have been unduly inconsiderate for your personal feelings, but in making the appointment, which you admit is a good one, he has doubtless been actuated by a conscientious sense of duty. Remember that a fundamental principle of highly organized bodies is that a superior cannot expect to select his own lieutenants. The next higher is always consulted and generally the latter's superiors also. The theory is that they are in a position to have a broader view, to size up more talent, to draw from the system at large, and to accentuate principles and policies in promotions and appointments. This theory is supported by practice, which goes even further. On most roads circulars signed by the superintendent and approved by the general superintendent announce the appointment of a trainmaster. Do not let this delude you into thinking the general manager has not been consulted. In fact, if you could drop a nickel in the slot and get a phonographic report of conferences on the appointment, you might happen to recognize the voice of the president himself before the machine shut off. All of which should convince you that the stockholders and directors have strewn other official pebbles besides yourself along the organization beach. You say that the relation of superintendent and trainmaster should be that of elder brother and younger brother. Very true, but do any of us ever select our brothers?

In a primitive state of civilization, when force is law, the military chieftain rules. He makes and breaks his lieutenants at pleasure. The oldest form of organization we have is the military, for armies are older than governments. Every nation has its birth in the throes of battle. Time passes and the chieftain finds his lieutenants insisting on permanency of tenure. Gradually they secure it, and channels of promotion and appointment are defined. These reach the lower grades and the general finds that he has not even the authority to discuss a private soldier from the service until the latter has been convicted by a court-martial of an offense covered by enactment of the legislative body of the nation. In every civilized country officers are commissioned by the executive head of the nation and by no one else. The general-in-chief may recommend, but he cannot appoint even a second lieutenant. Consider now a commercial organization. Do you think the high-salaried captain of an ocean liner can select his first and second officers without consulting his superiors? Does he select his own crew? Really, now, do you think the general superintendent should perfunctorily approve your recommendation for trainmaster?

Men have been organizing armies and have been going down to the sea in ships for thousands of years. Let the railroads, which have been in existence only seventy-five years, draw another leaf from the lesson of the ages. The time is fast coming when an official cannot discharge a skilled laborer from the service without the approval of at least one higher official. We may not like it; we may say that such policies will put the road in the hands of a receiver. That is just what the conductors said when we took away from them the privilege of hiring their own brakemen. It will come just the same. We may as well look pleasant and see the bright side. Where employment is made a lifetime business, where admission thereto is restricted to the lower grades and to younger men, public sentiment will not stand for letting the question of a man's livelihood be decided by any one official, however fair and just he may be. Safety and good administration may demand the man's summary suspension from duty by the immediate official or employe in charge. If the man has been in the service a prescribed probationary period his permanent discharge will have to be approved by higher authority. Men will not care to risk having a recommendation for discharge disapproved. They will learn that the more carefully a discharge has been considered the less readily will a reinstatement be made.

Some people think you cannot have military methods and organization on a railroad because it has no guardhouse. This is a mistake. Your old dad, after trying both, finds that railroads, in some respects, have a more powerful discipline than the army. A discipline based on bread and butter, shoes for the baby, love of home, and pride of family, which is the bulwark of the state, has in itself all necessary elements for maximum practical effectiveness.

Reinstatements, unless based on new evidence, are demoralizing to discipline, for the reason that the unworthy employe bumps back to a lower grade some deserving man, whose good service is then reckoned at a discount. Some passenger conductors become so color blind they cannot tell

the company's money from their own. They keep down the wrong lead until the auditor derails them at the spotter's switch. The ex-conductor gets hungry, the sympathetic grievance committee, not knowing what is for its own best interests, intercedes. The management, dreaming of loyalty in coming strikes, reinstates the offender. Some young conductor, who, on the strength of his promotion, has married or bought a home, is set back to braking. This causes some brakeman to carry the mail to the extra list. He quits in disgust and another road, less sympathetic, gets the benefit of his training. Other reinstatements follow and more of the younger men quit. Years go on, a rush of business comes. The management look in vain for promotion material and wonder at the seeming ingratitude in quitting of so many good young men whom it was fully intended to promote—in the sweet by and by. This is not the experience of one road, but of many. Let us be just before we are generous.

Speaking of discharged employes, did you ever happen to be in a general office with an expassenger conductor, discharged for "unsatisfactory services," but seeking immediate reinstatement; and have an ex-official, who left the service in first-class standing, come in and ask for the next official vacancy? The conductor might succeed, but the official would fall a sacrifice on the shrine of civil service, a fetich because, in its true meaning, so little understood.

I shall string a civil service limited for you on some other time card.

Affectionately, your own

LETTER VIII.

EDUCATION OF SEVERAL KINDS.

May 8, 1904.

My Dear Boy:—I happened to meet your general manager the other day, and the way he spoke of the good work you are doing warmed the cockles of my old heart. He said that you couldn't rest easy until you knew more about the division than any other man. This, of course, is as it should be, but it is astonishing how many division superintendents are satisfied to grope along in the dark. Then some fine day the general officials come along on an inspection trip and unintentionally make the superintendent look like thirty cents by the sincere questions they ask about the division which he is unable to answer. If one's memory has not been trained by education it is a good thing to condense information and have it in a notebook in the vest pocket. Some wise man has said that all education after we are twenty-five years old consists in knowing where to look for things.

Another help that school education gives to an official is to broaden him so that he can use different methods on different properties. There are three main reasons why officials without much early education have succeeded and will continue to succeed. The first is native ability, which remains comparatively undeveloped without the second, which is opportunity. The third is the good luck to work under organizers and developers of talent. Training under the right sort of leaders is an education in itself. The danger of relying on such training alone is that one may copy too blindly the methods of his master without being broad enough to realize that the same master under other conditions of territory would adopt radically different methods. This is the reason why there are so many failures when a new man takes a crowd of his followers to reorganize a property. If all succeed, very well, but if one fails the most of the bunch go tumbling down like a row of blocks.

Again, the educated man from his knowledge of history is less likely to forget that what may go in fifteen-year-old Oklahoma will receive the icy mitt and the marble heart in three-hundred-year-old Virginia. Triples that are O.K. in cavalier South Carolina may be too quick acting in puritan Massachusetts. Commercialism, like patriotism, rests on certain fundamental principles. The application of these principles may be as uniform as a train of system cars; it may be as diverse as the cars in a train of a connecting line. Orthodoxy is usually my doxy.

The rough and ready efficiency of the West, which has developed a vast domain, has won the praise of the world. Our rough and ready brethren are finding that, as society rapidly becomes more highly organized, this old-time efficiency must be supplemented with technical education. So you find your self-made magnate giving his sons college educations. The only regrettable part is that to make it easy the old man raises the low joints for the boys and they do not always get bumpings enough to test their equipment thoroughly. Time will correct this, and more college men, more presidents' sons, will fire, will switch, will brake, will become men behind cars as well as men behind desks. It is not only what you know, but what you make people believe you know, that counts in this little game of life. The American people never go back on a man who puts aside birth or education and stakes his all upon his manhood; who is willing to share the dangers and the hardships of his calling. Our military men have long since learned this lesson, and the son of the general must do the same guard duty, make the same marches, dig the same trenches, and face the same bullets as his fellows. His father knows that for it to be otherwise would be to handicap the son by the contempt of his comrades. Like the Spartan mother, he says: "My son, return with your shield or upon it."

Did you ever consider how uncertain a quantity is opportunity, as inscrutable as the ways of Providence? In all ages and in all callings it has been one of the numerous mysteries that make life so attractive. There is many a veteran conductor, many a gray-haired station agent, who, if he could have had the chance to start, would have become a general manager. Some men have to go to another road to be fully appreciated. When a man is young he is criticized if he changes roads. When he is older his services are sought because of his varied experience with different roads. Human nature is prone to limit the length of everybody's train to the capacity of its own sidetracks.

In the spring of 1861 there went from his tannery at Galena to the capital of Illinois an ex-officer, a professional soldier, whose gallantry and efficiency had stood the tests of the war with Mexico. Springfield was filled with commission seekers, natives of the State, and Illinois, like some railroads, did not wish to go off her own rails for talent. She needed trained clerks to make out muster rolls, to book wheel reports in the yard office, as it were. This humble employment the silent soldier accepted with better grace than has characterized some former railway officials under similar circumstances. The opportunity came in the shape of a mutinous regiment, which,

like a mountain division, was hard to handle. Three years later the clerk had run around all the officers, was commanding all the armies of the Union, and the world rang with the military fame of Ulysses S. Grant. Strange indeed is opportunity. Some successful railroad men owe their official start to the seeming bad luck of being let out as an employe.

Your general manager said that he had read some of my letters to you; threw me a warm jolly by remarking that you are a credit to such teaching. Then he confessed that he had asked the son if the old man always practices what he preaches. I am pleased to know from his own lips that you uncovered his headlight on that point.

Affectionately, your own

LETTER IX.

CORRESPONDENCE AND TELEGRAMS.

May 15, 1904.

My Dear Boy:—You have asked me to say something more on the subject of correspondence and telegrams. In these days of push the button for the stenographer, letters and telegrams are longer than when the officials themselves wrote out communications in long-hand. It therefore usually remains for employes like yardmasters, conductors and operators to preserve the good old terse style of the past. Some of them send messages that are models of comprehensiveness and brevity. When you run across a man who is an artist in that sort of thing keep an eye on him. The chances are that he uses the same good judgment in all of his work; that he accomplishes the greatest possible amount with the least possible effort; that he takes advantage of the easiest and best way; that he has the prime requisites of a coming official, namely, a cool head and horse sense.

Of course, the matter of terseness can be run into the ground. Clearness should not be sacrificed to brevity. There is a happy medium between the off agin, on agin, gone agin, Finnegan, of the Irish section foreman and the regretsky to reportsky of the Russian general. The point to be gained is to avoid repetition and unnecessary words. When wiring your office that you will go east on Number Two, the word east is superfluous for the reason that on your road Number Two can not possibly run west. For years in our train orders we used the phrase, right of track. Then somebody was bright enough to think that as Stonewall Jackson is no longer hauling locomotives from one line to another over the Valley turnpike in Virginia, the words "of track" might be cut out. Similar amputations have been made in the morning delay reports of many roads.

Human nature is so prone to grasp at the shadow rather than the substance that men cling to words rather than to ideas. When you have written a bulletin directing something to be done, do not discount your faith in its effect by the introduction of our good old friend, "Be Governed Accordingly." We get in the habit of doing a thing simply because we have always seen it done and know no other way. We paint on the sides of our cars such unnecessary words as baggage, chair, dining, parlor, furniture, stock, etc., etc., just as though these cars were never used for anything else; just as though the words really served some useful purpose. The people who do not know the different kinds of cars are beyond the reach of instruction through such information. You have heard of the man who entered the dining car by mistake and asked, "Is this the smoking car?" Whereupon a waiter grinned and replied, "No, suh, this is the chewin' cah." The Pullman people years ago discontinued the use of the words "sleeping car" on their equipment. It is not of record that the voices of the car inspectors and the switchmen on the outside have awakened any more passengers than usual on account of such omission.

We borrowed from the army and the navy the idea of uniforms for employes, brass buttons, gold lace and all. Lately soldiers and sailors are wearing plainer, simpler service uniforms. We, however, have not taken a tumble, perhaps because no one has hit us with a club, or run into our switch shanty and knocked it off the right of way. The cap is the essential feature of a trainman's uniform. He doesn't exactly talk through it, but its badge and ornaments identify his responsibilities and proclaim his authority. Add to the cap a plain blue uniform suit with the detachable black buttons the tailor furnishes, and you have a very satisfactory result. The cap then becomes the only difference between the costume for the road and that for the street. Where tried, it has been found that men wore their best suits on duty and on the street, and kept their worn and shabby suits to wear around home. At present on nearly all roads, as the uniform is too conspicuous to be worn off duty, the men are tempted to defer buying a new uniform until the old becomes very shabby. It has been found that freight crews are easily induced to take advantage of the contract price to buy such plain uniforms for street wear. Such freight crews can be provided with extra caps from the office in emergencies and be utilized to advantage; sometimes reducing the amount of deadhead mileage in making special one-way passenger movements. The street railway of at least one large city has tried this system of plain uniforms with excellent results. Why should the most of us be so timid that we must have a precedent before we can endorse a proposed plan? Like a successful after-dinner speaker, I am responding to the toast on expression by talking about other things.

In writing important letters or instructions it often pays to take the time to sit down and make a rough draft with a lead pencil. If you have the dictation habit so firmly fixed that this is irksome, revise the first draft made by the stenographer. Except when writing in the familiar style, the third person should be used rather than the first or second. The use of the second person should be carefully avoided in formulating general instructions; its use in special instructions to a few individuals is sometimes, but rarely, permissible. In writing or dictating telegrams figure roughly

what the message would cost the company for transmission at commercial rates, and its probable reduction if the price per extra word came out of your own pocket. As far as possible avoid letting your initials become cheap by being used by too many people. If the management do not disapprove, encourage your subordinates to do routine business over their own initials or over symbols, as S. for superintendent (G.S. for general superintendent, and so on), so that when your initials come over the wire they will indicate personal attention and final action. This, too, has been tried successfully in contravention of the fallacy that unquestioning obedience must be rendered even when it is known that the official's initials have been signed by the office boy. It may be remarked in passing, that appreciation and fame await the individual who will be able to coin some short and expressive words to replace such awkward and cumbrous designations as superintendent of motive power, engineer maintenance of way, assistant to the first vice-president, etc., etc.

Did you ever think how desirable and practicable it would be to adopt the Government method of addressing the office instead of the incumbent by name? We do this with train orders, and usually in addressing station agents. We should also address "The Superintendent, Getthere Division, Suchtown, Somestate," and not use his name unless it is intended as personal and to be opened by him alone.

In all correspondence remember that a reprimand, expressed or implied, may be taken in a very different sense by the recipient from that intended by the sender. Your old dad has maintained satisfactory discipline among quite a bunch of men on more than one trunk line without ever writing a letter of reprimand or sending a hot message over the wire. The advice of the famous politician to walk ten miles to see a man rather than write him a letter is paraphrased for our business to mean rawhide yourself fifty or a hundred miles over the road to jack up a man rather than play him a tune on the typewriter. Another useful injunction is that of a famous soldier and diplomat, "Never underrate yourself in action; never overrate yourself in a report."

Affectionately, your own

LETTER X.

THE BAYONET PRECEDES THE GOSPEL.

May 22, 1904.

My Dear Boy:—The evolution of the relative importance of the several departments in railroad work is an interesting study. The early railroads were short and usually had for president the most important man of affairs in the community, a banker, a lawyer, a publicist, a what-not. Frequently this man could not give his whole time to the road and he leaned heavily upon his superintendent, who, perhaps, had been the engineer in charge of construction. The superintendent of the early days was general manager on a small scale, and with limited facilities had to be a man fertile in resources. The superintendent of to-day is a better man, because the race improves all the time, but he performs duties of a decidedly different nature. It is idle to speculate as to just what he would do under primitive conditions. A return to such circumstances is impossible. We know that in a pinch our railway officials and employes, as a class, are never found wanting. They will measure up to standard in the future as they have in the past. One fact they must never forget is that, like soldiers and sailors, their faculties must be so alert, their grasp so comprehensive, that they will not get lost when the fortunes of the service bring them into strange territory. The pace is too swift to admit of standing still to get one's bearings.

There were few officials and the conductors were very important personages. When the superintendent needed an assistant it was natural to take a conductor who helped around the office, ran the pay car and specials, and made himself generally useful. Later on, train dispatching developed splendid tests of executive ability and the official staff was recruited by promotions from dispatchers. Still later, the growing importance of terminal problems gave yardmasters a chance for recognition and advancement.

As West Point was the nursery of the early constructing engineers, many of the early roads were built and operated by military men, whose impress in railway methods has survived to this day. When the civil war was over the railroads gained for their service thousands of men whose ability had stood the stern test of camp and battle, men who could meet unexpected conditions. These men bore the brunt in the wonderful railroad development that secured forever the commercial greatness of our country. The value of military methods was appreciated by them and almost unconsciously such methods were copied in organization, in discipline, in correspondence. One reason the great Pennsylvania organization is so strong and successful is the training some of its embryo high officials received in the military railway bureau of the War Department during the great conflict. The bayonet always precedes the gospel. When the military have cleared the wilderness of the savage foe the railroad brings a permanent civilization. Witness the marvelous growth of the great West during the last forty years.

A majority of the railroads in the country at some time or other passed through a receivership. Here came a chance for legal men, and after reorganizations lawyer presidents have not been uncommon. At the next stage of development many railroads had been built and systems were growing larger. The civil engineer, who in earlier years would have become the president or chief operating official, was now taken care of in a newly necessitated department, that of maintenance and construction, sufficiently important to attract his talents. Following this period competition was keen; it was a struggle for existence. The man who could get the business was IT. The traffic man had his inning and, if not president, dictated policies and the amount of his own salary and perquisites. With the growth of the community of interest idea the traffic man is just as important; but he is no longer wreckmaster, and the transportation man is up under the lime light near the derrick car. Between the different dynasties of departments the transportation man, like the rock of ages, is always the standby and always will be. The other departments come and go in relative importance, but the transportation never shuts off, and is there with the sand when the others unload from the gangway.

The revolution in standards of power and equipment incident to recent years of tractive units and ton-mile costs has brought the mechanical man prominently in front of the headlight. Fortunately for himself and for the service in general he has not dodged the rays when anyone cared to read figures, and the way to higher executive positions has not been left dark for him. The pendulum is already coming back toward the transportation man. Whether the next swing will be toward the signal engineer or toward the electrician it is hard to say.

The lesson a superintendent should learn from all this is that he has more and more superiors to please, more and more fads to follow, more and more improvements to develop, more and more different points of view to reconcile. He must merge his own importance, his likes and dislikes in the great corporation with which he has cast his lot. If his superiors spell traveler with two l's or labor with a u, let him do likewise. By so yielding he is not losing any manhood. He is winning a

victory over the crotchety part of his individuality and leaving room for its development along broader lines. He that ruleth his spirit is greater than he that taketh a city. As no man can take a city or do any great work unaided he must learn first to rule his own spirit in order that he may rule others and gain their heartiest co-operation. The superintendent who is habitually calm and polite, however great the provocation to speak angrily, will soon find that if he is firm and just his men are worrying even more than he lest things go wrong on the division.

In the matter of discipline there has been a great change in sentiment and in method. Whether or not it is all advisable is very much of a question. There are too many collisions in proportion to the improvement in material and personnel. In the old days the crew at fault, whether they actually got together or not, were discharged and forever barred off the road. Nowadays we are apt to give them another trial on the theory that we are immune from future mistakes on their part. This may or may not be so, but how about the effect on others in the service? How about the men who are thereby entitled to promotion? Is not a failure to make an example of such offenders holding life and property too cheap? We may pity the unfortunate blunderers, just as we may pity a drunkard or a thief, but their usefulness to us should be over. They may start in again, but it must be on some other road. Our duty to the public and to our stockholders demands that the safety of a train should be sacred. One of the most absurd conclusions is to measure the punishment by the amount of damage, according to how straight the track happened to be, according to how hard they happened to hit. Some railroad sins can be forgiven, but drunkenness, chronic or periodic; stealing, money or property; and collisions, actual or constructive, should be unpardonable on any road, however thoroughly they may be blotted out elsewhere. Less sentiment and more discharges will mean fewer collisions.

Affectionately, your own

LETTER XI.

PREVENTING WRECKS BEFORE THEY HAPPEN.

May 29, 1904.

My Dear Boy:—An able and successful general manager—not all able men and not all general managers are successful—recently called attention to a most important distinction in the training and practice of superintendents. He says that too much stress is laid upon the development of ability to locate responsibility after a wreck occurs, and not enough upon the quality of controlling circumstances, of cultivating precautionary habits that will prevent disaster. As he aptly puts it, the superintendent should be a doctor, a health officer, rather than a coroner; his staff a sanitary commission, a board of health to prevent disease rather than a jury to determine its causes and effects. Some superintendents pride themselves on their legal acumen, their ability to cross-examine, and on the way they can catch a crew trying to lie out of a mix-up. This is all very well if it does not obscure the main object, namely, to minimize disaster in the future. The investigation serves, perhaps, to determine what men to discipline and discharge as an example to others in the service. It should also serve as a lesson in official methods. However thorough and searching, it cannot restore life or return property. The damage has been done. All the king's horses and all the king's men cannot put Humpty-Dumpty together again.

Some of your men every day will give you the old hot air, "As long as there are railroads there will be wrecks." To which you should hand back the stereotyped reply, "Very true, but let's figure on letting the other fellow have them." A discreet remark or suggestion that will put a man to thinking for himself is one of the secrets of success in handling men. Never miss an opportunity to make the point that wrecks seldom occur from the neglect of any one man. It is when two or more forget at the same time or fall down together that trouble results. Impress on the brakeman the fact that the very stop he neglects to flag is the time when the operator is most likely to let two trains in the same block. Remind your conductor that when he fails to read the orders to the engineman in person and sends them forward by the porter or the head brakeman, that is the very trip the orders get torn or smeared so that a fatal mistake results. When a passenger train breaks in two the air usually sets on both portions. It fails to do so when bums or misplaced safety chains have turned the angle cocks; and that is the time there should be a trainman riding in the rear car. Men will tell you so and so cannot happen, but next week it does happen just the same. The whistle hose and the brake hose cannot be coupled together because the connections are purposely made of a different pattern. A green apprentice coupling an engine to a tender at a roundhouse managed to pound together the couplings of the wrong pairs of hose, which the engine inspector had failed to notice were badly worn. That was the day the car inspectors neglected to try the signal and the air before the train left the terminal. By a strange fatality the conductor trusted the car men for the station test. The engineman was too busy to make a running test. They all got wise when the air wouldn't work at the first railroad crossing. Watch the inspectors to see that they do not form the lazy habit of giving the signal to try the air from the next to the last car, of walking only half the length of the train to see the pistons and the brakeshoes. Never wink at an irregularity of that sort. It will come back to plague you a hundredfold. Go right after it quietly, but promptly and effectually. Do not wait for disaster or for investigation by your superiors to tell you that a loose practice prevails. Get such information with your own senses or from observations of your staff.

It is vigilance, eternal vigilance, that is the price of safety. Teach your men that a hundred successes do not justify an avoidable failure, that twenty years of faithful service cannot condone criminal carelessness. A fundamental is that when backing up there should always be a man on the rear end. Educate your men to feel that neglect of this wise precaution is just as mortifying as to appear in public without clothes. In shoving long cuts of cars without using air, get your brakemen and switchmen to feel a pride in setting a hand brake on the end car to take the slack and save the jerk on the drawbars. Work for the old-time feeling of chagrin that came to the calloused-armed passenger brakeman, in the days of Armstrong brakes, when he did not go after them soon enough and let his train run by the station. The men are not to blame for this loss of pride and interest. We, the officials, are at fault. We have not kept ahead of the game. We have been coroners, not sanitary inspectors.

If an engine is waiting at a hand derail or at a crossover for a train, neither switch should be thrown until the train has passed. Then, if the throttle happens to fly open at just the wrong moment, the train will not be sideswiped. If not trained, your switchmen will throw every switch possible beforehand so as to be ready. They may think such precautions are old womanish, but the time will come when your wisdom will be vindicated. If a train is waiting for a connection, with a siding switch in rear, the facing point switch should be opened, so that if the incoming man loses his air or misjudges distances the train will not be hit. Similarly a flagman going back

to protect a train between switches should open the siding switch as he passes it. The switch is more effectual than a torpedo, and if a following train happens to get by him and his torpedoes his own train will not be hit. He should flag just the same, because a train entering the open switch too fast might turn over. It is better to take a chance on a derailment than on a collision. It is better still to have such training, vigilance and discipline that there will be little chance of either disaster.

Train your men to do things because they are right, because it is manly to do good railroading. Then, when you hold an investigation you will not find at the moment the accident happened that the engineman was priming his injector, the fireman putting in a fire, the head brakeman shoveling down coal, the conductor sorting his bills, and the hind man starting to boil coffee for supper.

There is hardly a conductor or an engineman of any length of service who has not at some time overlooked an order or a train. When he has forgotten, his partner has remembered. The trouble has come, bad luck, they call it, when they both forgot. Many a \$50 operator has saved the job of a \$150 engineman. Keep your men keyed up to the idea that this is too uncertain; that each must watch his own job, that in so doing he may keep his comrade out of the hole, that by conscientious vigilance he becomes a better man and more of a credit to his calling. No man wilfully courts danger to life and property. His failures are an accompaniment, a concomitant they call it in logic, of officials being better coroners than they are doctors.

Affectionately, your own

LETTER XII.

THE SELF-MADE MAN WHO WORSHIPS HIS MAKER.

June 5, 1904.

My Dear Boy:—I once heard General Sheridan, my old commander, say that when he was a lieutenant he made up his mind to be the best lieutenant in his regiment; that in every grade to which promotion brought him he strove to be the best; that he attributed his high rank to this consistent effort. Right here is a moral that many a railroad man should apply to himself. Although Sheridan's comrades at West Point and in the service knew his efficiency, the powers that were in 1861 found no higher position for him than that of captain and assistant quartermaster. During the first year of the civil war, while politicians were called colonels and lawyers tried to be generals, this trained soldier was inspecting horses and mules in the Southwest, a veterinary's work. Some men, disheartened by such apparent inappreciation, would have lost interest, would have let the contractor palm off inferior animals on the government. Not so with the future commander of the army. He tried all the harder and his work was efficient, clean and honest. In the spring of 1862 a Michigan cavalry regiment needed a colonel and the officer hailing from Ohio, who had bought horses so well, had a chance to drill both horses and men. A year and a half later he was commanding a division of infantry, and six months after that as major general a corps of cavalry. Popular opinion pictures Sheridan as a dashing fighter, executing the plans of some one else. Never was there a more incomplete conception. No matter how hard had been the fighting, how wearing the march, it was Sheridan who rose in the night to see that the sleeping camp or bivouac did not suffer from laxity in guard duty, that all was ready for the plans of the morrow. The general manager did not have to tell him that the switch lamps on his division were not burning. The general superintendent did not have to wire him that his water cranes were out of order. The superintendent of motive power did not have to complain that his enginemen were not kept in line. The traffic manager did not lose freight because his night terminals became congested.

There is many a railroad man who has lost heart and lessened his usefulness because an honest but inappreciative management has promoted the wrong man. Then is the time to come out strong, to try harder than before to be appreciated. The world has little use for soreheads. The more strenuous the conditions the less sympathy for the sulker in the tent. Be game and do not kick for rest. The sleeve is no place to wear a wounded heart. Do not put up a squeal about nepotism. As long as man loves woman and that woman's children the relatives of the management will always be the easiest for the promotion call-boy to find. Remember that though they be marked up first out, there are other runs to be filled; that sooner or later there are chances for more crews to get out. If you find flaws in the reasons announced for certain appointments, forget them in the thought that honesty of purpose is a distinguishing characteristic of operating management. Not only look pleasant but head off the efforts of foolish friends to form a volunteer grievance committee in your behalf.

Assuming that you are trying to be the best division superintendent, remember that in the final roundup it is not your own ideas of success that must prevail. You may know that you are stronger and better than the official who gets the preferred run. You may know that it would be best for the company to have you run around him. All the men on the division may unconsciously feel your superior ability. They may all swear by you and make your name almost sacred around the lunch counter and the caboose track. All this will not count for full value if you do not please your superiors. When the general manager comes on your division you must be ready for any kind of a statistical run. He has not time to wait for you to oil around. His every hour is valuable and like all busy men he forms his opinions in a hurry. Remember that until we know men intimately we judge them by standards more or less artificial, but usually pretty accurate in the aggregate. Thus a man who is careless and untidy in his dress is apt to overlook little essentials in the management of men and affairs. The dandy is almost never a coward; for, if physical courage be lacking, his pride supplies its place. The superintendent whose desk is in confusion probably has untidy stations and dirty coaches. The man who slouches coatless into his superior's office and sprawls into a chair before being invited to sit down is likely to be equally inconsiderate of the public his company serves. The tobacco lover who cannot refrain from smoking or chewing the few minutes he is close to the throne will probably not inherit much of the kingdom of advancement. The man who clings to the George Washington habit of eating with his knife and the Thomas Jefferson custom of drinking from his saucer has the burden of proof on him to show that he is not unobservant of progress in other things and is not generally behind the times. The self-made man in so many cases worships his maker that he forgets the divinity that doth hedge a king. The man above may be no better, perhaps not as good, morally, mentally, physically and socially, but officially he is the superior in fact as well as in name. Familiarity breeds contempt and the more respect you show your superior the more dignity you are conferring upon yourself, the less likely are your own subordinates to forget the respect that is due your position. Self-restraint and mental poise cultivate an unconscious dignity of character that is of immeasurable value in the handling of men. Abraham Lincoln and Robert E. Lee, men of radically different types but alike in being idolized by their people, were popular heroes, although neither was addressed, even by his intimates, by his first name. The highest compliment you can pay an associate or a subordinate is to address him in private by his first name. It shows either that you have known him a long time or that you think enough of him to separate him from his payroll designation.

One of the amiable failings of human nature is to be self-satisfied, a condition that in our profession is probably intensified. We railroad men have to think and act in such a hurry that we become very cocksure of ourselves. We have so little time for introspection that we often regard the science of railroading as putting it on the other fellow. When disaster occurs, no matter how defective may have been our equipment, how parsimonious our policy, how lax our discipline, we cry out long and loud at the untrustworthiness of employes, at the decadence of company spirit, at the growing evils of the labor unions. An intelligent public usually gets on to us, however, and we pay for such mental and vocal pyrotechnics with compound interest. It will profit us to do a little more self-examination, to copy the publican rather than the pharisee. The conductor who burns off journals will assure us of his distinguished concern and of his constant injunctions to his brakemen to watch for hot boxes. The superintendent who rawhides his men will tell you with tears in his voice how necessary it is to be considerate of the boys on the road. The general superintendent who sends long and unnecessary telegrams will deplore with you the tendency of the traffic department to burden the wires. All these are good men and true, but they have not formed the habit of healthy, honest self-criticism. Strong, indeed, is the man who can stand up and say, like Lee at Gettysburg, "I was in command and responsible. If anyone is to blame I am the man."

The greatest of executives are those who can make men think for themselves, who can work men and have them believe they are playing, who can suggest a new thought to a man and leave him with the idea that he originated it himself. A great deal of effort is lost, a vast amount of mental force is wasted in trying to convince people that you alone originated an idea or a movement. Bury such a thought in the results produced, for it is results we are after. Get your satisfaction in said results and your amusement in the honest self-glorification of some unconscious borrower who has utilized your idea. It doesn't pay to be too much of an originator. If you have advanced ideas, keep yourself in the background or you may kill the ideas. Men find the old alignment so familiar that they are slow to want curves replaced by tangents. If you are too ubiquitous with suggestions they will become leery of your good judgment and will unconsciously set the fish tail when you whistle into town. If you will run past the distant signal and find your superior at the home, some of the best stops for the suggestion derail are: "You doubtless have considered the advisability of thus and so;" or, "I assume you are not quite ready to decide the question of hit or miss;" or, "As you were saying the other day, we are losing money by deadheading crews;" or, "I hope you will be able to carry out your idea of introducing train staffs;" or, "On further consideration, do you care to recommend adopting lap sidings for the new extension?" etc. Of course this kind of a sand valve must not be opened too wide or too often or some of the soft soap will get on the detector bar and violate the interlocking rules.

Affectionately, your own

LETTER XIII.

THE FRIEND-MILE AS A UNIT OF MEASURE.

June 12, 1904.

My Dear Boy:—Your chief dispatcher blew through here the other day on his vacation and dropped in to pay his respects. He rather apologized for so doing, as he seemed to think it might be considered an intrusion to call on a stranger. I took it as a compliment to myself and as a mark of his loyalty to you. It is so easy for us old fellows to forget that we were once junior officials ourselves that I rather like to keep in touch with those who are to come after and maintain the time-honored standards of the profession. I never like to say very much about my desire to acquire information from everyone I meet, for experience has made me a little leery of the man who whistles too long for that station. He is apt to toot his own horn so much that he doesn't hear the other fellow's signals. So I tried not to do all the talking, and did not tell my guest of the great improvements I had made since I came to this position. I preferred to let him hear that from someone else. If one should take too literally the talk of the officials on whom he calls he would wonder how the road ever ran before each held down his particular job; how there can possibly be any improvement made by those who come after. No, I do not advocate hiding one's light under a bucket in the cab all the time—only when running.

The world is getting to place more and more confidence in the man who thinks out loud. It trusts him because he is not doubtful of himself. The stunt of looking wise and not expressing an opinion when a suggestion is made is no longer popular. A non-committal promise to look into the matter may be construed as a mask for ignorance or timidity. The more a man knows the more frankly he acknowledges that a certain idea is new to him. Men to whom talking and writing do not come easy sometimes say beware of the windy man, but there are some mighty efficient railroaders who act and perform all the better for being able to handle words. Hot air is all right if properly compressed. The idle breeze dries the ground and runs windmills. Sand bites the rail in more economical quantities when fed down by the pneumatic attachment. Every division has its Windy Bill, its Chattering Charlie, its Gasbag George; but some way, when they are on the road you always feel safe. They may work a con game on some of the agents and dispatchers, but they get over the road with the local. You feel good when you meet them. The man you want to run from is Calamity Jake, who always has a tale of woe as long as a gravel train. His caboose rides rough: its stove smokes; the caller doesn't give him time enough for his wife to cook breakfast; the yardmaster saves all the shop cripples for his train; he can't trust the ignorant engineers; the brakemen are all farmers, and the signal oil won't burn. If you tell him that's all right, that you will try and correct all these things when the car accountant's office stops kicking on his wheel reports, he will look at you in sympathetic sadness and bewail the modern tendency to make clerks of conductors.

Your chief dispatcher is a fine fellow and understands the art of getting away. He didn't wear out his welcome but broke away while making a good impression. You have to unlock the switch for some men before they can couple their crossings and get out of town. The dispatcher has to send the operator outside with a clearance. Acquaintance is one of a young man's most valuable assets, and a two minutes' interview may grade the way for a lifelong run. Before the world was as good as it is now, men rather prided themselves on the number of enemies they had made. Nowadays the friend mile is a more desirable unit of measure.

Washington Irving puts it very prettily where he says, "for who is there among us who does not like now and then to play the sage?" So I felt rather flattered when your chief dispatcher asked me for advice as to what to study in order to get on in the railway world. I told him first of all to read every bit of company literature that he could get hold of; not to skim through a part of the pamphlet on refrigerator cars and guess at the rest. A table of freight rates may become interesting if properly approached. Do not try to memorize data and statistics, but rather plod through them at least once with a view to trying to master the principles that govern. Life is very full in this twentieth century, but, broadly speaking, it is still possible to know something of everything as well as everything of something. The day is coming when we will not entrust a man with the important duties and the great responsibilities of a division superintendent until we have given him a brief course in every department. We examine a man before we let him run an engine, but how about the man who runs him? A superintendent should know enough about an engine to handle the enginemen just as he does the trainmen. When we have men successfully running engines who can barely read and write, it is a mistake to claim that a locomotive is such a sacred mystery that only the mechanical department can judge whether or not it is properly handled. Enginemen are transportation men, and the time that master mechanics put in assigning crews, keeping an age book, and otherwise duplicating the superintendent's work might a great deal better be given to the back shop. The yardmaster has one caller and the roundhouse foreman another. The two callers go up the same street, sometimes together, and call men in adjoining houses, an expensive duplication of work. The trainmaster rides in the caboose and the traveling engineer—road foreman is the modern term—in the engine, but neither dares presume to know the business of the other. Every trainmaster should be a traveling engineer and every traveling engineer should be a trainmaster. That will be the case when we train officials along more definite lines. Honey bees feed their future gueen a special food. No, I would not decrease the number of officials, if anything I would increase it. I would not, however, let every official created have a chief clerk and a stenographer. I would make it impossible for him to yield to the temptation to add a bureau of records to the amount of useless information already on file. I wouldn't lose my nerve if now and then a set of ancient papers got lost, for with less red tape quicker action would result and little would get away. The first time the trainmaster had to wait an hour or two before he could dictate a letter in the superintendent's office, or could use a stenographer in his own office, he would beef for a separate establishment. If more help should be needed, which would be very doubtful, put it on, but do not limit its usefulness to any one official. With a proper, responsible head it is entirely feasible to carry the community of interest idea into office organization. If the division engineer is under the superintendent, why, in sending papers into the next room to him, write a letter and burden your files with the carbon of the stereotyped, "Kindly note next attached and take necessary action?" Is not his office a part of the superintendent's? Have you not the same right to papers there that you have to those in the office of the chief dispatcher? Why not go even further and have one chief clerk and one set of records for the whole outfit, just as an assistant superintendent can handle a part of the work without having a separate force? If you ever rearrange an office building, fix it so that the casual visitor waiting to see the boss will not learn state secrets by hearing the chief clerk dictate letters.

A number of roads have tried the experiment of putting the enginemen and the roundhousemen solely under the superintendent, and of confining the master mechanic to his proper function of running the shops. It has usually failed; not on account of inherent weakness as a system, but because the superintendent didn't superintend, and found it too convenient to try to shift the responsibility to the mechanical department. Reform has to begin at the top, and if the division is to be the unit the superintendent must be something more than a high-class chief dispatcher finding flaws in train sheets. It is not enough for him to be a star division engineer, a boss yardmaster. He must remember that his holding of any of these positions is ancient history, not to be forgotten, because valuable and instructive, but nevertheless a thing of the past. As the yardmaster and the dispatcher must scatter their trains, so the superintendent must keep his staff doing different things. He must avoid having two men doing the same thing. If it is better to call the roundhouse foreman a master mechanic and invent a title for the man behind the back shop, let us do so; but by all means avoid working the master mechanic at present as foreman, head caller, road timekeeper and roundhouse clerk. The superintendent can boss all these jobs, and transportation, including its operating attributes, must focus at his office. It is not the superintendent who works the most hours who is the most successful. It is he who puts in the best licks at the right time, night or day, and with the right man or men.

I told your chief dispatcher that a knowledge of law is as important to a real superintendent as a knowledge of telegraphy. I advised him to give himself the pleasure of reading Cooky's edition of Blackstone, which, if taken in homeopathic doses, is one of the clearest things in the language. Every superintendent gets to be more or less of a lawyer. It should not be necessary to refer every little fire or stock claim to the legal department for some of its students to render a profound opinion upon a matter of common sense. It is so easy to follow the line of least resistance that we too often evade responsibility by throwing up our hands and saying that such and such is a legal question, a mechanical matter, or a traffic problem. We gracefully pass it up to the other fellow, and think we are in to clear when an investigation happens to come. By and by, oblivious of the relation between cause and effect, we deplore the curtailment of our authority and inveigh against centralization.

I had some other ideas to set out for you, but we have drifted so near the switch that there is not room enough to make a drop of the caboose. So I shall either pull the whole train into the yard or get permission from the yardmaster to cut off on the main, and like an orthodox conductor, leave them for the night men to switch out. We conductors feel that, as a switch engine lies around the most of the time, it can always do at least one more job, besides having time to shove us out of the yard and over the hill.

Affectionately, your own

LETTER XIV.

THE MANAGEMENT THAT BREEDS FROM ITS OWN HERD.

June 19, 1904.

My Dear Boy:—History repeats itself, and railroad history is made so fast that we repeat ourselves very often. Mankind absorbs a certain amount from the experience of others. In spite of the much good that comes, the same old fallacies are followed, the same old blunders are made. Within the last fifty years every road in the country, at some time or other, has undergone at least one reorganization and a corresponding radical change in personnel. Always, after several new camels get their heads under the tent, comes a newspaper pronunciamento that thereafter the management will breed from its own herd. This inbreeding invariably leads ultimately to narrowness if not to deterioration. The cousins intermarry too often and ere long the road is breeding its own scrubs.

Within the last five years every road in the country has gone outside its own ranks for official talent. The oldest roads have had only a few Leonard Woods and Fred Funstons, a president here, a vice-president there. Other roads have changed officials so fast that one is reminded of the traveler sojourning in Paris during the French Revolution. He instructed his servant to tell him every morning what the weather was, that he might know how to dress himself, and what the government was, that he might know how to conduct himself. What then of our boasted civil service; of the wonderful administrative machines we build up and find wanting? Is the principle wrong or is its application faulty? The earnest efforts of able men, crowned by many partial successes, are sufficient guarantee of honesty of purpose, of the necessity for something of the sort that has been attempted. He who criticises, be he ever so honest, must suggest a practical remedy or he soon descends from the level of the critic to that of the demagogue or the common scold.

Our trouble seems to be, not with civil service as an abstract proposition, but with the type we have been getting. It is about Z-99 as compared with the real thing. It has too many flat wheels to run smoothly. It must be jacked up high enough for new trucks and a stronger kingbolt. True civil service presupposes maximum care in original selection. It doesn't mean that we shall wait until the grain and the coal begin to move before we figure on more crews. It rather contemplates having available firemen in wipers, and willing brakemen in clerks. Every superintendent believes that he is the best judge of men on the pike. On every system are probably men who can give him cards and spades, picked coal and treated water, and then outclass him on such a run. If we leave the hiring to the different trainmasters, master mechanics, or agents, we may have mostly the Irish on one division, mostly the Dutch on another. If we are going into this civil service business and are taking men, like Federal judges, for life or during good behavior, let's have a long list of waiting eligibles recruited for each division. Let's send around periodically a car with an examining board from central headquarters to size up the talent recommended by local officials. Put experienced officials, a surgeon and an oculist on the committee. Show your trainmaster that men who make it a business have more time than he to keep dudes and cigarette smokers off the runboard and the payroll; that the former have broader opportunities than he to develop a high standard of requirements. Let the committee encourage men already employed to demonstrate their fitness for transfer to other departments or to heavier divisions. Let's change ends with our rail and put it where it will do the most good. The employment bureau, the recruiting office, or the civil service commission becomes a necessity to every large organization. Some roads have made a start in this direction, but it is only a start. To work out the problem will cost us money. Yes, but less than we are being forced to pay by some of the labor contracts we have had to sign. It is not only more graceful, it is less expensive, this leading instead of being

The great trouble seems to be in this matter of civil service that we have tried to accomplish too much in too short a time. An industry whose existence does not antedate the memory of men still living cannot hope to have struck the best methods already. Yet it can be too cautious in building Chinese walls around its organization. What we have been striving for is to cultivate a company spirit, to improve the efficiency of the service. We have felt that the way to do this is to make our men feel secure in their positions, to have them convinced that the shakeup made by our advent is the last they will ever experience. Have we not chased this rainbow long enough? Should we not back up and draw some of the spikes we have put in the connection switches? It is one thing to sit in an office and figure that the importation of this one man ought not to make anybody uneasy. It is quite another to make the thousands of men along the road believe that we can stick to the original package. Blood is thicker than water and the new man will have his relatives and his followers or the followers of his friends. If he is too thin-skinned, fear of criticism may prevent his bringing in some new talent that would be of real benefit to his road. He is blamed if he does

and blamed if he doesn't. Whichever course he pursues there remains, in greater or less degree, that uncertainty which is so demoralizing. Remove this uncertainty, let men know definitely what to expect, and you are over the hill and closer to the terminal.

The old-fashioned rule of promote two and hire one worked mighty well on some roads for conductors and enginemen. In these days of larger systems the ratio might be changed to three or four or even five or six to one. If it were definitely understood that every so often, say every fifth vacancy in certain grades of officials and employes, a man would certainly be selected from outside the service, I believe that we could remove the feeling of uncertainty. We would in a large measure attain the result we have thus far missed. We would build up organizations with enough fresh blood to stand the test of time.

Brains and adaptability are not a natural monopoly. God Almighty hasn't given any road a New Jersey charter broad enough for incorporating a trust of the most efficient men. No, I am not a populist or a socialist. I believe in trusts. They have come to stay and ultimately to benefit the masses. Legislation will no more succeed in destroying them than it did in preventing partnerships in England where centuries ago it was thought for two men to unite as partners in business was an unsafe combination of power. Education comes by hard knocks and probably anti-merger decisions are worth the inconvenience that they have caused. The sober sense of the American people will tell them after a while that in attempting constitutional and legislative interference they have not benefited themselves one dollar. They will learn that forcing a change of methods does not necessarily bring about a different result. They will learn that in the long run they, the people, are the losers when good capital is tied up; that they pay the price for unwise competition. The railroads, the first great trusts, should be early to realize that some conditions inherently forbid the elimination of competition. Our prairies are too broad for an agricultural trust. The range of the human mind is too great for any railroad to patent the ability of its men.

This trust freight seems to make you full tonnage without cleaning out all the rush stuff in my yard. You may cut off ahead of the rest of the civil service loads and I will have a pony set on your caboose when you pull through the ladder. Yes, I will tell the operator at the yard office to scratch them off your consist. I shall have to run another section and fill out with some cars of company material which the construction department is kicking about. Please put up—excuse me, display—signals until the dispatcher can get hold of you at the end of the double track. By the way, if instead of "will display signals, etc.," his order should read, "will signal, etc.," would it not be shorter and, including flags, lamps, whistle and voice, be more comprehensive?

Affectionately, your own

LETTER XV.

MORE ON CIVIL SERVICE.

June 26, 1904.

My Dear Boy:—We were speaking of railroad civil service, so called. As I told you before, our civil service is so far from the genuine article that I always feel like qualifying the term in some way for fear of being called in on the carpet for failure to cut the proper duplex. It is a great big subject, worthy of the most serious consideration, because it concerns men, not machines. Furthermore, it is a high type of man with whom we deal or should deal. We are all so busy that we say we concern ourselves with results. We all butt in too much on details, usually along the line of our early training. Yet, withal, we overlook some pretty long shots because we flatter ourselves we are too busy to place small bets.

Even after we have wasted so much of the building season that we give the contractor a bonus to rush the new line to completion in time to hold the charter, wouldn't it pay us to have a care as to the kind of men we let him work on our right of way? Next year, when the grievance committees come up from the new division, we make them feel that it means something, it gives them a stamp of honor to work for our system. Why not begin a little farther back? Why not hook up in the beginning so that our different departments can get busy early in the game? Let the people who are to settle the new country help build and maintain the road. Let the immigration agent camp with the reconnoitering engineer. When the latter comes back to locate or retrace, let the former be interesting colonies. Let our own organization follow the surveyor's flag. Let's be our own contractor and get back more of the money he disburses. Why let a floating gang of Dagoes take so big a bunch of it back to sunny Italy? Why not spend it ourselves so that its recipients will use it to develop the country and hurry the origination of traffic? Let's handle this coin both going and coming and cut out some of the empty haul.

The political revolutions in continental Europe and the famine in Ireland in 1848 brought to this country a high class of immigrants. We gave them work and schools. They helped build the railroads. Some continued on the roads after construction; others helped develop the surrounding country. Our flag made them free, and when civil war came they were among the bravest of its defenders. To-day their children and their children's children, all Americans, rank high among railway officials and employes. Perhaps all this is a happen so; perhaps much of it is due to big, brainy men whose policies were not narrowed by specialization in departments. We are now doing little new construction. We should do it better than ever and in the full sense of the word. Is it enough to pass it up to the construction department?

Did it ever strike you that there may be many good reasons why both officials and employes may desire to transfer to another road? A young man, feeling the home nest too full, the local demand for skilled labor too light, has struck out for a newer country. He makes good. We find him in after years running an engine, working a trick, or, perchance, holding down an official job. Death occurs at the old home. Marriage brings new interests in another country. An invalid member of his family needs a change of climate. An unexpected development of a chance investment in a remote locality demands occasional personal attention. The orphaned children of a relative claim his protection. Any one of a dozen praiseworthy motives may prompt him to make a change, provided he can continue to derive his main support from the calling to which he has found himself adapted.

Would he be able to transfer without beginning over again at the bottom? Between the civil service of the companies and the seniority of the brotherhoods he would find it like making a link and pin coupling on the inside of a sharp curve. He would be lucky if he could get a regular job on another division of the same system. Let him persist in suggestions as to how the matter may be brought about, and the average official, hidebound by precedent, will consider him nutty, a candidate for the crazy house instead of for another run. Who is the loser? Not only the man, but the company, which should have the benefit of his wider experience, of his peculiar interest in its territory, of the infusion of fresh blood which his advent would mean.

Suppose an official has resigned for any good personal reason, or because he couldn't reduce the size of the engine nozzles fast enough to suit a new management. When he starts out to hunt a job his brethren of the profession receive him with sympathy. They promise to help him out. Each begs him to understand how impossible it is for him to catch the pay car on that particular line. Perhaps his informant has been on that company's payroll only six months himself, but he waxes eloquent on the benefits of civil service, on the desirability of making their own men, of overcoming previous demoralization. This would be amusing if it were not a serious business. Each seems to flatter himself that he got aboard because of peculiar personal fitness, and inferentially denies such attribute of genius in the man on the outside. As a matter of fact, the

recognition of outside talent is usually a consequence of acquaintance, of happening to know the right man at the right time, of having previously worked with the appointing official. All this contains too much of the element of chance. When we reserve certain vacancies for men outside of the breastworks and select them in advance we shall get better results.

We have made our civil service frogs so stiff that our discipline has climbed the rail. We know it is so hard for a conductor or an engineman to get a job that we sometimes hesitate too long before we make an example for the good of the service by discharging a flagrant offender. If we knew that by and by he could hit on some road the vacancy reserved for outsiders we would have the benefit of the change. The man would learn a lesson, would not be debarred from his occupation, and would give better service on another road. Talk with your employes about this and you will be astonished to find how many will fall in with this idea of leaving open a door of hope by filling just so many vacancies with outside men.

Your official or your employe seeking a transfer or hunting a job will be impressed with the fact that all assistance rendered will be with a view to favoring him because he is a good, worthy fellow. He will not hear it put on the ground that any company is fortunate to have his services, that his future employers are being especially considered. If he has known from boyhood the territory and civilization where he desires to work, it will not be urged as a special qualification. Right here is where the most of us fall down. We too seldom make our subordinates feel that we are the gainers by having them in our employ. We are too likely to make them feel they are lucky to have a job. This may do for the indifferent men, but it puts no premium on superior ability and loyalty. It renders a discharge, when made, less effective as an example. You cannot treat all your men alike in all things. In a few things, collisions, stealing, booze-fighting, for example, you have to do so. In most things you must avoid destroying individuality. You must build up personal pride in each. Even sister engines of the same type do not steam or pull exactly alike. Man, made in the image of Deity, has pride, brains and courage to make more complex his disposition. Corporations have no souls. Railroad men have souls and good red blood. Their intelligence is an inspiration; their steadfastness, a psalm.

Affectionately, your own

LETTER XVI.

THE SUPPLY TRAIN.

July 3, 1904.

My Dear Boy:—Blacksmiths' horses and shoemakers' wives proverbially go unshod. A railroad puts up its poorest sample of transportation in the routine handling of its own material and supplies. Company stuff is moved and handled last of all; and probably at maximum expense. For example, if we wish to ship a car of wheels to division headquarters we load them after we are lucky enough to get an available car. Then after proper billing authority has been furnished we go through some more red tape, so that the auditor may not confuse figs with thistles, revenue producers with deadheads. When we happen to have a train with such light tonnage that all excuses for moving the car have been exhausted it reaches the yard nearest its destination. The master mechanic's office in a day or two has pounded sufficiently at the yardmaster to get the car set, usually several hours after it has been promised. It is not of record just how much time and money have been wasted by the mechanical department through not having the car when expected.

If our administration is unusually smooth we may be able to load our scrap wheels on this same car. Usually, however, we wait until the car has been hauled down the line before some office away off somewhere gives disposition for the wornout material. Or, having unloaded all the wheels, we wait until next week before we order in another car, and go through the same performance to ship a couple of pairs to some junction point on the same division. I will not bore you with the expensive details of getting a car of ties loaded and distributed, of how much time the sectionmen are worked to poor advantage because the car or material failed to show up when expected.

We, mounted on wheels, with transportation as our chief asset, let our own business get it where the chicken felt the axe, where the sharp flange caught the bum. It used to be more comfortable in the old days. We could have the sectionmen do so many jobs without its seeming to cost anything. The fact that we have learned better makes me rash enough to believe that we may yet progress beyond thinking that some of our own transportation costs little or nothing because we do it with the local freight or a switch engine. We haul a car clear over the division to pick up a few pounds of scrap paper; provided, of course, the agents have not confused the day with that for loading dairy line shipments. The weakness in handling company material naturally leads to a distrust by other departments and a desire by each to control the distribution of its own supplies.

Did you ever think in what a haphazard, hit or miss manner we handle our traveling workers? The scale inspector is a very necessary individual because freight revenue is a function of weight. He is so valuable to us that, although the test car is a nuisance in trains and yards, we haul him hundreds of miles to do a few minutes' or a few hours' work. If he should try to do any other company business; if he should repair furniture, solicit traffic, inspect ties or examine interlocking plants, he would infringe on the prerogatives of other men who earn salaries by riding much and working little. Yes, I know we must have departments. Our great task is to work them to the best advantage; to let them overlap a little when business is dull, or where local conditions permit. We should switch our departments together so that we can cut in the air on enough to hold the train without going after expenses with a club.

The employe who does not receive supplies regularly, whose requisitions for stationery are arbitrarily cut, will try to get enough ahead to keep himself from running out. When you take an inventory you must figure on removing the temptation for everyone to hold back full returns for fear of not rendering good service in the future. With a lot of money tied up in supplies at central or division storehouses our service often suffers, even accidents occur for want of a lantern globe, or a few gallons of oil. The average local freight crew has no more compunctions in replenishing the caboose from a can of oil consigned to a country agent than did the slave in taking chickens. It all belongs to the company. Massa's chicken, massa's niggah. Some roads are now distributing oil to sections and to small stations from a box car fitted with inside tanks and self-registering pumps, a very economical arrangement. This car runs on the local freight at fixed times. The next step has been to put with it supply cars, handled by the oil man, who issues supplies and tools to agents, section foremen and pumpers. A stationery car comes next in the outfit. This progressive development is hampered in most cases by adherence to the timehonored requisition. It does not promote a good company spirit in an agent to haul by him a car filled with supplies and deny him a much-needed broom, a comfort-giving pane of glass, simply because a requisition has not passed through the prescribed number of chief clerks' office baskets. Issues are for the good of the service, not for charity. The best way is to require a division official to accompany the cars on his division, hold him responsible, and make his check good on our traveling bank. Let the employe sign on a line in a book for articles received, just as an agent receipts to an express messenger, and let the official countersign once for all the employes on a page. Then you have the economy and benefits of centralization without the demoralizing interference with local administration.

The supply cars are only a beginning. The evolution must be a supply and inspection train run exclusively for company business, and to do every practicable kind of company business. It should supply every department and pick up the surplus and scrap in each. It should run over as many divisions as feasible, giving it time to return and restock so as to cover its territory at prescribed intervals, say every thirty or sixty days. This train should be manned by monthly company men, preferably of the semi-official class. The position of fireman should be part of the course of a special apprentice. If no special apprentice is available for engineman, use the man in mind for the next vacancy as road foreman. Let the scale inspector be the flagman. For conductor have a coming trainmaster, not afraid to pull off his coat to help adjust a scale or to unload a keg of track spikes. Have an ambitious brakeman for train clerk, whose records would replace requisitions and waybilling. For pilot use the superintendent, the trainmaster, the chief dispatcher, the master mechanic, the road foreman, the division engineer, or the supervisor. Have as many as possible of those last named accompany the train and give the division a rigid inspection. Pretty soon you would find the general superintendent frequently hitching his car to this train. Put the contents of the train in charge of a high-class traveling storekeeper. On the ground the employe would indicate his requirements, the division official would recommend, and the traveling storekeeper, closely in touch with the management and its policies, would take final action. Whatever happened to be done, it would be right up to date, and in accordance with existing needs. Arriving at a roundhouse, the train itself would spot a car of wheels and a car of oil, taking care to reload scrap wheels and empty oil barrels. In general do not issue a new article unless an unserviceable one is turned in. The recollections of those present will make fresher the record of expendable articles issued on a previous trip. Long range requisitions, approved by distant authority, may result in false economy, in a lack of clearly defined responsibility. The essence of good administration consists in dealing with men and things, in giving them greater value than their paper symbols. If love for requisitions should still linger in the official breast, the proprieties of such chaste affection could be preserved by going through all the forms until their absurdity is fully demonstrated.

The supply train should have a car fitted up as a workshop in which a handy man could repair station trucks, office chairs, lanterns, switch lamps, etc., etc., and save shipping many miles for a new part. Many tools and utensils would last longer if, in some such way, they could receive the stitch in time that saves nine. Prompt repair and interchange among various points should diminish investment in reserve supply. An article should not have to be returned to the place where previously used. Under present methods the return journey may put it in worse shape than when first sent in. When repaired it should be issued wherever it will do the most good.

Another car in the supply train should be a laboratory in charge of the superintendent of tests or his representative, whose office would thus get more closely in touch with division officials and with service conditions. The scrap car, with its broken side rods, its worn-out shovels, its twisted drills, might mean a whole lot in connection with arbitrary theoretical tests.

With the train, on stated trips, should be the employment bureau. Pick up candidates, haul them over the division. Talk with them, note their adaptability in strange surroundings, see of how promising a stretch is the rubber in their necks. Give them transportation back home and, if desired, tell them to report again next trip for further examination.

When your supply train has to tie up away from a night roundhouse, let the crew take short turns as watchmen. Incidentally the train might serve as an object lesson as to the endurance and capacity of men, the length of runs, and the care of an engine. If your labor contracts do not permit you to man your own train, do the necessary toward an amendment of such unwise schedules.

The more you think of the increased efficiency of the service, of the ultimate economy, of the smoother administration, the more you will cuddle up to the notion of a company train. Experience will show the wisdom or unwisdom of numerous details that will suggest themselves. I have given you only an outline with a few samples of methods to be pursued. I want you to think out the rest for yourself. It is theory to-day, but the theory of to-day is the forerunner of practice a few years hence.

Affectionately, your own

LETTER XVII.

WHAT THE BIG ENGINE HAS COST.

July 10, 1904.

My Dear Boy:—The progressive president of a rustling railroad has recently gone on record as regretting the too rapid introduction of big engines. To which from many an ancient office, from many a greasy roundhouse comes a loud amen. The fad for big engines, the slavery to the ton mile, the rack of the comparative statement, have cost the granger roads a pile of good coin. Procrustes, the highwayman of the ancients, fitted all his victims to stone beds, doubtless charging to other expenses the stretching of an arm or the cutting off of a foot. Nowadays we get our brains warped and our legs pulled just the same. The methods are more subtle, the operations more graceful. Our equanimity stands for almost any old thing, provided it is done in the name of progress, or is called a process of analysis. Able men devote their lives to the solution of problems of practical railroad operation, to making maximum net earnings for their employers, only to be discounted by the financial writers. Fools rush in where angels fear to tread. The same writers who, to hear them tell it, can save financial panics by sound advice to the country bankers, who can instruct our Uncle Samuel how to handle his navy, who can hurry Russian troops to Manchuria, can tell us just how to run our railroad, just how many tons we should pull per train. Invention is the handmaiden of progress. Inventors are usually laymen or outsiders. Inventors and architects have to be held in check to prevent development from becoming abnormal or one-sided. The man who invented the air brake was not asked to come in and take charge of all transportation. The men who design big engines should not be allowed to forget conditions of track, territory and traffic.

Railroads are run to make money. A motion to manage them like golf links is never in order. The track is built for running trains. To the man with too much ton mile on the brain the running of a train, the very object of the road's existence, becomes a bugaboo. He will sacrifice business, incur risks of other losses, rather than run a train. In some cases this is all right, in others it is all wrong. There is a happy medium which all of us should be allowed to work out for ourselves, to suit our own conditions. The trouble is that we are denied a sliding scale. All roads look alike to the critic, the reviewer and the broker.

Roads of dense traffic with much low-class freight, such as coal, coke, ore, pig iron, etc., to move, found it more economical to have large engines and heavy trains. The nature of the business demands a considerable supply always on hand. This permits waiting for full tonnage for every train. A few cars, more or less, at one end or the other of the line make no great difference to the shipper. These roads usually have more than one track and an old solid roadbed. This good thing of economical transportation was pushed along to us of the prairies. Here traffic is relatively thin, the track with dirt ballast is less solid, hauls are many times longer, and single track is the rule. Moreover, we frequently have merchandise, implements, machinery and other high-class freight in one direction, and such perishable stuff as live stock and dressed meats in the other. A dozen years ago we had developed a combination freight and passenger engine, usually a ten-wheeler with fairly high drivers, which handled such business promptly and profitably. We could take out a Raymond excursion or a theatrical special one way, and coming back make a fly run with belated stock for a distant market. We may yet do the same with the compound battleship, but it will first require alterations and a big expenditure on track. When stock shows up you must get it moving. You cannot hold it to club trains, as in the case of coal and pig iron. You miss the market and there is a big claim to pay, to which the financial gentleman in New York does not give sufficient weight when he makes his wonderful analysis of our figures. It does not show up in grate surface, tractive power, or weight on the drivers. It is not complimentary to our wisdom that stock shippers have been compelled to invoke State aid to force us to run stock trains regardless of full tonnage, to do what our own best interests demanded. We should avoid the necessity for even a just regulation of our affairs. It opens the door to much that is unjust and undesirable.

The big engine has made us straighten curves, reduce grades, relay rail, renew bridges, buy land, increase terminals, extend passing tracks, abandon light equipment and increase wages. Its presence on single-track roads has retarded traffic and has increased expenses. It has torn up our track and increased the number of wrecks. Its long hours and trying work have been an element of demoralization among our men. The efficiency of our crews is limited to the endurance of the fireman. This last condition must be remedied by an automatic stoker—the most crying need of the present. Supply usually keeps pretty close to demand and the automatic stoker should not be very long in coming.

Yes, directly and indirectly, the big engine has cost us a lot of dough. It is not an unmixed evil. It

has its good points, to be sure. Some of the new conditions it has forced would have come in time anyway. Its advantages would be greater, its operation cheaper, if its coming could have been broken to us more gently. It is now a condition, not a theory, and we must do our best with it, regardless of our personal predilections. Whether or not it has come to stay is an open question. It probably has, but modified for higher speed, when all conditions permit. We are not yet wise enough to know just what it is costing us. Not even our own statisticians have had time to digest fully the figures of increased equipment due to slower movement; of increased cost of maintenance, both of track and equipment; of unparalleled increase in freight claims; of higher wages; of strengthened power of the labor organizations; of altered trade conditions due to dissatisfaction with transportation; of changed location of industrial plants; of the effect of reduced speed on water competition; of the numerous conditions that go to make a railroad so complex. In the language of the good old funeral hymn, some time we'll understand.

We must make up our minds to prompter movement of freight, which may mean increased speed. The people demand it and public opinion is king. Here again the shipper steps in to help us out, for promptness simplifies our terminal problems. The art of war has been defined as getting the mostest men there the fustest. The art of railroading comes to mean moving the mostest trains the soonest.

Affectionately, your own

LETTER XVIII.

BE A SUPERINTENDENT-NOT A NURSE.

July 17, 1904.

My Dear Boy:—I am so sure that you will be a general manager some day that I have been writing you a good deal of advice as to matters that are above the control of a division superintendent. As a rule, however, a man will fill any position better if he has a good conception of the work that is beyond his own sphere. Some people do not like to hire an ex-official for work subordinate to positions that he may previously have held. They fear that the old superintendent who gets aboard as yardmaster or dispatcher will be a nuisance, that he will be all the time scheming for promotion, that he may try to dictate to his superiors, that he will have too much dignity to climb a side ladder, that he will be only temporary, that they will soon be put to the trouble of breaking in another man. All of which is narrow and shows in the aforesaid objectors a lack of confidence in themselves and in their own organization. It all depends on the man himself. If he is the right stuff he will take a broader view for having been an official. He will appreciate the difficulties of his superiors. His desire to make good should induce him to put forth maximum effort. He may be able to get his men out of ruts of many years' standing. It is so seldom that we get fresh blood we should be thankful that circumstances permit us to get a three-hundred-dollar man to work for one hundred. He may be only temporary for that position, but if he makes us money we should be willing to be incommoded later on. It is a selfish fear, this feeling that by and by our royal selves may suffer the personal inconvenience of having to look after a certain part of our machine that we thought was running itself. Vain hope, this looking for any kind of perpetual motion. We are paid official salaries to be big enough to tower over such lazy feelings, over our own personal disinclination to exertion. Let me repeat, once more, that for every position you should have an understudy. Then if anybody drops out through promotion or otherwise your task is a simple one.

A fact that none of us should overlook is that we all have superiors. The president reports to the directors, and the latter to the stockholders. The stockholder, big or little, is his or her majesty, the citizen. Our superiors must know what we are doing. They will not butt in and give us so many directions if we just keep them advised of our progress. Your general superintendent is an able man, but neither you nor he is a mental telegrapher. After you get the surgeons called, the wreck train started, the general superintendent should be the next man to have the wire. Tell him briefly what has happened, what you have done, are doing and expect to do. If conditions are such that it is wise for you to go to the wreck or the washout yourself, wire him that you are on the ground. Don't think this is enough, but every half hour or so tell him how you are getting along. He will feel better and the officials above him will feel better. You will feel better because, if they are wise, they will let you alone and not bother you with instructions. Above all things do not try to pass responsibility up higher by asking what to do. Tell the general superintendent what trains you will detour, what equipment you will need from other divisions for stub runs, what you have requested your neighbors to do. War has been declared, the writs of the courts have ceased to run. You are the general in the field and it is all up to you. From the moment that you are wideawake enough to answer the telephone at the head of your bed, your brain should be earning your company many dollars a minute. As you slip into your clothes, think connectedly where all available men and material are to be had. As you rush over to the office, figure what the situation needs to protect the morning suburban trains. When you see the train sheet, tell the dispatcher what trains should be kept on time as long as possible, what trains should be tied up to prevent a blockade. Don't sit down and take the key, or act as call boy or for one second forget that you are the superintendent, that the whole push looks to you. The cooler your manner, the less hesitating your instructions, the greater the confidence of your men in you and in themselves, the better their work.

Arriving at the scene of trouble, size up the situation, reassure the panic-stricken passengers, organize everybody present, give politely all the information you have, how many hours passengers will be delayed, what train will come to take them forward, when their baggage can be expected. Be cool but sympathetic; alert, but polite. In a few minutes your presence for good will be felt. Tell the wreckmaster what to do first, but do not try to handle his men. Resist the temptation to use an axe or shovel yourself. Do not shrink from the sight of blood. Lead the relief parties, but do not try to be surgeon or nurse. Let the others do the lifting of the killed or injured. You do your work with your brains and with your voice. Be a superintendent. Care first for the injured and the dead. Then look to the comfort of the other passengers. Next in importance comes the mails, then the express and the baggage. Do not give any grand stand orders to burn cars or roll heavy equipment down the bank. Think twice before you destroy more property. The line must be opened, but conditions may be such that an extra hour or two will not complicate the situation, and will save the company thousands of dollars. Men often earn big salaries by the

things they avoid doing.

When the work has been organized, circulate among the gangs, give each foreman a word of praise, tell them all that you have ordered coffee and sandwiches, that the company also gives its men square meals at wrecks. Arrange to feed your transferred passengers earlier rather than later than usual. Do not hesitate to feed badly delayed passengers at the company's expense. When everything is running smoothly keep your mouth shut and your ears open. As the country people come flocking in to see the wreck, as the roadmaster yells his orders, you will hear some sweetheart ask her swain if that is the superintendent who has such a big voice. When he shakes his head and the wreckmaster roars to take a fresh hitch, she guesses again, only to be told that the quiet man over there with apparently the least to say is the boss of all. Soon many of the bystanders are pointing admiringly at you as the master of the situation. When it is all over, when, hours or days later, you lie down for a well-earned rest, you will feel that you are a railroad man, that you are holding down a job for which no old woman need apply. There is some self-satisfaction in this world which outruns the pay car, which cannot be measured in dollars and cents.

What I am telling you holds good for a trainmaster, a yardmaster or whoever happens to be the senior representative present. Sometimes it is better to send out the trainmaster and stay in yourself to handle an already congested situation. Sometimes the trainmaster is at the wrong end of the line and you must go yourself. Common sense is a pretty safe guide as to one's course of action. The principle to be remembered is to avoid interference with the man on the ground. If it is a minor derailment which the conductor is handling, do not rattle him with messages, with requests for reports. When you examine your conductors on rules, include questions and explanations which outline action expected in emergencies. Forbid your dispatcher sending a stereotyped message to get written statements of all witnesses every time a personal injury occurs. Have your conductors, your agents and your section foremen so drilled that they will keep the office informed and will depend on themselves, not on the dispatchers, for such things. Your rules, your organization, the instructions on your blanks will amount to little if they are continually discounted by special messages. You had better lose a set of reports than tear your organization to pieces. When somebody falls down, discipline him in such a way that the others will keep in line.

It takes patience and persistence, forbearance and firmness to drill men to a high state of discipline. Disobedience and indifference can sometimes be traced to unwise orders. The impossible or the unreasonable is expected. There are too many bulletins and too many instructions. Do not think a thing is done, an abuse corrected, a condition remedied simply because you have given an order to produce the desired effect. It is up to you to follow the matter to a finish. You must know by observation, by inspection, by the reports of your staff, that your order is being obeyed. The way to enforce discipline is not to keep repeating the order. Except in rare cases an order should not be repeated or a bulletin reissued. Weak men try to strengthen their discipline by extravagant language in their instructions. Do not say that no excuse will be taken for failure to turn in these reports or to comply with these instructions. You may be made to appear ridiculous, even mendacious, by a cloudburst, by a holdup, by an act of God or the public enemy, as the old law phrase runs. Vitality in expression is a good thing. It is useless without vigor in enforcement. The latter does not depend upon the kind of breakfast food you order in the dining car, but upon the ginger in your administration.

Affectionately, your own

LETTER XIX.

THE RACK OF THE COMPARATIVE STATEMENT.

July 24, 1904.

My Dear Boy:—You ask what I mean by the rack of the comparative statement. I mean that, figuratively speaking, we are all pretty securely fastened to the corresponding month of last year. What was originally intended as a tavernkeeper's tab, as a rough check on operation, has become a balanced ledger, a rigid standard of efficiency. Time, even a short period, brings a sacredness to all things. If we make a so-called better showing on paper than a twelvemonth previous, we shake hands with ourselves and forget how rotten we were considered just one short year ago. The ball team that wins the championship and takes the big gate receipts is the one whose members play for the side rather than for high individual averages. The tendency is for our owners to expect us to make base hits rather than send in runs which win games.

If in April and May we have a lot of ties on hand, we may not be allowed to put them in the track because they will be charged out before June 30, and make too heavy a showing of expenditure for the fiscal year. So, with labor comparatively plentiful and the weather comfortable, we wait until the new fiscal year comes in, until the sun shines hottest on the track. Then, with farmers paying harvest wages we have to offer more money. If we get the extra men the heat lessens their efficiency. It is true we have probably had to pay the producer for the ties, but if we fail to charge them to the final account, we have a childlike confidence that they have not yet cost us anything. The little matters of failure to utilize the full life of the tie, of interest on the money invested, we dismiss with the thought that trifling losses must be expected in the conduct of large affairs.

Maintenance of equipment as well as maintenance of way suffers from too much comparative statement. Some new official pulls our power to pieces to show us how they used to build up train-mile records on the Far Eastern. The crowded rip tracks reflect the tractive power of the big engines. Bad orders, the bane of a yardmaster's life, the teasers of the traffic man's tracers, block our terminals. Our shopmen and our car repairers, despairing of full time, move away. Yet withal we are serene, for are not we operating just as cheaply as they did at this time last year?

When I am in doubt, when I become mixed with the complexities of our profession, I go back to my boyhood on the farm. From that gateway as a basing point I can think out a rate sheet with fewer differentials. The same common sense housekeeping which my mother practiced will fit any railroad, however diversified its territory. The same well-balanced management which enabled my father to pay off the mortgage and extend his acres is suited to any railroad, however complicated its financial obligations. The bigger the proposition, the greater the need for sticking to homely basic principles. We learned on the farm to expect about so much rainfall every year. Whether the heaviest would come in one month or in another, the good Lord never found time to tell us. We did the things that came to hand, sometimes similarly, sometimes differently, from the corresponding month of the previous year. If our crops were short we did not starve our work horses. We sometimes found it paid, even with a poor crop in sight, to go to the bank and borrow rather than neglect the ditching in a wet field. If we made some surplus money we did not blow it all in for tools and improvements. We knew that the inevitable lean years preclude throwing the fat in the fire. If we ran behind some year, we did some retrenching, to be sure, but we did not lose our nerve, did not lose our faith in the future.

Some kinds of fertilizers on the farm are said to make rich fathers and poor sons. The way some railroads have been run for a record you would imagine that race suicide had reached a point where no further generations were expected. One of the gravest of our mistakes has been the application of the comparative statement, regardless of its effect upon our men. The farmer finds it wise and economical to arrange work for several monthly men in order to minimize the number of day hands for his rush seasons. In the winter he may lay them off, but this is for a period sufficiently long and sufficiently definite to enable the farm hand to become something else, say a wood chopper or a lumberman. Can we expect our car repairers, our sectionmen, to be loyal and faithful if we lay them off with necessary work in sight, simply to make our books look better? They know that later on we shall, at the last minute, at the scratch of an indefinite somebody's pen, put on a big force and with a hurrah, boys, rush it through. Is this fair? Is it not better to keep twenty men steadily employed than to have forty on half time? The unquestioned deterioration in the quality of our labor, in the morale of our forces, cannot all be laid on the union's doorstep. There is a responsibility here which we cannot shirk.

Cutting down expenses has been done in an unintelligent, cold-blooded sort of a way. We go home at night feeling good at having cut down our payrolls. We should be feeling sorry at the necessity for taking from men the wherewithal to pay the unceasing rent and grocery bills. Our

methods give some room for the populists' plea to put the man above the dollar. No, I do not expect ever to see an entire correction of these conditions. In the play of economic forces the weak have to suffer. I believe, though, that through minimizing such suffering we can improve the service and earn bigger dividends for our stockholders. Each of us can do a little; all of us together can do a great deal toward making the problems easier. As the French say, noblesse oblige—rank imposes obligation—every time. It is up to us, the educated, powerful class, to take the lead and to do the most. We cannot expect the poor, unlettered man to work out his own salvation unaided. We cannot turn him loose to face an unequal struggle. If he fails, if he has too much time for brooding, society at large has an anarchist and we are the losers. Do not understand me as advocating the employment or retention of unnecessary men. What I am kicking for is a better balanced system. When we lay off our extra sectionman in the fall, do we give him a pass and ask him to come to town and work when we put on more unskilled winter labor in the shops and roundhouses? No, he is in a different department. An official or a foreman might be put to the inconvenience of waiting a few days, of breaking in a new man. Next spring there might have to be a readjustment when the work trains go on. Some big, strong railroad men are coming to the front who will improve these conditions by working from a broader viewpoint. We need more brainy men with nerve enough to stand up and insist upon a consideration of the welfare of our properties ten, twenty or fifty years hence. Because we need them they will be developed.

Now do not hand me the old song and dance about business being cold-blooded and devoid of sentiment. We spend money directly and indirectly for advertising with a view to fostering public sentiment in favor of our line. Business comes from an increase in population, from development of resources, from the growing sentiments of the human race. Life owes its origin to love, which originates in sentiment. The family, directly traceable to sentiment, is the unit of civilization. The way to have our heads rule our hearts is not to forget that we have hearts.

Business is so attractive because it is chock full of sentiment which can be made an asset.

Affectionately, your own

LETTER XX.

HANDLING THE PAY ROLL.

July 31, 1904.

My Dear Boy:—I have your letter about the supply train. Please do not fail to consider that it is an inspection and administrative train as well as a traveling storehouse. The term company train perhaps comes the nearest to a comprehensive designation. As a tentative proposition, to be modified by experience, I think I would distribute one-half of the expense of the train to supply, the other half to inspection and consider both halves as money well spent. With the enormous growth of business, with the increasing expansion of systems, we have had to leave more and more to departments. The result is that each department becomes more and more forgetful of the others. It isn't enough to have the heads at the general offices take lunch together. We must begin farther down in our administration to keep our departments in touch. Representatives of the traffic department should accompany the train and distribute their own advertising matter. Perhaps the best feature of all would be the improved feeling among the country agents due to more intimate acquaintance with the operating and traffic officials with whom they are doing business. We can afford to compete with the organizers of the telegraphers and clerks for this spirit. It will interest you to know that at least two large systems are figuring on a company train. When it comes, as come it will, we shall all wonder, as in the case of the telephone, how we ever got along without it.

You ask if the pay car should be included in the outfit. Yes, if local conditions permit. Before going into this very far, however, let us consider our system of paying only once a month. Has it sufficient merit to stand the test of time? It breaks down in some cases when we wish additional cheap labor. Many of us have turned over to contractors the unloading of company coal at fuel stations. The avowed reason for so doing is that the shovelers being often recruited from the hobo or the squalid class, we cannot hope to handle them as well as a contractor who pays daily or weekly. Right down the track a little way our agent is remitting company money which is not earning any interest. Another reason given is that our officials are too far away to give the coal wharves proper supervision. As a matter of fact the official is on hand about as frequently as the contractor. This is a sad commentary on the versatility and elasticity of our organization. Before throwing money to the contractors why not give our section foreman or our agent a bonus for supervising the coal heavers? Let our men be a little interchangeable. If a man becomes worn out from too much sun on the track, let the breeze blow through his whiskers in the coal shed for a few weeks. No, I do not think the track would suffer if the section foreman had to put the fear of the Lord in another gang of men. The old-time section foreman had ingenuity and originality enough to do many things. His prototype of to-day may be dwarfed by over-specialization. When we treat our men less like machines we can subdivide gangs and still get results.

Nearly every winter a bill is introduced in some legislature requiring corporations to pay their men at least twice a month. Railroads at once get busy and manage to be exempted from the provisions of these measures. Such resistance is based on a variety of arguments, the vastness of territory covered, the large number of men employed, the necessity for careful auditing, etc. How long we can hold out against the spirit of the age is a question. Why not keep ahead of the game and lead public opinion? At such times we become very solicitous of the thriftiness of our men. We claim that we are their benefactors; that by paying them so much money at one time we are helping them to save. As a matter of fact people who have studied such questions tell us that when payments are frequent less stuff is bought on credit and fewer bills are run. Savings banks find that, under certain conditions, men who are paid daily or weekly will put by more money than those who have a monthly pay day. It is an economic question, dependent more upon sociological conditions than upon railroad policy.

It is usually pretty good business sense to take advantage of trade discounts. Do you not think we could make better bargains with our men if we did not wait to pay them until we are six weeks in arrears? We pay them for only one month and are always in their debt. Every once in a while we lose a good man from the service because he is hard pressed and can raise money only by taking his time check.

The monthly payroll was adopted before bonding and surety companies revolutionized business methods. The theory is that the roll must be approved and audited before payment in order to insure accuracy and prevent fraud. Did you ever hear of a payroll being disapproved as such? No matter how unwise their employment, how injudicious the time put in, the men must be paid. We are under moral and legal obligations to pay for service performed. Did you ever hear of a padded payroll being caught in the auditor's office? The man who stuffs the roll alters the data against which the auditor checks. The few arithmetical errors discovered do not justify the time

consumed. Again, why should you send your general superintendent a payroll of names any more than you should send him copies of your train sheets? What difference should it make to him just how much each particular man worked? He should have a summary of results, totals, maxima, minima, averages, etc., just as the morning report gives him a summary of the train sheet. If he wants more detailed information, let him come to your office and examine the time books, just as he should occasionally go over your train sheets. He is furnished a car to travel for just such purposes.

Assuming the desirability for more frequent payments, the day, the trip, the piece, would seem the best unit. Railroads have comparatively few credit lists. The ability to force patrons to pay cash is a business asset, and should give us the benefits of a cash basis. Our present system of payments is slow and cumbrous. In our desire to guard every avenue to fraud we have gone too far and retarded administration. The bonding company gives us a check which should enable us, under a proper system of inspection, to have the timekeeper practically the paymaster. I confess that I have not yet been able to work out all the details to my own satisfaction. I have gone far enough, however, to be convinced that there are men in our business bright enough to solve the problem. When given proper attention it will be found that for the same or less expense we can pay daily, improve the service and render a better account of our stewardship to the stockholders.

An agent remits daily. Why not let him turn in as cash a receipt or a deduction to cover his own pay? If he can do this, it is an easy step to accept as cash the time slips of his force, of the operators and sectionmen at his station. The time slips of shopmen, roundhousemen, yardmen, trainmen, enginemen, etc., when countersigned by the proper chief clerk, should become cash at a certain designated agency or local bank. It might be found practicable to use a form of time slip similar to a postal note or a street car transfer which could be punched and then authenticated with a stamp. An advantage of this would be that these original data would be available for tabulation in electrical integrating machines in the auditor's office. The plan followed in compiling statistics would be similar to that in use for many years in the census office in Washington.

Such a system of payment presupposes fewer checking clerks but more traveling auditors and inspectors. It does things first and talks about them afterward. It is predicated upon the belief that checks and balances must begin to work nearer the foundation, that true centralization of results demands a full measure of local autonomy.

Affectionately, your own

LETTER XXI.

MILITARY ORGANIZATION.

August 7, 1904.

My Dear Boy:—While in Washington last week I dropped in to see some old cronies at the War Department. The iconoclasts have been at work there, too, with gratifying results. The military secretary's office has superseded the former adjutant-general's department. Under the new dispensation every letter must receive definite action, not a mere acknowledgment, the very day of its receipt; every telegram must be answered within two hours. An emergency request came in for some equipment for a militia encampment. In three hours the Philadelphia clothing depot acknowledged the order, reported loading and shipment, and advised that bill of lading had been mailed. This means better supply, less suffering, more effective movements when real war comes. It means a saving in blood and treasure.

We of the railroads are inclined to scoff at the slowness of government methods. Are we doing as well as the rejuvenated War Department? Of course, when there is a wreck, a washout, a fire, we do some great stunts. Day in and day out we are sadly lacking in promptness with our telegrams and our letters. The pulse of business is so quick that these delays cost us money. The remedy is simple. Get the departments in line. A diplomatic censor with rank enough, say, that of assistant to the president, should be able to show even the highest officials where they are falling down, where they are duplicating work, where their telegrams have no business on the company's wires, where their letters are too lengthy, where their offices are lame. The departments on a railroad correspond to the bureaux of the War Department.

The Spanish war showed the weakness of the departmental system under modern conditions. It has been corrected by the creation by Congress of a general staff, with a chief of staff, usually a general officer detailed from the line, who, as next in rank to the Secretary of War, controls all departments, thus insuring unity of action. He has help enough to enable the general staff to give attention to details. The president of a railroad is often too busy and seldom has assistance enough to hold his departments in check. They do not always maintain a proper proportion to each other. If he appoints a committee to consider a question, the tendency is for such committee to leave the transportation part to its transportation man, the mechanical question to the mechanical member and the traffic problem to the traffic representative. The results of such work are likely to be narrow or one-sided. Each member should consider every phase of the matter and not minimize his own versatility. Remember that the layman may discover a radical inconsistency in professional practice. Give each man due weight in his specialty, but do not let him be absolute. A minority report from a committee should always be welcome as affording more information for the parent body or the appointing power. A little careful consideration, a little lively debate on a committee report, may be a healthy check.

While speaking of military organization, let me impress upon you that in the army the line always commands the staff. A staff officer cannot command troops except by express direction of the President. Enlisted men and junior officers must show a staff officer the respect due his rank, just as our conductor is respectful to the division freight agent, but when it comes to taking orders, that is another question. A lieutenant of the line, if he happens to be the senior present, may have under his command a surgeon with the rank of major, a commissary with the rank of captain, etc. Certain special work, such as the construction of buildings, of a telegraph line, of a road, may be put under a staff officer reporting directly to headquarters and exempted from the orders of the local commander of troops. We do the same when we put certain construction work under our engineers working independently of the superintendent. In an emergency all officers, men and material come under the control of the senior line officer present. With us the line is the transportation department, to whose senior representative, in time of trouble, usually the superintendent, every official and employe of whatever department should yield unquestioning obedience.

They have another feature in army administration which we would do well to emulate. On the theory perhaps that a cat may look at a king, the lowest may address the highest. The official ear and mouthpiece of the War Department is the military secretary. He may be addressed by the lowest man in the service, provided, that under the address is the important phrase in parenthesis, "through the proper channels." Unless the communication is grossly irrelevant or disrespectful it must be forwarded through the channels, each officer indorsing his opinion, pro or con. If it reaches an officer whose authority and views can give favorable action, it need not go higher. Otherwise, it must keep going. The reply comes back to the man through the same channels. All this is worth the trouble it costs, for, even if unfavorable action is taken, the man feels that he has been given consideration; that he is not a mere machine; that there may be

good, honest reasons for turning him down. This strong effort to preserve individuality is the reason that the American people never have cause to lose confidence in the man behind the gun. Its short-sighted absence in railroad administration is the prime cause of our loss of confidence in the spirit of our men. The inauguration of such a feature might cause our agitators to be annoying and importunate for a time. The greater the consideration shown, the sooner would the agitators be laughed at and discouraged by their comrades. It would break up the fashion of ignoring the superintendent and running to the general manager with every petty little grievance.

If your trainmaster sees fit to make a general recommendation, for example, about a train rule, provided he does so through your office, you should forward it, giving your own views. If you happen to disapprove, do not try to kill the proposition by holding the letter. Under the narrow practice of most roads the trainmaster would have no redress and would be considered disloyal if he attempted to reach the general superintendent.

In the handling of railroad papers there are a number of short cuts. There are too many letters written just for the sake of having a carbon to complete a file. If you must have a carbon, require offices reporting to yours to make an extra copy on the typewriter of the original letter. Stamp both copies with the office dater, and just below use a one-line rubber stamp; for example, "To the General Superintendent," adding in pen, if necessary, such words as "recommended," "disapproved," etc. If no special action is taken, no signature is necessary, the office stamp being sufficient authentication. Forward one copy, keep the other, and in routine correspondence your file is complete without the scratch of a pen or the click of a typewriter in your office. Certain classes of papers referred to your subordinates, for example, special itineraries, claims, statistics, etc., can be kept track of by a number system in a small book, without using any carbon. Master the file system of your office. If someone happens to drop in for information, do not be put to the mortification of explaining that your clerks do not come down Sunday morning, or that they are all playing ball on the company nine. Filing should be uniform on divisions and in departments, one general plan for the whole road. Some roads have as many varieties as a pickle factory.

It was nice of your friend, the chief dispatcher, to write so strong a letter indorsing the sacredness of signatures. He is right; most telegraphic instructions on a division should go out over the initials of the chief dispatcher. Years ago your old dad, with the title of trainmaster and the duties of an assistant superintendent, obtained smooth results from the following bulletin:

"Instructions from this office governing the movements of trains, engines and cars, and the temporary assignments of men, will be given over the initials of the chief dispatcher. Messages concerning such routine matters will be addressed to the chief dispatcher. The idea is to limit the use of the trainmaster's initials to cases handled personally by him."

The men caught right on. They saw that it was impossible for a man to be issuing all the instructions over the wire when he spent most of his time on the road.

I have long thought that a train order should be as individual as a bank check and be signed by the dispatcher's own initials. I am beginning to believe that no signature is necessary; that the dispatcher's initials, given with the "complete," should be sufficient.

Affectionately, your own

LETTER XXII.

WRECKS AND BLOCK SIGNALS.

August 14, 1904.

My Dear Boy:—You ask what we are going to do to prevent so many wrecks. My various admonitions to you have been in vain if I have failed to score some points looking to that end. We must get closer to our men, improve their discipline, which means also their spirit. We must have more official supervision. We must pay division officials better salaries. The minimum pay of a division superintendent, regardless of the price of wheat, should be \$300 per month and expenses, with such greater amount as the importance of the division demands. Trainmasters cannot be expected to enforce discipline and set an example in neatness if paid less than some of their conductors and enginemen. Not a bad rough rule for fixing intermediate salaries is to split the difference between the highest man in one grade and the lowest in the next higher, and then add enough to make convenient even money. Do not think you are saving money if you avoid raising the pay of your officials when you raise that of employes.

Wrecks are a reflection of administration. Sometimes cause and effect are years apart, so distant, in fact, as to be almost unrecognizable. Adversity makes heroes and the more disorganized we find conditions the more comprehensive and earnest should be our efforts to seek the cure. Neither public opinion nor our own self-respect will stand for shifting too much of the blame to our predecessors. Whatever safety appliances we adopt we shall never be able to eliminate entirely the element of human judgment, we shall never get beyond trusting somebody. Therefore we must train our men to alertness. We must build up a loyalty that pervades every rank. Those roads have the fewest wrecks due to defective equipment which cater to the welfare of their men. Such roads do not expect a man to live on air. When repair work is slack they put their men to building cars and engines, taking advantage of the low price of material. If we have to operate so closely that we cannot make such wise investments in influence, we are grading the way to disaster. We are preparing to pay out later in wrecking, personal injuries, maintenance and renewal of equipment, much more than the expense of anticipating future needs by keeping our men employed and contented. No amount of engine and car inspection can overcome inherent defects due to careless workmanship. Will the track walker who knows not when he will be laid off prevent as many disasters as he whom we find time to tell in advance what tenure to expect? We can overdo this matter of running our railroad too strictly in accordance with the auditor's statistical blue print. As surgery the operation is a great success, but unfortunately the patient

We have divided responsibility sufficiently when we furnish both the conductor and the engineman a copy of the train order. If it is desirable for the brakemen and the fireman to be informed, we should furnish a copy to each man in the crew. What is everybody's business becomes nobody's business. Even if it were practicable it is undesirable, this idea of showing the orders to every member of the crew. It would seem better to have three different standard signals for an engineman whistling into town; one indicating a wait order or a meeting point, either by time table or train order; another indicating a passing point, and a third indicating no other trains to be considered. The wrong signal sounded by the engineman should cause the conductor to stop the train with the air before the switch is reached. Some roads now have the engineman sound a prescribed signal, after the station whistle, to indicate orders to be executed. The objection to this is that valuable time may be lost by the conductor before being sure whether or not he heard the signal. A condition should not be indicated in a negative manner by the failure to do something. All indications should be of a positive nature, that a positive understanding may result and positive action be taken. It may be a little hard to give up the good old long blast for stations, but safety demands some such modification.

The fad for main track derails at interlocking plants seems nearly to have ditched itself. We are realizing that it is not necessary to kill an engineman who runs past a signal. The money that such unnecessary derailments have cost might better have been spent in enforcing discipline by increased official supervision. If main track derails were proper for an interlocking plant, it would logically follow that every block signal should be interlocked with a derail. Desirable as they are on auxiliary low-speed routes, it is doubtful if derails have any place in a main track, even at drawbridges. We are learning, too, that a good derail can be installed without cutting the rail.

Public opinion is aroused on the subject of our failure to safeguard human life in proportion to our progress in other matters. We must cough up the money for more block signals. I say block signals, not because they are the panacea for the evil that many people imagine, but because they are the best safeguard yet devised. They are useless without proper discipline and supervision. The vertical plane coupler is not all that can be desired. Yet if modern equipment

had to stand the slack of the link and pin it would be in a bad way. The block signal even with the train staff or the train tablet is far from perfect. It is impolitic, however, for us to hesitate too long before going down into our clothes for the coin. While waiting for the perfect method to be developed the perfect man may be evolved and bump the most of us out of our jobs.

There will be fewer wrecks when executive and general officials have better control of temper and judgment. Feeling in an indefinite way the responsibility for an appalling wreck, the high official thinks he must do something. He butts in with some ill-considered instructions which breed distrust of the entire system of running trains, which discount the whole organization. This action may result for a time in an abnormal, unhealthy vigilance, which is certain to be followed by a demoralizing reaction. When a condition, like a man, gets the drop on you the only sane thing to do is to throw up your hands for the time being. Wisdom consists in looking for the true prime cause of the aforesaid drop. The frontal attack on a buzz saw is suicidal. Always take it in flank.

When you get your block signals, consider the permissive block as an abomination before the Lord. The only block to have is the positive block in both directions. If there is trouble in a block, let the dispatcher give the delayed train a message to flag over. Encourage your men to flag over, block or no block, against any train on the road when common sense dictates such a course. The object of all rules is to run trains with safety, not to tie them up on technicalities. Flagging means good flagging, signals as sure and unmistakable as fixed signals. Some day we shall find time to instruct our flagmen uniformly. They should all either put the red light on the end of a tie and swing the white light across the track, or they should swing both lights; not sometimes one way, sometimes the other. A red light of itself means stop. If the flagman swings it he runs a big risk of blowing it out. In matters of this sort there cannot be too much uniformity for all roads. Where we run uniformity into the ground is where we fail to recognize the radical differences in individual characteristics of men of the Atlantic, the Pacific and the prairie type.

Realization, if not repentance, must precede salvation. We must save ourselves. If not, the government doctrinaires will undertake a task for which we are better qualified. We cannot stop killing people to-day or to-morrow, this year or next. The problem is not as easy for us as for the oft cited English railways. Their block signals are a coincidence, not a prime cause of their safer operation. Much of our mileage has only a speculator's or a promoter's excuse for existence. Much of our traffic is so thin that English thoroughness would put a part of our lines out of business, much to our relief, but much to the intolerance of the public. Until our systems are sufficiently stable to remove the tempting sign, "Please kick me," from the view of the financial manipulator, we cannot keep out of the scrimmage, we cannot build up as safe and conservative operating organizations as the English. We can, however, do much better than we are doing. Automatic devices will help, but they are only a check. The balance lies, my boy, in developing the human interest of the men, high and low, who work for the road.

Affectionately, your own

LETTER XXIII.

UNIONISM.

August 21, 1904.

My Dear Boy:—"What will you put in its place, Bob?" was perhaps the hardest query that the brilliant Ingersoll had to answer in his assaults on the Christian religion. Does not the same question confront us in our attacks upon organized labor? We endeavor to tear down, but do we build up? This subject, like the marriage relation, cannot be entered into lightly. It is longer than a train of ore jimmies, and broader than a box vestibule. It is a bridge too close to the track for the telltales to sting your face in time to get off a furniture car. Like the ostrich, believing itself hidden with its head stuck in the sand, we feel that if we call them committees of our employes we are not recognizing the union. Is this consistent? We claim, and justly so, that a high principle is involved; that if we recognize the union we practically force every man to join, regardless of his own inclinations and of his freedom as an American citizen. This is sound doctrine, but its application is very faulty. Our spirit may be willing, but our flesh is damnably weak. Do we give the non-union man a show for his white alley? Not as long as we fail to question the credentials of committees. We know that all their names appear on the payrolls, at least during the time they are not laying off and using our transportation for organizing or grievance work. We do not disturb ourselves to find if they were elected as employes. Did the non-union men have any voice in their selection? Not much; they were elected in the lodge room. We, in effect, say to the nonunion man that the way to the band wagon is through the lodge room door. Then we are very much shocked to find that he, like ourselves, is following the lines of least resistance. It is so much easier to run with the current of traffic than to cross over; it takes so much less nerve to open up for trailing points than to keep our hand off the air valve when approaching facing points. When a move is made to run out a non-union man, we are so afraid of being accused of holding somebody up that we put on the man the whole burden of making good.

Unionism, like religion, and like love, is the outgrowth of certain feelings and emotions in the human breast that strive to overcome the limitations of mankind; that seek to make an eternity of time, an ideal of an idea, a solid phalanx out of heterogeneous parts. You may win the strike, down the union, hire your men as individuals; but sooner or later, in the Lord's own good time, in obedience to natural law, they will organize in some form, under some name or other. Only a few will stand out; some from sheer contrariness; more from strong individuality of temperament. The outsiders, from a lack of organization, have little positive influence, simply a negative conservatism.

Since these things are so, why not, to drop into familiar phrase, be governed accordingly? Instead of letting the men organize the road, why not have the road organize the men? The system of collective bargaining, of labor contracts, has come to stay. It is merely a question of how and with whom we shall deal. It is so easy to let out work by contract, to call on the supply dealer to help us out, that doubt as to our own powers of organization becomes habit of mind. We farm out our rest rooms, our temperance encouraging resorts, to the Railroad Y.M.C.A. Where comes in the company, whose existence makes occupation possible, whose capital is invested, whose property is involved?

Do you think we have made effort enough to let our men organize as employes? Should not all our plans for terminals and headquarters include the excellent investment of a club house and assembly hall? When we have tried this plan and failed have we not been too easily discouraged? Sometimes the cause of failure has been our own mistake in selecting the wrong location, in deferring too much to the convenience of our own land company, in attempting too much official supervision, in allowing our local officials to butt in to ride their pet hobbies. Let us try turning the building over to a committee of our employes and inculcate a feeling of pride and responsibility. Our employes are a high grade of men; many of them are nature's noblemen. It is true they sometimes worship false gods, indulge in strikes, commit violence, and require vigorous discipline. Although misguided in all this, they are usually honest as individuals. When banded together there results the same tendency that exists in political parties, in churches and in societies, to mistake their own organization for the only defender of the true faith. This same spirit plans religious crusades, gains converts by the sword and destroys freedom in the name of liberty. This spirit run mad breeds anarchy. It may result in a condition, as with us in the strikes of 1894, when cold lead and sharp steel are needed to cool hot blood, when the innocent have to suffer with the quilty. This spirit is unreasonable, but its existence cannot be ignored.

"Men," says Marcus Aurelius, "exist for one another; teach them then or bear with them." It is up to us to do more of the teaching act. A prime requisite of a teacher is honesty. Let us be honest. Let us either recognize the unions outright, or else try to teach them that they have not yet

attained full age; that as yet they are lacking in the ripe wisdom which permits of a larger participation in affairs. Let us be fair and tell them wherein they are lacking. Capital, from inherent differences in nature, can never surrender itself to the absolute control of labor. Capital can, however, give labor, its poor neighbor, the results of deeper study, of wider view, of larger experience. It can point out the consequences of mistakes of past centuries, as, for example, the shortsighted policies of the trade guilds in England. We can teach the unions that much more than the payment of dues should be essential to membership; that they are in a position to demand high standards of conduct. The unions must learn that if they would be powerful, they must be severe as well as just. If they desire merely benevolent and comfortable care of their members they must put away the ambition for recognition. To be respected they must purge their ranks of the morally unfit. The union must expel the thief and the drunkard, as well as the thug and the ruffian, if justly discharged by the company, before it can hope to be trusted as a judge of capacity. It must learn that the American people will never stand for the closed shop, the restricted output, a limited number of craftsmen.

The failure of the A.R.U. strike in 1894 taught a much-needed lesson. It put many a good man on the hog train, but it was a terrible warning to would-be strikers. Did we maintain our advantage? Did we develop more men and prepare for the great rush of business the years were sure to bring? Perhaps we did the best we could; perhaps in the name of economy we maintained too few officials. Perhaps our officials were so overworked that they did not have time to watch the game. Perhaps the situation got away from us because the unions increased their official payrolls relatively faster than did the railroads. Perhaps the union leaders made relatively greater progress than railway officials in attracting the men with insurance or profit-sharing features. The whole question is interlocked with so many side lines that it is easy to overlook a dwarf signal or two. Be that as it may, we lost our nerve and shut off too far back in the country when we got a meeting order for the flush times of 1902. We were so afraid the other fellow might make a dollar or two if we happened to tie up, that we yielded the inch which has resulted in the ell of union domination. A war, terrible as it is, may result in good. There are worse things than strikes to contemplate. We chose peace at any price, and we are paying the price. We blame our statesmen and politicians for not resisting union influence, for being morally responsible for the uncompromising attitude of union leaders. Why should they open our firebox door for us as long as we fear to burn our own fingers? The great comfort in the situation is that we are beginning to wake up. We have walked long enough in our sleep. The slumbering giant, business sense, is aroused. The worst is over if we but do our part. The unions have come to stay. Their extermination, even if desirable, is as impracticable as liquor prohibition. We cannot surrender supinely. The solution lies in wise regulation, in education, in the inculcation of true temperance of thought and action.

Affectionately, your own

LETTER XXIV.

THE ROUND-UP.

August 28, 1904.

My Dear Boy:—When you have a conference of your staff, do not overlook the storekeeper. Even if he reports to the general storekeeper, he should be on your staff in somewhat the same relation to you as is the master mechanic who reports to the superintendent of motive power. If the management, in the last treaty of peace, has awarded the storekeeper to some other sovereignty, be foxy enough to invite him to be present for his own good. He will not decline to come. Then, when you are discussing work trains; when the master mechanic figures out the engines; the trainmaster, the crews; the roadmaster, the men; the chief dispatcher, the working hours; the whole arrangement will not fall down from lack of material which the storekeeper did not know about in time. Invite the storekeeper out on the road with you; drop in frequently at the storehouse and see if you cannot help him out of his difficulties. We all have our troubles. Do not proclaim your own inefficiency and narrowness by writing the general superintendent that your failure has been due to the store department falling down on material. Unless you have kept close to the game, you may find that you were lame in not giving sufficient warning; that the stuff was loaded in time but was delayed by the transportation department waiting for full tonnage.

When you get to be general manager, do not forget the general storekeeper. Keep close to him and take him out often. When you become operating vice-president, do the same with the purchasing agent, whose position, like that of the general storekeeper, is an evolution from a clerkship in some general office. Not all of us have realized the necessary elevation of these places to official status. They, too, have come to stay. They will survive even the awkwardness of their own titles. Would not "purchaser" or "buyer," and "supplyman" or "supplier," be better terms?

Speaking of inviting people to ride in your car. From operating vice-presidents down we do not avail ourselves sufficiently of the company of representatives of the accounting department. They do not and should not report to us. They, however, compile statistics from data which we furnish. We want to have our data in such good shape that they will not misinterpret. As they count our Australian ballots, it is important for us to know how to put the cross opposite the eagle or the rooster. On the other hand, the service will not suffer if we have a chance, on the ground, to show the inconsistency of some arbitrary requirements.

I carried by an idea in a recent letter. I asked the man on the opposite run to take it back; but he, too, had a big switch list and a time order. So it has been an over in the freight room until now I bill it free astray. The thought is that our organization should provide automatically, as in the army and the navy, for the next in rank available to assume the duties of an absent or incapacitated official. A superintendent has to be sick or absent for quite a long time before we designate an acting superintendent. We let the chief clerk sign for him, an absurd fiction if long continued. Why should not the assistant superintendent, or, if none, the trainmaster, sign as acting superintendent as a matter of course when the accidents of the service take the superintendent off the division? An assistant is really a deputy, although, with all our borrowing and mutilating of titles, we have not utilized the comprehensive qualification of "deputy." The time is soon coming when we shall welcome the opportunity of making our organization elastic by giving understudies the title of acting so and so. As we grow in liberality we shall feel proud to lend one of our men to another road for a few months at a time to do special work or to introduce some new idea that he has developed. The other road will be glad to pay the man a good salary, and he will return to us all the broader and more valuable because of service elsewhere. We have been meantime training another man for any vacancy in the grade that may occur. By the same token, we shall by and by consider it a privilege to get back in our official family a man whom we trained to our ways in youth, but who has been broadened by service with different roads. We shall get over considering him as having lost his rights, as an unpardonable offender against our sacred civil service. There is never any affection stronger than our first real love.

As you master the details of your profession, as you carry out loyally the policies of your management, keep in mind the possibility of radical changes. We shall not forever keep up the absurdity of a Pullman conductor's snap and a train conductor's busy job. When we each own at least the sleeping and parlor cars local to our own rails, the conductor will run the train and perhaps work the sleepers, while a collector will work the coaches and chair cars. When oil burners and automatic stokers have revolutionized the fireman's duties, when train orders are unknown, when the position or color of a signal is the only instruction, we may transfer the command of the train to one of the men in the engine. When we so protect our trains by block signals or other devices that to send back a flag is an absurdity, our trainmen will become

starters, and perhaps collectors, with duties not dissimilar to those of guards on elevated roads. When the much-needed motor car for suburban and branch service is perfected, other changes will come. You may not live to see electricity displace steam for heavy motive power, but you had better not gamble all your life insurance on such a proposition.

The tendency has been to limit all the utilities of a railroad to transportation. Before long we shall, for a time at least, be going to the opposite extreme. Some of us have entered the pension and life insurance business, some own coal mines directly or indirectly. Should we not manufacture our own ice at various points as needed and cut out some haul? Should we not control the banks in the cities and towns where we disburse so much money? Why not grain elevators and industrial plants? Can we afford to manufacture relatively fewer of our own appliances than that comprehensive organization, the Standard Oil Company? These questions cannot be answered easily or by a simple yes or no. They all depend upon time and circumstance. Our trouble has been a fundamental error in reasoning, a dogmatic generalization from too few particular cases. Stagnation is usually death to business. As we cannot back up, it would seem wise to be ready to move forward in power and influence. Ours is a high destiny. The railway officials of the future will never be without knotty propositions to tackle. They will not have to work as long hours as we, but their problems will be more intense. The injector saves the drudgery of jacking up an engine to pump her, but it does not warrant sitting down while waiting for the steam derrick.

Through all the improvements, real or imaginary, through all the changes that the years may bring, bear in mind the human element. Although the race grows better all the time, the old Adam and Eve will be ever present in all of us. High explosives, armor plate, modern weapons, modify the conditions of war, but as the Japs and Russians are teaching us to-day we can never do entirely without the individual initiative, without the courage necessary for the hand-to-hand conflict. Some may deplore this condition, but, in the words of the Salvation Army lassie, I thank God for it.

For a period covering some thirty years, beginning and ending over a hundred years ago, an English nobleman and statesman, the Earl of Chesterfield, man of letters, wrote a series to his son. The morals inculcated are hardly acceptable in this better age. The manners taught, the art of pleasing so attractively set forth, have a value to-day, have made the term Chesterfield a synonym for grace. Lord Chesterfield's letters to his son were collected to the number of nearly five hundred and published in book form. He has had many imitators, and I confess to being one of them. Whether or not he borrowed the idea from some ancient father I have never sent a tracer to find out. Now that you and I are to be near enough for heart-to-heart talks, my weekly letters will cease. Whether or not they shall be preserved in book form it is up to you to say.

Affectionately, your own

POSTSCRIPT.

BY FRANK H. SPEARMAN.

When a young army officer, a West Pointer, resigns his commission to become a railroad man the unusual happens and observers naturally follow the result with interest. Major Charles Hine was more than a lieutenant of the Sixth United States Infantry when he threw up his commission to become a freight brakeman on the Big Four. He was even then, at twenty-eight, a graduate of the Cincinnati Law School, a member of the bar and a practical civil engineer. When the country needed her army men in 1898, Lieutenant Hine, then on the staff of a Big Four superintendent in Cleveland, secured leave of absence, volunteered and was commissioned a major of the First District of Columbia Infantry. After Santiago, Major Hine promptly resumed his work as a railroadman. He has served as brakeman, switchman, yardmaster, conductor, chief clerk to the superintendent, trainmaster, assistant superintendent and general superintendent. He is, by nature, a student; no task is too onerous to dismay him if there is in it or behind it something he can learn. Thus he has not only stored away information, but he has learned how to impart it, and his fund of shrewd observation and good common sense he has drawn on in writing a railroad book entitled "Letters From an Old Railway Official to His Son, a Division Superintendent."

The letters cover a breadth of ground in railway operation that is really astonishing to any one who does not know the man behind them. This is not all; loaded as they are with nuggets of hard, practical sense in railroad practice, they have a form and finish that make them doubly attractive. They are short, compact, of an easy and agreeable style and both lively and humorous as well as instructive.

Major Hine has long since won his literary spurs as a contributor to the Army and Navy Journal, The Railway Age and The Century Magazine. His present book is bright, quick and gossipy, and it would interest a man that did not know the difference between a puzzle switch and a gravity yard, but its especial appeal is to the young railroad man of to-day who understands that whether in the operating department, the accounting department or the motive power, he must, to get ahead, know all that he can, and the letters cover as many railroad subjects as they bear numbers. They will take their place at once in railroad libraries and in railroad literature. Major Hine—recently doing special railroad work on the staff of the general manager of the Rock Island system and at present on the staff of the second vice-president of the Burlington, specially charged with the subject of company supplies—may write longer and more pretentious books than this; but hardly one of more real value to the ambitious young railroad man.

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*** END OF THE PROJECT GUTENBERG EBOOK LETTERS FROM AN OLD RAILWAY OFFICIAL TO HIS SON, A DIVISION SUPERINTENDENT ***

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