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## Volume 14 - Issue 9 - June, 1905

Rose Technic Staff

*Rose-Hulman Institute of Technology*

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## THE TECHNIC.

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### TERMS :

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*Issued Monthly at the Rose Polytechnic Institute.*

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TO the Class of 1905 this issue of THE TECHNIC is dedicated. As you leave us, fellows, you take with you the most sincere wishes of us all, that you may succeed as well as those who have gone before you. In the midst of your achievements, however, do not forget Old Rose. When anything of interest happens, drop a line to THE TECHNIC. Our Alumni Department depends entirely upon the individual members for its news items, so drop us a line, for we're always glad to hear from you.

WE regret to state that Mr. John M. Nelson, for two years Instructor in Chemistry, has presented his resignation. He will attend Columbia to present a thesis for the degree of Ph. D.

CONSIDERABLE argument has been stirred up among the students by the recent action of the Glee Club. The facts of the case are as follows: The members of the club were each presented with a Glee Club pin, which was paid for with the funds of the club.

The chief argument given by the members is the fact that they earned the money by giving an entertainment, therefore it was theirs to do with as they pleased. It should be remembered, however, that the Glee Club receives a percentage of the Student Fund, and it was this money that defrayed the expenses of rehearsals, etc., preparatory to giving the entertainment. We hold, therefore, that the club's action was no more justifiable than would be the base-ball or foot-ball team's, if they were to use for personal purposes the money taken in at the gate at a game. The money the Glee Club made by the entertainment should have gone to the Rose Symphony Club treasury, just as the gate receipts at a game go to the Athletic Association. The action of the Glee Club was all the more to be censured in view of the fact that the other two organizations of the Symphony Club have been considerably hampered by lack of funds.

THE Scientific Society recently held its first meeting of the school year, for the purpose of electing new officers for the next year. Mr. Delle was elected President. Mr. Delle has shown a marked interest in the affairs of the club, and we may rest assured that the next year will be a lively one in Scientific Society circles. It would seem a pity, indeed, if so useful an or-

ganization should break up, as it practically did in the past year, simply because the men at the head of it are not sufficiently interested to call meetings.

As mentioned at the recent general assembly, it is "up to us," for if we don't keep the society going, the Faculty will require a course in public speaking. So let's all wake up, and not give the Faculty a chance to take a hand in this matter, and we will have, in the Scientific Society, a lively, useful student organization.

IN looking back over the school year just closed, we find that it has been a very successful one for Rose. The foot-ball team won just half the games played, but came out considerably ahead in the total points scored. The basket-ball team met the best teams of the state, and more than held its own, being acknowledged to be second only to Wabash. The track team won from Culver Military Academy and State Normal, in dual meets, and won the I. C. A. L. championship over Earlham, Wabash and Normal. Turk and Lee also scored in the I. I. A. A. state meet. The base-ball team, with only five of last year's team left, has developed into an excellent team, and has won a majority of its games.

In other lines besides athletics there has been decided activity. The Y. M. C. A., Symphony Club, Telegraph Company, in fact all the organizations, with the exception of the Scientific Society and Camera Club, have had an exception-

ally good year. The work of the Camera Club is of necessity more in the nature of individual work, and that the followers of the kodak have not been idle, is shown by the display of pictures in the club's case. Taken as a whole, we believe the work of the various organizations was quite satisfactory.

WE take pleasure in presenting in this issue, pictures of the base-ball team, track team, and of Mr. Paul E. Turk. Mr. Turk has deservedly won a reputation throughout Indiana as an athlete of unusual ability.

THE track team returned from Bloomington with the report that they had good reasons to believe they had been "doped." It is known that several I. U. students had wagered considerable amounts of money that their athletes would win the 220-yd. dash. Turk, of Rose, was the only dangerous competitor. It is further known that on the afternoon of the meet, all those that had eaten at the same table with Turk, became ill.

To lay the blame for such an act on any college would be indeed a serious charge. If this thing was done, we feel sure it was the work of several individuals. But, as long as we have no positive proof, let us hope and believe that the illness was caused by something else, say, for example, the drinking water. At all events, the fact remains that Turk won the race.





## Sociology and Engineering.

COMMENCEMENT ADDRESS,

Delivered by DR. L. C. MONIN, Dean, Armour Institute of Technology.

A FEW years ago a young Spanish nobleman inherited the estates, as well as the titles and privileges, of his father, the Duke of Medina. As it is the custom in Spain, he had to appear before his sovereign, in order to tell the whole court, assembled in state, why he was worthy to succeed his father. In place, however, of enumerating the valient deeds of his ancestors and basing his claims upon their services rendered to the state, he laid at the feet of his sovereign the diploma of Civil Engineer which he had received from the polytechnic school at Madrid. He wished to obtain all the honors and privileges due to his rank because he himself had won something of distinction by his own endeavor and work. This example of the young Duke of Medina might well be followed by the engineering students of our country. It may be that he put too great a value upon his diploma, but, nevertheless, it is true that to-day the engineering profession is one of the most important in the life of any nation. The reason for it is that it has to deal not only with material improvements and comforts, but also with human welfare in general.

We are coming to see that education should give to the student not only what he needs for his own development, but also that which the community needs and will ask of him. It goes without saying that a graduate of Rose Polytechnic Institute, as well as the other higher institutions of learning, should know his business. This is the minimum that may be required of him. But behind the engineer is the man and the citizen. They must be trained as well as the professional man. We are all familiar with the value of the three "r's" in primary education, but the importance of what I should like to call the three capital "R's" of secondary and higher education is not so easily recognized. Yet in our present time great emphasis ought to be laid

upon these. They are *Restraint, Respect and Reverence*. The educated man should know how to restrain his passions and his impulses, and by self-control, as well as self-direction, should he be able to master himself. He should have respect for law and a reverence for God and His universe.

A man who thoroughly appreciates the value of the three capital "R's" will not neglect to devote himself to the welfare of his fellowmen. However, there is one science which deals particularly, and in an especial sense, with human welfare. I refer to the science of *Sociology*.

Sociology is the science that deals with the facts of human life in order to coordinate them in their proper relationship and to deduce from them rules for guidance in the practical affairs of life. The practical problem of social well-being belongs to the present time. The task of civilization since the decline of the Roman Empire had in the main three successive stages:

*Subjugation*, the *military* stage of modern civilization;

*Liberation*, the *industrial* stage of modern civilization;

*Organization*, the *humanitarian* stage of modern civilization.

The march of history was from subjugation to liberation, when society progressed from status to contract, i. e., from the state in which rights are established by *authority* and *custom* to that in which they are established by mutual consent. From the recognition of *obligations* to the recognition of *rights*; from *service* to *self-help*.

We are now passing from the demand for *liberty* to the demand for *solidarity* (reconstruction). Ours is partly the industrial and partly the humanitarian stage of modern civilization; where the *end* and *ideal* shall not be so much the *increase* of wealth, as the *ascent* of man. With the demand for human welfare there goes the de-



mand for political and religious principles which shall guide and inspire mankind. The gospel of to-day is to *help every one to help himself*.

It often seems as if men to-day become more and more unintelligible to each other, on account of the diversity of interests and multiplicity of functions. The world is fast becoming a *workshop* and ceasing to be a *school of character*. Matter has the mastery over mind. The mechanism of industry runs away with us. But the essential social problem is not merely how to produce and distribute wealth, but how to attain largeness and fullness of life. The organic conception of society is fundamental to any clear understanding of the problems of our time.

The scope of society is indeed a very wide one. It deals not only with the world of *phenomena*, but also with the world of *values*. Put the value upon the right things and the right value on things. Not so much what reality *is*, but what we imagine reality to be will determine our conduct. However, is it possible for an engineer to busy himself with so comprehensive a science as sociology? It is, if you distinguish well in life, as well as in your studies, between that which is *fundamental*, *supplemental* and *incidental*.

I am here reminded of the following story about a little girl who was once asked what her father was doing. She answered, "Most of the time he is sawing wood, sometimes he goes down town and talks to his neighbors and friends, and sometimes he sits in the rocking-chair on the porch and smokes his pipe." These activities of the little girl's father seem to be illustrative of the three kinds of human activities, those which are fundamental, or supplemental, or merely incidental. Your profession as engineers is fundamental, but there are many lines of activity which should be supplemental to it, if you wish to live a complete life. As for base-ball, pipe-smoking, the reading, or experiencing, of our love stories—they are merely incidental. Perhaps I am expressing a heresy, as I am sure that some of you are considering certain experiences as being quite fundamental these June days. I may be told that engineers do not have the time

to bother with work outside their own professional studies. Sometimes, too, a man has good intentions towards keeping up his history, or his music, or his interests in religious or philosophical thoughts, but he seems to lack the time and opportunity for such work. Such people are like the man who told how, in his younger days, he intended to cut down a small tree. As he could not find his ax on that particular day, he put off the work until such time as he would have his ax handy. Other work intervened. The years passed and still the tree was standing. At last the man thought the time opportune for cutting down the tree. He finally found an ax. Alas! the tree had grown so tall that the ax proved too small an instrument for the undertaking. "You see," the old man remarked with a sigh, "that is why I never cut down that tree." Don't wait too long for an ax; that is to say, for inclination, or opportunity, or expected help. When you have no ax, whittle!

According to President Butler of Columbia University, there are five lines of human activities, along which the spiritual possessions of the race are handed down from generation to generation. Every child has the right to enter into his full spiritual inheritance. These lines of activity are the literary, the aesthetic, the scientific, the religious and the institutional. No man can properly be called cultured who is not in sympathy with the spirit of any one of these five forms of human endeavor. Your fundamental work will be along scientific lines; the supplemental must be chosen by you from one or two of the others. I know of no better study and work than sociology, which is broadening and supplemental to the engineer's profession. For an engineer stands between all classes of society, especially between capital and labor. Employer (the railroad company, the great firm, the State) and employed look to him as a guide and adviser. Hence, his sympathies must be large. He must work for and guard the interests of capital that employs him without working against the interest of labor and the "masses" whom his finished work is chiefly to benefit. He must be able not

only to see both sides of a question, but also the third side, which is, generally speaking, the nearest right. In every controversy the partisans on each side can see only their side. We are all afflicted with partial blindness when it is necessary to view correctly the position of others.

How even the best of us are often blind to the point of view of others is well illustrated by the following story:—A little boy went fishing one Sunday, and while he was waiting for the fish to come, a minister chanced to pass him. When he saw the boy, he said to him, "Do you not know that it is not right to fish on Sunday? What would your father say if he knew of it?" "Father is round the bend digging bait." It is necessary, as you may see, to enter earnestly and sympathetically into the character and mental condition of others, in order to understand correctly their actions and their tendencies.

Thus, in the labor dispute, there is a third party, the public, too long neglected; or the government. It is impossible to get a complete view of any question unless one looks at it from all three sides. And this, the engineer should be able to do, as he touches elbow with all classes of society. He should see that there should be a square deal all around. His should always be the better, the sober, the sound judgment.

In many instances he will perceive that the causes of trouble are not so much economical as moral. One of Dickens' characters says:—Income 20 shillings, 6 pence; Expenses 20 shillings; Result, *happiness*. Income 19 shillings, 6 pence; Expenses 20 shillings; Result, *misery*. This is a mathematical problem as well as a moral problem, which no one is better trained to calculate than the engineer. Not only must the income be increased, but the expenses reduced. Drawing the analogy from his engineering practice, the engineer will enforce the lesson that intelligent efforts to save and to prevent are often more effective than efforts to raise wages or to increase productive powers. In this sense, the function of the engineer becomes truly *educative*.

The economic interpretation of history looks for the causes and reasons of human progress or

decline, not so much in acts of governments and decisions of kings and parliaments, as in the economic condition of the times. The pressure of life upon the means of subsistence is the chief cause of all forms of conflict and struggle. Life must adjust itself to the wherewithal of life.

According to this doctrine (Karl Marx, Prof. Seligman, Columbia University) mankind changes its social relations in changing the modes of production. The hand mill creates a society with a feudal lord; the steam mill a society with the industrial capitalist. And with the changed social relations we have changed principles and ideals of conduct and life. Steam power brought concentration of population.

In all this the engineer is nearest to the force at work. For instance, in a recent article in the *Engineering Magazine* of April, 1905, Dr. Louis Bell speaks of the "Economic Aspect of Electric-power Distribution." Summarizing the accepted standards of electrical and mechanical practice in power transmission and distribution, he shows the influence which electric-power distribution is already exercising in redistributing industry and population. It promises to be a most powerful factor in opposition to the centralizing tendency of steam and water, as direct motor powers for manufacturing establishments. Thus it tends to annul many of the worst evils of the factory system.

The practical problem to be solved is to make non-urban regions industrially more useful. In Europe the keenest interest is taken in preserving manufactures against the inroads of centralization. Electric-power distribution and communication is an excellent decentralizing agency. The existence of a small industrial center means increased prosperity in all the region about it. In small places where the workmen are stable and responsible members of the community, the difficulties of the labor situation are much smaller than in large centers. The most interesting feature of engineering small plants lies, according to Dr. Bell, in the tactful use of water storage.

While it is conceded on many sides that the en-



gineer must pay more attention to the social aspect of his work, there are even indications that we shall soon have another branch of engineering, devoting itself entirely to social work, namely, the *Social Engineer*. Such a man will have to be acquainted with workmen and their needs. He will have to discover causes for dissatisfaction and remove them. His duties will be to help the poor and the ignorant to help themselves, and to report to their and his employers all causes for friction, making recommendations for the removal of such friction before it is too late. His labors, therefore, will be preventative as well as constructive. Many firms are beginning to employ engineers in such capacity. For instance, the Proctor & Gamble Company, at Ivorydale, the National Cash Register Company, Ohio, the Shepard Company, Providence, R. I., etc.

Four years ago the manufacturers of Cleveland, Ohio, jointly employed a "Social Secretary" who gives his whole time to assisting in the improvement of local factory conditions. He is in a real sense a "Consulting Engineer" and the first of his kind on record.

Gentlemen of the Graduating Class: It is not enough that we just do our allotted work. We

must do an *extra*. Only by these can we climb up to success. A man's capacity is gauged by his power to grasp a situation in all its various aspects and by untiring application. Commencement is in reality re-commencement. Begin again! What tonic strength in these two words. What a fine motto to be put at the heading of our life's chart. It is said these words were the favorite expression of Thiers, the great French statesman. "*On recommence.*" Whatever may have barred the way — misfortune, illness, discouragement, defeat—he counted it lightly and never complained. He did not fret nor fuss, nor did he ever throw down his tools. All he would say in the darkest hours of his career was, "*On recommence;*" "*I shall begin again.*"

If I should endeavor to express in a few words the engineer's best characteristics, I should say that the spirit of technical education is *Simplicity, Sincerity, Service*. Where the three manifest themselves in a man's character and work, we have a balanced and a well ordered life. May it be yours to attain such a balance. If you do, you will be certain of success.

Gentlemen, I congratulate you upon this, your Commencement.







## Alumni Address.

By OZNI P. HOOD, '85.

IN his opening remarks, Mr. Hood, who is a member of the first class graduated from Rose, referred to the first commencement, which took place twenty years ago. He spoke of the growth of the Institute from that time to the present, as well in size as in prestige in the engineering world. He then spoke as follows, on the subject "The Man and his Job."

Advice is said to be one of the cheapest things in the world, flowing in a stream of great volume, and to use hydraulic terms, usually from a source but slightly above the point of issue.

Yet in this great stream there drop small streamlets of high potential value, from sources ages old, familiar to us all from frequent repetition, and of which we are apt to become carelessly unconscious, because of their triteness.

Our modern effort keeps us on the lookout for something new, and makes us distrust that which is a few decades old.

We look for something new, and better and more up to date. I can bring you no new advice. My own experience has simply re-discovered to me the value of the old truths, and the point I wish to make to-day is that the fundamental qualities of a useful, successful man are the same

to-day that they have been for many years. The old formulas still apply. True, some coefficients have varied from time to time as this or that quality has been most valuable in our industrial and natural growth, yet the main terms of greatest weight entering the equation are the same for you as they were for your fathers and your grandfathers.

The twentieth century is asking for the same sterling character and vigorous effort that made men successful in the nineteenth century. With all the wonderful improvement in material surroundings, with the greater power trusted to man through his continued discovery of natural law, requiring great changes in the direction of his education, and notwithstanding the complexity of present living, there has been no need for revising the estimate of an honest man.

An employer of high class labor to-day wants fundamentally a man he can trust, and a brilliant mentality without this fundamental quality of character counts for little in ultimate success. It is not sufficient that your work be done skillfully. A request came for a man to make a report on a mining property. The project was at that time a geological proposition. A young man was

recommended by telegraph, who was capable along that line and, we felt sure, could give satisfactory service. A telegram in return inquired "Would you be willing to trust Mr. Blank with ten thousand dollars of your own money in charge of a small expedition to Alaska?"

Now ten thousand dollars is a large amount of money for any teacher to have, and the inquiry might have been "Would you trust all you have to the honesty and good judgment of this young man?" We began to question within ourselves concerning him in a way we had not thought of before. We had not attempted to give him a grade along the line of common honesty. We knew of no positively dishonest thing of any man in that class, yet there were some whom we instinctively would not voluntarily trust with our all. Our judgment of the man had to be made up from a multitude of little things, and you will find that is exactly the way a business man will form his opinion of you.

Sometimes there are men in a college class who insist that a different standard of common honesty applies to men while in college than to business men out of college, and that a certain laxity in property rights or in the ethics of an examination or recitation is perhaps harmless and is considerably diverting. But at such a time of questioning one wonders whether a distorted view of things may not continue after leaving college life, and have produced a mental strabismus which will become apparent under stress. But this man's college record, as far as the books showed, was featureless. He was by no means the brightest man in the class, yet his whole record was good. The impression that the man had left upon us all was such that it justified the following reply: "If we had ten thousand dollars, and it was necessary to trust it to somebody, we would as soon trust it to Mr. Blank as any young man we know."

For any young man who can win this reputation by sturdy character shown in the little things of college life, the path of advancement is open.

An employer wants loyalty. The people who

criticise, talk too much, tear down, grumble, backbite and hinder, are a common lot. Their services can be had without asking, and they require no fee. In their ranks there is great competition, and it is a mistake to put one's self in competition with them. What is wanted is a man who will help push, who will get under the load and begin to lift, however remote his position may be from the center of the organization. You will hardly find a situation where all goes to your liking, where your superiors make no mistakes, where technical ability is shown in every detail or where you are treated with the utmost consideration. You can always find something to find fault with. Yet, if you try you will always find something admirable in character, in strength, in skill or in policy, and if the tongue must wag, let it be of these. Let your employer feel that you are trying to carry out plans as he wants them carried out. He may want them carried out your way and then he may not. You will be hired to help, and I believe a man has no right to hold a position where he cannot help.

Loyalty does not mean shutting one's eyes to error, but rather to focus attention on hearty, helpful service. This requires a point of view easily possible in most situations, and when it can not be taken it is time to change work. A higher type of loyalty in our industrial life is needed now than ever before. When our employers were personally known to us, when some slight bond of human feeling could help toward a real friendliness of persons, then hearty service was more easy. Organizations are now so large, so machine-like in their operation, that they have accentuated that class of man who is satisfied to render a carefully trimmed stipend of hours and draw a pay envelope on Saturday night. This attitude is not confined to men in minor positions.

Some of the largest corporations recently formed found that men who had been heads of small component parts, loyal to their work and the small company of stockholders who were their friends, men who had made financial sacrifices for their company in times of trouble, could not transfer that loyalty to the larger combina-



tion, even with greatly increased salary. The present needs men loyal to their work, loyal to high ideals of their profession, where personal friendliness is largely eliminated. This quality is as valuable as it ever was, and is apparently harder to find.

An employer wants a day's work. It is not always easy for a college man to know what is a fair equivalent for his wage. He has not measured himself by the standard of other workers.

Mr. Carnegie, in giving advice to young men says, "Do not shirk; rather go beyond your task. Do not let any young man think he has performed his duty when he has performed the work assigned him. Promotion comes from exceptional work."

I have seen cases where there was no intention whatever of shirking, but only a wrong idea of what constituted a day's work. This is particularly true of college men, whose daylight hours of college work are not continuous and do not correspond to a worker's day. There is an apparent leisure in a late morning class, in a vacant hour, in a lesson that can be given scant attention to-day with the expectation of making it up to-morrow.

This way of doing things follows many a man for a year or two into his after work, in spite of the fact that the usual technical student has in a week, between day and night work, put more time on his job than the day laborer. In going beyond your task, it is not intimated that you meddle with the other man's job, who may not be doing his work to your satisfaction, but rather that exceptional effort be put on your own work, and as legitimate opportunity offers you be preparing yourself for the position just ahead. Some few men are so impressed with the advantages they have enjoyed in a college training that they consider themselves in a class alone, and not expected to compete with or render the continuous service of less favored men. They are put in immediate competition with men of less schooling, sometimes but not always less bright, and fail to see that the other man really renders the more acceptable service because used to the task

by habit and keenly desirous to do all that he can. It takes some hard experiences to teach that kind of a school man that employers care little in what form your opportunities have come, what degree you have or from where you graduated, even whether you graduated at all or not, but they do care for what you can do, and will judge you by results. To use a common expression, it is as necessary for you to "make good" as for any other man.

It is only by increased efficiency that you place yourselves beyond the competition of men who have had none of the training a college affords.

Employers are asking you to occupy a different plane as to personal habits than has been insisted upon before. Some large railroad corporations and manufacturing companies select men only from the ranks of those who use no liquors and this attitude is being felt in the mining industry. More and more is it a bar to some desirable positions that one indulges even moderately. In mining it is sometimes assumed that as one lives on the frontier the small vices are really of no moment, but requests come for men who use neither tobacco nor liquor and whose moral tone can be depended upon to help the better side of things in some remote corner out of sight of the world in general.

It is as desirable as ever that one bring to a place of responsibility some of one's life, one's hope, one's ambition, one's highest ideals as well as stipulated hours of technical service.

Whatever line of effort you follow you will need a knowledge of men. It has seemed to me that the technical graduate was peculiarly liable to a deficiency in this direction. Our time has been spent in a study of physical law, of materials, of machines and inanimate things in general. The very intensity of our study has weaned us from much contact with men. A good engineer finds endless pleasure in the problems of his profession worked out over the drawing board, perhaps in solitary confinement with his books and then to see the child of his brain built into a useful form by the great processes of his art. Yet the demand for his goods will come from men,



he will receive his pay from men, men must use his machines and the machines will fail because of the limitations of the men who run them. With men he must work and through their opinion of his ability is he to rise to more responsible service. In positions of authority his whole success depends upon his fortunate selection of men as helpers, men who will be hands and eyes for him and live in general and efficient harmony with the rest of the body. By a knowledge of men I do not mean simply the productive power of a man in your business, how many tons of coal a day a good fireman can handle, neither do I mean that kind of knowledge which is usually possessed by the "good fellow" who can slap most men on the back without offense, but rather that knowledge of men which enables you to instinctively know their point of view, the hidden springs of action, the true from the false, and that which makes it easy for you to meet and work with, to believe in and make friends of many kinds of men. Too many are satisfied with so narrow a circle of acquaintance that they fear to break away from a few familiar faces and when the inevitable changes of life scatter the familiar ones they find themselves alone and lacking the power to gather a new host of friends.

I do not believe this knowledge is gained from books; it must be gained by contact with men themselves, working with and for them always as a student.

The great financial prizes are not reserved for the technical man, for his services are cheaply bought, but for the technically trained man who has a good commercial training the possibilities are great. This combination has been rare among technical graduates and it is the oft repeated advice of the older men that in some way the young graduate should have some training of the business sense. The old way of learning a business by beginning at the bottom and passing successively through the various positions is still open, but very few men who have invested

\$1,500 to \$3,000 and four years time have the grit to follow this slow course, preferring something which gives greater immediate returns. Yet this business side of the job must be learned if large money returns for your labor are to be expected and that position which offers an opportunity to learn something of the business side of life while you still exercise your technical ability, is greatly to be desired. There are some jobs a young man can not afford to take although they may pay well at the beginning.

It is usually a misfortune for a young graduate to occupy a position too high in the scale of responsibility and authority at the start. Whenever the position is so high that the details of the work are taken as a matter of course and no opportunity is offered to master them, then the foundation is weak and insufficient to build a large career upon.

The young man who starts out as manager or superintendent is usually the envy of his class, but in ten years he is likely to be outstripped by a career of slower growth. Do not let the promise of high pay take you from the line of engineering work, unless you have found yourself unfitted for the life of the engineer. Present money income is of far less importance than the opportunity for gaining good experience in the line of your profession.

I have said little of the value of your technical training. I take it as a matter of course. You are entering a profession of special value to this nation, a profession in which every effort is one of helpfulness and growth. No profession has done more toward binding together a scattered remnant of people into a vigorous and forceful nation than engineering. The present is as needful of good men as the past has ever been, men with initiative, able to do, and having the courage to dare. Many paths open to such men. There will be work for every one to do, and the men of "Rose" welcome the newcomers to the band of workers.

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**Official Report of Nineteenth Annual Business Session of the Rose Polytechnic Alumni Association.**

Thursday, June 8, 1905.

The meeting was called to order at 3 P.M., in the ordinary of the Terre Haute House, by President John B. Peddle, and the following representatives of the various classes were present :

O. P. Hood, . . . . . '85	Carl J. Kiefer, . . . . . '03
Charles E. Scott, . . . . . '86	R. D. Landrum, . . . . . '04
Herbert Foltz, . . . . . '86	Charles C. McCormick, . . '04
J. B. Aikman, . . . . . '87	Roy W. Hill, . . . . . '04
John B. Peddle, . . . . . '88	E. Bryon, . . . . . '04
George M. Davis, . . . . . '88	J. N. Ross, . . . . . '04
R. L. McCormick, . . . . . '91	Robert F. Garretson, . . '04
E. F. Folsom, . . . . . '92	L. A. Touzalin, . . . . . '04
S. B. Tinsley, . . . . . '92	M. B. Miller, . . . . . '04
E. S. Johannott, . . . . . '93	William C. Noelke, . . '04
A. M. Hood, . . . . . '93	C. G. Davies, . . . . . '05
J. S. Royse, . . . . . '94	O. F. Reynolds, . . . . . '05
Harrison W. Craver, . . . . . '95	M. R. Reed, . . . . . '05
T. H. Miller, . . . . . '95	H. E. Shryer, . . . . . '05
O. E. McMeans, . . . . . '96	E. E. Larkins, . . . . . '05
W. E. Burk, . . . . . '96	C. E. Robertson, . . . . . '05
Uhel U. Carr, . . . . . '96	Edward H. Spalding, . . '05
T. G. Pierson, . . . . . '97	Fred W. A. Haller, . . . '05
H. C. Westfall, . . . . . '97	R. G. Jenkes, Jr., . . . '05
C. J. Larson, . . . . . '00	George Benson, Jr., . . . '05
J. R. Riggs, . . . . . '01	Clifford B. Speaker, . . '05
H. A. Schwartz, . . . . . '01	Hubert Parr, . . . . . '05
Arthur J. Paige, . . . . . '02	Walter E. Johnson, . . . '05
Chester L. Post, . . . . . '03	Lewis A. Snider, . . . . . '05

The report of the Election Committee was submitted, and the following persons were declared elected: President, John B. Peddle, '88; Vice-President, E. S. Johannott, '93; Alumni Representative on Board of Managers, T. L. Condron, '90, in place of W. A. Layman, '92, whose term expired.

Mr. Peddle called Mr. Folz to the chair and offered his resignation, on the ground that he believed it unadvisable for a member of the faculty to serve as an officer of the Association. Mr. Peddle was followed by Mr. Johannott, who offered his own resignation, and moved that Messrs. Davis and Kidder, the unsuccessful candidates, be substituted. There being no second to the motion, the original motion to accept the report of the committee was put and adopted.

The Secretary's report of the minutes of the last meeting were read and approved.

The following financial report was submitted and accepted :

**ALUMNI FUND.**

**RECEIPTS, 1904.**

Balance on hand as per last report, . . .	\$89 84
Dues received last meeting after report was submitted, . . . . .	35 00
By deficiency carried to 1905, . . . . .	.91
	\$125.75

**DISBURSEMENTS, 1904.**

<b>Expenses Election Com.—</b>	
670 return postal cards, printed, . . .	\$ 17.50
<b>Expenses Executive Com.—</b>	
Menu cards, . . . . .	14.00
375 postal cards, printed, . . . . .	5.75
375 invitations, . . . . .	11.75
Addressing envelopes, . . . . .	1.50
Postage, . . . . .	6.52
<b>Expenses Secretary—</b>	
350 printed circular letters, . . . . .	3.75
Postage, . . . . .	6.97
<b>Expenses Alumni Reps. on Board of Managers. 400 printed reports, . . .</b>	
200 copies Technic, . . . . .	10.00
<b>Expenses Ways and Means Com.—</b>	
Postage, . . . . .	\$ 12.00
Envelopes and printing, . . . . .	5 75
Banquet fund deficiency, . . . . .	12.26
	\$125.75

**RECEIPTS IN 1905.**

Dues received for 1905 to date, . . . . .	\$ 64.50
Less deficiency forwarded from 1904 acc't,	.91
	63.59

**BANQUET FUND.**

**RECEIPTS.**

Balance as per last report, . . . . .	\$ 11.70
Receipts at last banquet, . . . . .	120.00
From Alumni fund to cover deficiency, . .	12.26
	\$143.96

**DISBURSEMENTS.**

Music for banquet, . . . . .	\$ 10.50
Freight on champagne, . . . . .	61
Watson & Beggs, . . . . .	132.85
	\$143.96

Respectfully submitted,

J. B. AIKMAN,  
Sec'y & Treas.

The Special Committee, consisting of the officers of the Executive Committee (Mr. Hood, '93, not serving), reported the selection of Mr. Hood, '93, to succeed Mr. Aikman as Secretary and Treasurer.

Nominations were made for Executive Committee as follows: Mr. H. L. Foltz, '86; Mr. John B. Aikman, '87; Mr. J. R. Riggs, '01; Mr. R. D. Landrum, '04. Nominations were then closed, and the committee elected as follows: Mr. H. L. Foltz, Chairman; Mr. J. R. Riggs, and Mr. R. D. Landrum.



The Permanent Ways and Means Committee reported informally through its chairman, Mr. E. F. Folsom, '92, stating that the Alumni Fund had been increased to over Fifteen Thousand Dollars (\$15,000.00), and that further special effort in securing subscriptions from alumni would be discontinued. A brief sketch of the intentions of the committee as to further work was given, indicating that the next step would be an effort to secure a substantial addition to the Endowment Fund from the citizens of Vigo county. A motion by Mr. Tinsley '92, seconded by Mr. Foltz, '86, extending the thanks of the Association to the committee, was passed.

Mr. Foltz presented an informal report from the alumni representatives, explaining that, by reason of unavoidable business engagements, it had been impossible for himself and Mr. Layman to meet at the Institute, and that, therefore, a formal report would be submitted later.

Upon motion of Mr. Folsom, a vote of thanks was extended to Mr. O. P. Hood, '85, for his admirable address, presented at the Commencement exercises, and THE TECHNIC was requested to print the address in full.

Under the order of new business, Mr. Riggs '01, suggested a change of method in nomination of officers of the Association in order to avoid, where possible, the election of faculty members as officers, and to do away with the postal ballot. He then moved to change the method of election of officers; this motion was duly seconded and passed.

Mr. McCormick, '91, moved that the meeting proceed to nominate candidates for President and Vice-President, and the motion was seconded. Mr. Tinsley, '92, moved to amend the motion by making the Executive Committee and Officers a nominating committee with instructions to nominate four members of different classes for candidates for the office of President and Vice-President, the persons so nominated to be presented to the Association as a whole the following May, as candidates, and the two persons receiving the two highest numbers of votes to be declared elected as President and Vice-President, respect-

ively. The amendment was seconded and defeated. Mr. Scott, '86, then moved to amend the McCormick motion by providing that the meeting as a whole nominate four candidates for the offices of President and Vice-President, and six men as candidates for the Executive Committee. Mr. Craver, '95, moved to amend the Scott amendment by striking out all mention of the Executive Committee, and also providing that the number of nominations for the offices of President and Vice-President should not be less than four. The amendment was seconded and Scott accepted the amendment. Thereupon, the Scott amendment, as amended by Craver, was carried; and the McCormick motion, as amended, was then carried. The meeting then proceeded as a committee of the whole, and the following nominations were made and seconded: Mr. Tinsley, '92, Mr. Riggs, '01, Mr. Schwartz, '01, Mr. Burk, '96, Mr. Miller, '95, and Mr. G. M. Davis, '88. The nominations were closed, and upon motion of the Secretary the nominations were ratified by the Committee of the Whole.

Upon motion of Mr. Folsom, '92, the class of 1905 was voted in as members of the Association.

Mr. Foltz asked for an expression of opinion as to the desirability of holding the next banquet and business meeting at the Institute, if possible. The opinion was unanimous that, if possible, it would be exceedingly desirable to arrange for the business meeting to be held at the Institute in the latter part of the afternoon, and to adjourn from that meeting to the banquet.

Upon motion of Tinsley, '92, the meeting adjourned.

Respectfully submitted,  
ARTHUR M. HOOD,  
Secretary-Treasurer.

#### ALUMNI BANQUET.

The nineteenth annual Banquet of the Alumni Association was held at the Terre Haute House in the evening, the majority of the classes which have graduated from the Institute being represented. Places were provided for seventy-five in the main dining room, and promptly at nine



o'clock the members and their guests, who had been exchanging greetings and renewing friendships in the lobby of the hotel, filed into the dining room and were seated at a U-shaped table with John B. Peddle, President of the Association and Toastmaster, at its head; the honor guests, including Dr. Monin, of Chicago, Dr. Mees, and Members of the Board of Managers and Faculty, being seated on either side.

Judging from the standpoint of number in attendance and enthusiasm, the 1905 banquet must go down into the history of the Association as a record-breaker, there having been none prior to this date so largely attended or enthusiastically endorsed. Much praise is due the Executive Committee composed of Arthur M. Hood, '93, J. Robert Riggs, '01, and Herbert Foltz, '86, for the banquet arrangements. The table was profusely decorated with carnations and ferns and a mandolin orchestra furnished the music for the occasion. The menu cards, always a feature of these banquets, were characteristic and unique, the cover page being embellished with the Institute seal, of which the following is a copy:

"This night I hold an old accustomed feast."  
—Romeo and Juliet.

THE DINNER.

"A glass is good, a lass is good,  
And a pipe to smoke in cold weather;  
The world is good and the people are good,  
And we're all good fellows together."  
—O'Keefe.

- |                           |                             |                    |
|---------------------------|-----------------------------|--------------------|
|                           | Little Necks                |                    |
| Olives                    |                             | Radishes           |
|                           | Planked Shad, Duchesse      |                    |
|                           | Cucumbers                   |                    |
| Fried Chicken, Maryland   |                             |                    |
|                           | New Browned Potatoes        | New Peas           |
|                           |                             | Claret             |
|                           | Punch                       |                    |
| Cigarettes (Buy your own) |                             |                    |
|                           | Tomato with Mayonaise       |                    |
|                           |                             | Hommel's Extra Dry |
|                           | Ice Cream with Strawberries |                    |
|                           | Assorted Cake               |                    |
| Roquefort Cheese          |                             | Bents Crackers     |
|                           | Coffee                      | Cigars             |

"Turn over a new leaf." — Middleton.

"A deal of skimble-skamble stuff." — Henry IV.

"Abstruse and mystic thoughts you must express  
With painful care but seeming easiness." — Dillon.

THE TOASTS.

Toastmaster—JOHN B. PEDDLE.

"A gentleman who loves to hear himself talk,  
and will speak more in a minute than he will  
stand to in a month." — Shakespeare.

Address of Welcome, . . . . . Dr. Mees

"A health to you, good friends of mine,  
A plenty to you all;  
May each one be at his own house  
When fortune makes her call!" —Alonzo Rice.

Naughty Five, . . . . . Herbert Watson

"I speak truth not so much as I would, but as  
much as I dare." —Montaigne.

Looking Backward, . . . . . S. B. Tinsley

"I love everything that's old— old friends, old times,  
old manners, old books, old wine." —Goldsmith.

The Thoroughbred, . . . . . Dr. John White

"We came into this world naked and bare,  
We go through this world full of sorrow and care;  
We go out of this world — we know not where —  
But if we're thoroughbreds here, we'll be thorough-  
breds there." —Anon.

College Widows and Others, . . . . . John T. Regan

"Here's to the girls we've asked, old pal,  
Here's to the girls who said "nay."  
'Tis better for us they treated us thus,  
For they're driving the Mormons away." —Anon.

The Igorrotes, . . . . . W. C. Ball

"When I ope my mouth, let no dog bark."  
— Merchant of Venice.  
"Here's to us all! God bless every one!" —Dickens.

With the exception of Mr. Regan, who was detained by illness, the responses were made according to the program, Mr. R. F. Garretson responding to Mr. Regan's sentiment. At the earnest solicitation of the Toastmaster and the "gang," as Mr. Foltz insisted on designating them, Dr. Monin made a few remarks, adding to the favorable impression which his able address of the morning had already established. A letter was read from Mr. Ames, the Professor of Drawing in the early days of the Institute, regretting his inability to be present. He found on examination that his Sunday trousers would not "close up" by about six inches, and his tailor

could not get on to his curves in time to make him presentable for the occasion.

A feature not down on the program, which caused much merriment, was the introduction of four cases of Coca-Cola when Mr. Tinsley's toast was announced, he having been formerly associated in the manufacture of this beverage. Each guest was supplied with a bottle, straw, and opener, Mr. Tinsley himself appreciating the joke as fully as the other of his colleagues. Mr. Ball, the President of the Board of Managers, was in his usual happy mood and drew on his fund of good stories and trite sayings to the enjoyment of all present.

Following the formal part of the program, the meeting became informal and a number of the members were called upon to "butt in" with a few remarks to give the Toastmaster a chance to select the best remaining from the bunch of stories with which he had provided himself for the occasion. Those adding to the enjoyment of the evening with remarks, in addition to the speakers having had their toasts assigned and prepared, included O. P. Hood, '85, O. E. McMeans, '96, W. E. Burk, '96, Ernest Bryon, '04, Harry A. Schwartz, '01, Arthur M. Hood, '93, C. J. Larson, '00, Herbert Foltz, '86, Dr. Gray, Prof. Hathaway, George M. Crane.

Mr. Burk stated, in the course of his remarks, that this was the first time he had been back to an Alumni Banquet because it had taken him several years to save enough pennies to make the trip, but that he was coming again next year, even if it became necessary to rob his boy's bank to do so. Mr. McMeans, on the contrary, had been to every Banquet because he lived in Terre Haute and had not been able to save enough to get away. All of the remarks were unusually felicitous and kept the members in a gale of good humor the whole evening through.

At 1:30 o'clock, with a general hand-shaking and exchange of farewells, the Nineteenth Annual Banquet came to a close and a standard was established which the Association will find it difficult to eclipse with its future Banquets.

Following is a list of those present :

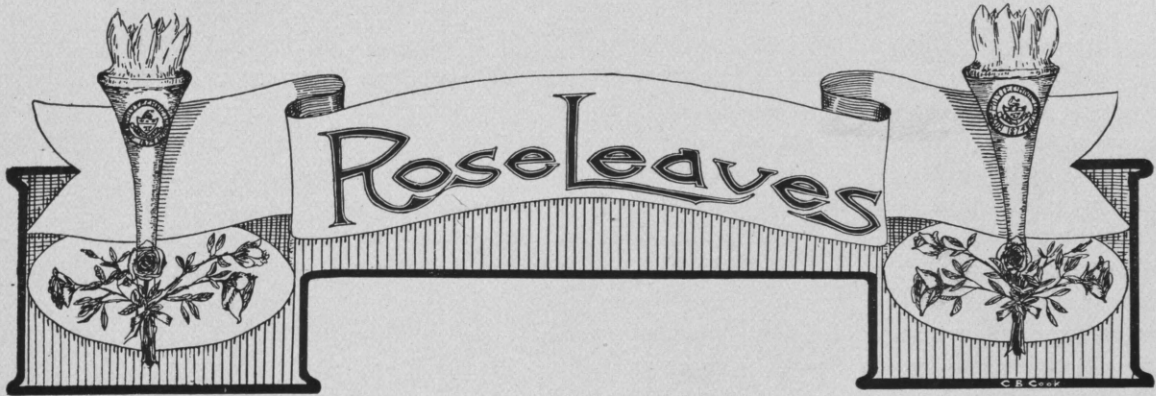
- Dr. L. C. Monin, Dean of Armour Institute.  
 President C. L. Mees.  
 Messrs. W. C. Ball and G. M. Crane, of the Board of Managers.  
 Profs. Thos. Gray, F. C. Wagner, A. S. Hathaway, John White.  
 N. H. Williams, J. M. Nelson and Frank W. Bennett, of the Faculty.
- |                            |                           |
|----------------------------|---------------------------|
| O. P. Hood, '85.           | Wm. C. Noelke, '04.       |
| Herbert Foltz, '86.        | L. A. Touzalin, '04.      |
| Charles E. Scott, '86.     | C. G. French, '04.        |
| S. B. Aikman, '87.         | J. H. Barbazette, '04.    |
| John B. Peddle, '88.       | R. D. Landrum, '04.       |
| George M. Davis, '88.      | Chas. C. McCormick, '04.  |
| S. B. Tinsley, '92.        | H. L. Watson, '05.        |
| Edson F. Folsom, '92.      | J. S. McBride, '05.       |
| Arthur M. Hood, '93.       | H. G. Kiefer, '05.        |
| E. S. Johannott, '93.      | Owen L. Wood, '05.        |
| Harrison W. Cravet, '95.   | M. R. Reed, '05.          |
| F. H. Miller, '95.         | Ralph C. Gray, '05.       |
| O. E. McMeans, '96.        | C. G. Davies, '05.        |
| W. E. Burk, '96.           | C. E. Robertson, '05.     |
| U. U. Carr, '96.           | L. A. Snider, '05.        |
| T. G. Pierson, '97.        | Geo. Benson, Jr., '05.    |
| C. J. Larson, '00.         | Walter E. Johnson, '05.   |
| H. A. Schwartz, '01.       | D. D. Wright, '05.        |
| J. R. Riggs, '01.          | O. F. Reynolds, '05.      |
| C. E. Cox, '02.            | Wm. R. Heick, '05.        |
| Arthur J. Paige, '02.      | H. R. Kadel, '05.         |
| J. P. A. Williams, '03.    | W. H. Burr, '05.          |
| Carl J. Kiefer, '03.       | Leon Goodman, '05.        |
| Chester L. Post, '03.      | E. Ernest Larkins, '05.   |
| Carl D. Fischer, Jr., '03. | L. W. Klenk, '05.         |
| E. H. McFarland, '04.      | R. C. Blanchard, '05.     |
| Roy W. Hill, '04.          | C. B. Cook, '05.          |
| Ferd W. Hahn, '04.         | H. E. Shryer, '05.        |
| J. N. Ross, '04.           | Chas. B. Trowbridge, '05. |
| J. T. Staff, Jr., '04.     | Ralph C. Everson, '05.    |
| R. F. Garretson, '04.      | E. H. Spalding, '05.      |
| E. Bryon, '04.             | W. S. Hanley, '05.        |
| M. B. Miller, '04.         |                           |

#### ALUMNI NOTES.

A telegram addressed to his parents at Louisville, from A. C. Eastwood, Manager and Engineer of the Electric Controller and Supply Co., at Cleveland, reveals the fact that on May 19, 1905, he became the father of a "fine boy." The reputation of Rose through at least one future class is assured.

Leo F. Dorn, of Louisville, and J. B. Hunley, '03, of Cincinnati, were both here on the 20th of May to visit the faculty and other friends, and to witness the victory of Rose in the I. C. A. L. field meet.





## Commencement.



THE following is the programme of the Twentieth Annual Commencement, which was held in the Institute Gymnasium, June 8:

Music.

Prayer.

Music.

Alumni Address,  
Ozni Porter Hood, '85.

Music.

Address,  
Dr. L. C. Monin,  
Dean of Armour Institute of Technology,  
"Sociology and Engineering."

Music.

Presentation of Diplomas.

Awarding of Prizes.

Benediction.

Music.

A very delightful feature of the programme was the music furnished by the Orchestra and Glee Club. Mr. Stock's cornet solo was very much appreciated.

The Alumni Address, given by Mr. Ozni P. Hood, of the Class of 1885, and the Commencement Address of Dr. L. C. Monin, were both masterly discussions of subjects of vital interest, and were listened to with profit, as well as pleasure.

Mr. Ball then presented the diplomas, addressing the graduating class as follows:

"When a fruit tree, or shrub, or bush of some new species has, in unbroken succession from year to year, propagated through seed or shoots, demonstrated that the new fruit or flower is uniform and good, and that it can be relied on to reproduce its kind, the type is said to be fixed. Surely this may now be said of our Rose bush, the seed of which was planted a quarter of a century ago. Just twenty-three years ago the first classes entered. Twenty-one years ago the first class graduated. Rose Polytechnic Institute thus reaches manhood's estate to-day, so far as recurring commencements mark the lapse of time. With these exercises she sends into the world her 21st class of graduates. A significant and pleasant feature of this occasion has been the return of one of the three members of the first class, that of 1885. Speaking in the name of the Alumni Association, of which he is an honored member (since he was of our first and therefore oldest class may I not refer to him as a venerable member of the Alumni Association) Mr. Hood brought to you members of the graduating class words of cheer from the great world into which you are about to enter. With several of our own sons members of the faculty, imparting to their successors what they themselves learned in the same recitation rooms and laboratories and shops, with her alumni returning from the workaday world to deliver addresses at commencement time, and with her alumni scattered



over the world doing the work of full-grown men in the higher fields of industrial life and keeping the Institute in the minds and hearts of men of affairs by honorable achievements, the Rose Polytechnic Institute has become self-perpetuating. Her type is fixed as an educational institution and her friends may well plume their pride over the result.

You have listened with pleasure and profit to a scholarly and instructive address on "Sociology and Engineering," by one who is a recognized authority on engineering problems. Little remains for me save to present to you, members of the class of 1905, the diplomas you have earned by completing the prescribed course of study. This I shall presently do in the name of the Faculty and Board of Managers, to whom in succession has been confided by the founder of the school, whose honored name it bears, general oversight of the Institute. Yet I cannot let the occasion pass without a few words of farewell. Of the members of the Board of Managers you have in the natural course of events seen comparatively little. Your work has been with the members of the faculty. All the facilities of the Institute have been at your disposal. Members of the faculty have been your guides, instructors and friends. Undoubtedly they have held you to strict accountability. Perhaps at times you chafed under it. Now, of course, you understand that this was in accordance with the wise and salutary rules of the game. Frankly, he is the worst sort of friend, indeed, no friend at all, who, as trainer, slights, through indifference or mistaken kindness, his appointed duty. Kindness that counts consists in holding the person under training up to his work. Diplomas ought to mean something. Here at Rose they always have meant something. No one is so much concerned in this as you who go through the school. Value, value to you, is represented by them. Nor is that all. Quite another consideration enters into it. The value of a diploma in its objective, commercial sense, is the estimate placed upon it by others. To prove to others the value of your diplomas you must secure opportunities.

Now the value of your diplomas, as immediately available assets in securing opportunities to show what you can do (I am not referring to its subjective value as affecting your knowledge, for what you have learned here you know) is as documentary evidence proving to others with whom you desire to become associated in business that you have completed creditably a comprehensive curriculum, in no case shortened or made easier, and that you are, therefore, presumptively fitted to cope with the stern realities of actual life. This presumption is strengthened by the character and career of every individual to whom a diploma has been granted in successive years from 1885 to the present time. For all these years a high standard has been maintained and you are the beneficiaries of it.

Now it is no part of the purpose of those into whose keeping has been confided the sacred trust of maintaining this Institute to cheapen the value of these diplomas as proofs of a thorough training in a specified course. Comparatively of little consequence is it whether the number of graduates shall be few or many. It is of commanding importance that all who do graduate shall have reached a prescribed standard—a standard that is gradually reached and which it is a settled purpose never to lower.

Graduates will go out from this school twenty years hence and thence on, it is hoped, in increasing numbers for ages afterward, and each class should do for all its successors what all of its predecessors have done for it. 'After us, the flood,' always was a cowardly phrase and always will be contemptible. It is hoped it never will be uttered here. Rather let it be said, after us better things, by reason of our persistent and honest efforts.

Reviewing mankind's achievements it sometimes seems as if those of us living to-day were born a generation too late; as if all needed things had been accomplished, all discoverable things discovered, all things possible in the way of invention had been invented. Even supposing that to be true, it would signify nothing. Conserving and preserving what has already been ac-

quired are great tasks, sufficient to demand steady effort and a high order of trained intelligence. But it is not true that all of Nature's secrets have been wrested from her. Each discovery discloses wider encircling fields, as a strong light succeeding a fainter one brings within the line of vision a vaster region of enveloping darkness needing light. What remains to be discovered in the fields of endeavor for which this course especially fits you is almost infinite. Nature has hidden her forces. Sometimes it seems as if the children's game of hide the handkerchief had been borrowed from Nature. Only she plays the game with prodigal splendor. Not single handkerchiefs, but handkerchiefs by the gross and bale, whole argosies of them, hidden everywhere, on the earth and under it, in sky and water. For finding these secreted forces, your training here in mastering and management of those already discovered and harnessed and made tractable to man, especially fits you.

It is, of course, understood that this Institute, in an especial sense, is materialistic in curriculum. Its purpose is to train men to do things in the line of what may be comprehensively stated in the one word engineering, and yet inadequately, for the course comprehends many phases of what has been grouped under that one word. More than most educational institutions, except those of its own class, its purpose is to fit young men, by training of both heads and hands, to enter into and tread the higher walks of industrial life. Yet there runs through the course, I trust, more, however, in the personal relations of the faculty with the students than in the prescribed course of study, a distinct understanding that professional success, 'getting there,' to use the vernacular, is not all of life, or even the better half of it. 'Getting there' is not bad, in truth, is distinctly good, but it is of supreme importance, not only to the world at large, but to the individual himself, that the person who does 'get there' is a man, a gentleman, if you please, holding whatever he possesses as in trust for mankind, with due regard to the rights and interests, and especially the needs, of others. 'Per-

haps a gentleman,' says Thackeray, 'is a rarer man than some of us think for.' 'Which of us,' he adds, 'can point out many such in his circle, men whose aims are generous, whose truth is constant, and not only constant in its kind but elevated in its degree; whose want of meanness makes them simple, who can look the world honestly in the face with an equal manly sympathy for the great and the small?' There are some material successes that are really not worth while, the sacrifices of character to obtain them are too great, the loss of self-respect too heavy a penalty to pay.

First and last you are bound to see a great deal of yourselves, and have a great deal to do with yourselves. Compared with what others may think of you what you know of yourselves is vastly more important, and whatever you may achieve will be too dearly bought if secured at the cost of your self-respect.

Keep on good terms with others, but most of all keep on good terms with yourselves. Laugh whenever you can get a chance and with people, not at them. There is a distinction here, and it marks a difference worth considering. Just as the hoof of a horse is the remnant of an original five toes, as some one has pointed out, so perhaps levity at the expense of others, and especially in regard to particular ailments in others, may be the descendant of an aboriginal ferocity in man. Humor probably arises from the same source, and and perhaps the first human laugh that ever woke the astonished echoes of gloomy primeval forests was not an expression of mirth, but exultation over the misery of a tortured enemy. Even to this day there is something terrible in some kinds of laughter. The laugh of madness or the laugh of cruelty is a sound more awful than that of the bitterest lamentations.

By means of that strange phonograph that we call literature we can listen even now to the laughter of the dead, to the hearty guffaws or cynical titterings of generation after generation of bygone men and women, and if we are curious in such matters we can probe into the nature of the changes that have passed over the fashion of



men's humor. As we penetrate further into the past, we find the sense of humor depending always more obviously and solely upon the enjoyment of the pain, misfortune, mortification or embarrassment of others. The sense of superiority was the sense of humor in our remote ancestors; or, in other words, vanity lay at the root of this, as of most other attributes of our bumptious species.

Putting ear to our phonograph, we catch the echoes of a merry tumult; boisterous, cruel, often brutal, yet with here and there a tender cadence from some solitary voice; and presently that lovely note grows stronger and sweeter as we travel slowly toward our time, until at length, through all the merriment, we can hear the soft under-murmur of pity. The music of it lays grip on the imagination—the long laughter of the ages which began in cruelty and ends in love.

Come back to your Alma Mater when opportunity offers in the years to come, just as the old boys in the earlier classes have come to our mutual joy. Come as often as the spirit moves you and strong desire tugs at your heart-strings. You may be sure of welcome. Whatever of success you may achieve will be noted here with a pride and pleasure only a little less than that with which it will be regarded by the throb of your immediate blood. Perhaps you may fail to accomplish all you hoped for and your Alma Mater, with her knowledge of your talents and training expected. Let not that deter you from returning here when you can. Rose hopes that you may, but does not demand that you achieve great things. All she asks is that you do your best. She makes only one demand, and that is that you keep your character clean. She would be dishonored if it should appear five or ten or twenty years from now that the intellect of any one of you, sharpened here, had been unworthily used, and, therefore, been increased in effectiveness as a weapon of mischief. But we are in hopeful mood to-day and believe that all your actions in future years, whether great or small, will ring clear and true. And so believing, with a world

of good wishes, we bid you bon voyage. Be of good cheer. Hail and farewell."

The Heminway Gold Medal, for the highest standing throughout the four year's course, was awarded to Mr. John C. Sproull, of Ansonia, Ohio. The bronze medal for the best work in the Freshman year went to Mr. Carl B. Andrews, of Honolulu, Hawaiian Islands.

Honorable mention was made as follows:

Senior Class—Lewis J. Snider, Terre Haute; Herbert L. Watson, Terre Haute; Fred W. A. Haller, Cincinnati; Charles R. Peddle, Brooklyn.

Junior Class—Carl Wischmeyer, Louisville; Ernest D. Kahlert, Louisville; George A. Kellsall, Louisville; Frank W. Pote, Terre Haute; Harold McComb, Terre Haute; Robert B. Evans, Oxford.

Sophomore Class—Milton Goodman, Terre Haute; Russell S. Sage, Terre Haute; Edwin C. Read, Terre Haute; Clifford W. Post, Gordon, O.

We give below the titles of the successful theses:

FOR THE DEGREE OF MECHANICAL ENGINEER.

Labor-Saving Devices in the Foundry. Harry Adolph Schwartz, M. S. '03.

FOR DEGREE OF ELECTRICAL ENGINEER.

The Electrical Conductivity of Steel as Affected by Chemical Composition and Physical Treatment. Samuel S. Wales, M. S. '02.

FOR DEGREE OF MASTER OF SCIENCE.

Thirty-three Professional Papers on Electrical Subjects. H. St. Clair Putnam, B. S. '86.

Electrical Problems in Interurban Railway and Power-Station Reconstruction. Carl J. Kiefer, B. S. '03.

Design for a Double Track 180 ft. Span Seven Panel Railway Bridge with a Ballasted Floor. Chester L. Post, B. S. '03.

FOR DEGREE OF BACHELOR OF SCIENCE.

Heating and Ventilation of the Indiana State Normal Training School Building. Donald H. Atherton.

Design of a Heating Plant for an Office Building, Louisville, Ky. John O. Bland.



- Test of the Ten-Million Gallon Pumping Engine of the Terre Haute Water Works Company. C. B. Cook, R. C. Gray, G. W. Greenleaf, W. R. Heick, H. R. Kadel, G. H. Pfeif.
- Test of the Heating Plant, Rose Polytechnic Institute. H. G. Kiefer, O. L. Wood.
- Test of Boiler and Steam Turbine of the Terre Haute Light and Traction Co. L. A. Snider, J. C. Sproull, H. L. Watson.
- Test of Vandalia Locomotive in Service. M. R. Reed, J. E. Daily.
- Tests on a Wagner Electric Manufacturing Company, 7½ H. P. Single Phase Motor. George Benson, Walter H. Burr.
- Experimental Study of the Effect of Capacity and Self Induction in an Artificial Line fed from an Alternating Generator. F. W. A. Haller, F. B. Lewis.
- Study of the Effect of Carbons upon the Efficiency of the Electric Arc Lamp. R. G. Jenckes, Jr., W. E. Johnson.
- Testing Transformers. L. W. Klenk.
- An Investigation of the Use of Electricity in Coal Mining. H. Parr.
- Construction and Test of a 3-H. P., Single-Phase, Alternating Current Motor. C. E. Robertson, D. D. Wright.
- Test of Steam Turbine Generator of the Terre Haute Light and Traction Co. E. H. Spalding, E. K. Stoddard.
- Study of Telephone Cables. C. B. Trowbridge.
- Preliminary Estimate of Cost of Elevating C. C. C. and St. L. Tracks through Terre Haute, Indiana. C. G. Davies, C. R. Peddle, C. B. Speaker, R. M. Wilson.
- Proposed Design for a Single Track, through 184 ft. ½ in. Pratt Truss Bridge. L. Goodman, R. C. Everson.
- Plan and Estimate for Second Main Track, Brazil to Seelyville, Present Alignment, with Grade Reduction to a Maximum of 6%, Vandalia R. R. W. S. Hanley.
- Designs and Comparison of 160 ft. Span, Double Track, R. R. Solid Concrete Steel Arch, and 160 ft. Span Double Track R. R. Two Ribbed Concrete Steel Arch. E. E. Larkins, F. H. Newnam.
- Approach to New Wabash Avenue Bridge, Terre Haute, Indiana. J. S. McBride.
- Comparison of the Extractive Powers of Commercial Sodium and Potassium Cyanides in the Treatment of Auriferous and Argentiferous Ores. R. C. Blanchard.
- Study of Proper Composition of Boiler Compounds. O. F. Reynolds, H. E. Shryer.

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### SENIOR RECEPTION.

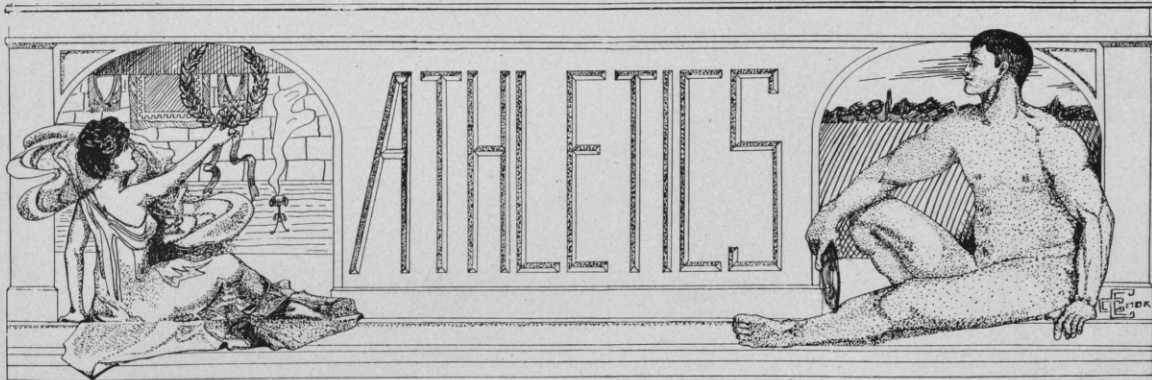
The Board of Managers and the Faculty of the Institute tendered the graduating class an elaborate reception and dance on Wednesday evening, June 7. There were about three hundred guests present, including many Alumni and parents of members of the class. The Glee Club rendered several selections in fine style, and the evening was very enjoyably spent by all present.

On the evening of May 11th, the Glee Club gave a concert at Sullivan, under the auspices of the M. E. Guild of that place. The weather seemed unfavorable for a time, but a large audience was present in spite of expected rain. Upon invitation of the Sullivan Elks, a number of the boys remained to a dance, and report having had a very enjoyable time





ROSE BASE BALL TEAM, 1905.



**STATE NORMAL 5, ROSE 9.**

MAY 6, on the Poly campus, the Rose team easily defeated the Normals by the score of 9 to 5. Daily struck out 11 men, while Coker struck out only 3. Hitting by both sides was the order of the day. Daily got a three-bagger and a two-bagger out of four times at bat, and Reed got four singles, five times at bat. The fielders were kept busy chasing flies, and did the most of the work in the game.

Normal started the game. Spencer and Mitchell were out on a double play, Douthett to Stoddard to Mooney. No runs. Reed singled, Bland and Douthett following his example, and all scored.

Douthett and Daily both hit safely in the third. Both scored.

In the fourth, Medlock, Coker and Cauble scored on Nutt's two-bagger to center, and Nutt scored on a two-base hit by Mitchell. Normal scored on two-baggers by Reeves and Keiser in the eighth.

Bland and Douthett scored on Daily's three-base hit to left, in the seventh. Daily scored on a grounder by Freudenreich.

In the eighth Mooney was hit by a pitched ball and scored on Reed's single to right field.

Score:

	I. S. N.		H.	S.H.	P.O.	A.	E.
	A.B.	R.					
Cauble, c., . . . . .	3	1	1	0	5	1	1
Nutt, 3, . . . . .	5	1	1	0	0	3	0
Spencer, 1, . . . . .	5	0	1	0	10	2	1
Mitchell, 2, . . . . .	5	0	1	0	4	3	0
Reeves, c. f., . . . . .	4	1	2	0	0	1	0

	A.B.	R.	H.	S.H.	P.O.	A.	E.
Reece, s. s., . . . . .	4	0	0	0	3	1	1
Keiser, l. f., . . . . .	3	0	1	0	1	0	0
Medlock, r. f., . . . . .	3	1	0	0	0	0	0
Coker, p., . . . . .	4	1	2	0	1	3	0
Totals, . . . . .	36	5	9	0	24	14	3

	R. P. I.		H.	S.H.	P.O.	A.	E.
	A.B.	R.					
Reed, c., . . . . .	5	1	4	0	12	0	0
Bland, l. f., . . . . .	5	2	1	0	1	2	0
Douthett, 3, . . . . .	4	3	2	0	0	3	0
Daily, p., . . . . .	3	2	2	0	0	3	0
Freudenreich, s. s., . . . . .	4	0	0	0	1	0	1
Stoddard, 2, . . . . .	4	0	1	0	2	2	1
McBride, r. f., . . . . .	4	0	0	0	0	0	0
Miner, c. f., . . . . .	3	0	0	0	3	0	0
Mooney, 1, . . . . .	3	1	2	0	8	0	0
Totals, . . . . .	35	9	12	0	27	10	2

**SCORE BY INNINGS**

	R.	P.	I.	Total
R. P. I., . . . . .	3	0	2	0 0 0 3 1 *—9
I. S. N., . . . . .	0	0	0	0 4 0 0 1 0—5

First base on balls—Off Daily, 3; off Coker, 3.

Struck out—By Daily, 11; by Coker, 3.

Hit by pitcher—Mooney, Keiser.

Double plays—Rose, 1.

Umpire—Armstrong.

**DePAUW 2, ROSE 6.**

May 13, at Greencastle, Rose won from D. P. U. in an easy game of base-ball. Only three men were struck out and the same number walked, so the fielders had their hands full keeping down the number of safe hits.

Rose had the first chance at the bat. Reed singled, Bland sacrificed, Douthett fouled to Martin, and Daily went out on an easy one to Shir-



ley. No runs. Martin walked, stole second and scored on a wild pitch. One run.

In the third, Reed was hit by a pitched ball, stole second, was advanced to third by Bland's grounder to second, and scored. Bland died on second. One run. Martin and Preston were out by a double play, Stoddard to Mooney.

Freudenreich, in the fourth, made first on Watson's error, but, after going to third on Stoddard's single, was caught between the plate and third base. Stoddard and McBride scored on Miner's single to center. Two runs.

In the seventh, Mooney scored when Martin fumbled a grounder.

DePauw got two two-base hits and one man scored.

Daily knocked a two-bagger over right and went around the other two bases on singles by Freudenreich and Stoddard. Martin fumbled again and let Freudenreich in. Two runs.

Score :

	D. P. U.							A.	E.
	A.B.	R.	B.H.	S.B.	S.H.	P.O.	A.		
Martin, 3 . . . . .	3	1	2	1	0	9	3	3	
Preston, 2, . . . . .	4	0	0	0	0	1	0	1	
Gibbons, 1. f., . . . . .	4	0	0	0	0	3	0	0	
Thomas, c. f., . . . . .	4	1	2	0	0	2	0	0	
Shirley, r. f., . . . . .	4	0	1	0	0	3	1	0	
Tucker, c., . . . . .	3	0	0	0	0	4	0	0	
Watson, 1, . . . . .	3	0	0	1	0	3	1	1	
Miller, s. s., . . . . .	2	0	0	0	0	2	5	0	
Houghland, p., . . . . .	3	0	0	0	0	0	2	0	
Totals, . . . . .	30	2	5	2	0	27	12	5	

	R. P. I.							A.	E.
	A.B.	R.	B.H.	S.B.	S.H.	P.O.	A.		
Reed, c., . . . . .	4	1	1	0	0	3	2	0	
Bland, 1. f., . . . . .	4	0	0	2	1	2	0	0	
Douthett, 3, . . . . .	5	0	0	0	0	3	3	1	
Daily p., . . . . .	4	1	1	0	0	2	2	0	
Freudenreich, s. s. . . . .	5	1	1	0	0	1	1	1	
Stoddard, 2, . . . . .	4	1	2	1	0	3	1	0	
McBride, r. f., . . . . .	4	1	0	1	0	0	0	0	
Mooney, 1, . . . . .	3	1	1	0	0	9	0	0	
Miner, c. f., . . . . .	3	0	1	0	1	3	0	0	
Totals, . . . . .	36	6	7	4	2	26*	9	2	

\* Shirley out for overrunning first.

BY INNINGS

	Total								
R. P. I., . . . . .	0	0	1	2	0	0	1	2	0-6
D. P. U., . . . . .	1	0	0	0	0	0	1	0	0-2

First base on balls—Off Daily, 2; off Houghland, 1.  
Struck out—By Daily, 2; by Houghland, 1.  
Double plays—Rose, 1; DePauw, 1.  
First base on errors—Rose, 5; DePauw 2.  
Left on bases—Rose, 8; DePauw, 3.  
Two-base hits—Thomas (2), Shirley, Daily.

MILLIKIN 0, ROSE 2.

May 16, in a slow, uninteresting game, Rose shut out Millikin University by the score of 2 to 0. There is not much to say concerning the game, the score being about all there was to it. Daily was in good form and pitched a steady game, striking out 12 men and allowing but one safe hit. Hill was hit five times and struck out 7 men. The outfielders had a good chance to take it easy as very few balls ever got that far out, especially when Millikin was at bat.

Both runs were made in the first inning. Reed singled to left, stole second, but after reaching third was caught between bases. Douthett and Daily both reached first through errors and scored, in turn, on Freudenreich's fly to third and Stoddard's grounder.

Score :

	M. U.							A.	E.
	A.B.	R.	B.H.	S.B.	S.H.	P.O.	A.		
Scudder, c. f., . . . . .	4	0	0	0	0	0	0	0	
D. McGaughey, 2, 3	0	0	1	0	1	1	1	1	
Miller, c., . . . . .	4	0	1	2	0	8	1	1	
Moses, 3, . . . . .	2	0	0	1	0	2	4	2	
Stocks, 1. f., . . . . .	2	0	0	1	0	0	0	0	
House, s. s., . . . . .	3	0	0	1	0	0	0	1	
W. McGaughey, 1, 3	0	0	0	0	0	11	0	0	
McDavid, r. f., . . . . .	4	0	0	0	0	1	1	0	
Hill, p., . . . . .	3	0	0	0	0	1	4	0	
Totals, . . . . .	28	0	1	6	0	24	11	5	

	R. P. I.							A.	E.
	A.B.	R.	B.H.	S.B.	S.H.	P.O.	A.		
Reed, 1, . . . . .	4	0	1	0	0	10	1	0	
Bland, 1. f., . . . . .	4	0	1	0	0	0	0	0	
Douthett, 3, . . . . .	3	1	1	0	1	0	2	0	
Daily, p., . . . . .	4	1	1	0	0	2	6	0	
Freudenreich, s. s. . . . .	3	0	0	2	0	0	0	0	
Stoddard, 2, . . . . .	4	0	0	2	0	1	1	1	
McBride, r. f., . . . . .	4	0	1	0	0	1	0	0	
Mooney, c., . . . . .	3	0	0	0	1	13	0	0	
Miner, c. f., . . . . .	2	0	0	0	0	0	0	0	
Totals, . . . . .	31	2	5	4	2	27	10	1	

First base on balls—Off Daily, 6; off Hill, 2.  
First base on errors—Rose, 5; Millikin, 0.  
Struck out—By Daily, 12; by Hill, 7.  
Passed balls—Mooney, 0; Moeller, 4.

**DePAUW 2, ROSE 1.**

In our second game this season with DePauw we lost by the score of 2 to 1. This game was played at Greencastle, May 18th, and was very interesting and fast throughout. Douthett pitched for Rose Poly and pitched a better game than Houghland, as he was hit less and allowed fewer men to walk. Rose had the best of the game all the way through, but D. P. U. bunched hits in the sixth and were thus one score ahead of us. DePauw scored in the first and again in the sixth.

First inning. Preston was hit by pitcher, stole second, and scored on a fielder's choice. In the sixth Martin got a two-bagger and scored on a single by Thomas.

Rose scored in the sixth when Bland singled and scored on Daily's single. Score :

D. P. U.							
A.B.	R.	B.H.	S.B.	P.O.	A.	E.	
Martin, 3,	4	1	1	0	1	6	0
Preston, 2,	3	1	0	1	1	1	0
Gibbons, l.f.,	4	0	0	0	0	0	0
Thomas, c.,	3	0	2	1	4	0	0
Shirley, r.f.,	3	0	0	0	3	0	0
Tucker, c.f.,	3	0	1	0	0	0	0
Watson, 1,	3	0	0	0	17	0	0
Miller, s.s.,	3	0	0	0	0	1	1
Houghland, p.,	3	0	0	0	1	8	0
Total	29	2	4	3	27	16	1

R. P. I.							
A.B.	R.	B.H.	S.B.	P.O.	A.	E.	
Reed, c.,	4	0	0	0	8	1	0
Bland, l.f.,	4	1	1	0	0	0	0
Douthett, p.,	4	0	1	0	1	4	0
Daily 3.,	4	0	1	1	4	1	0
Freudenreich, 2,	4	0	0	0	1	3	0
Stoddard, ss.,	4	0	0	0	0	2	1
McBride, r.f.,	2	0	1	1	2	1	0
Mooney, 1,	3	0	1	0	8	1	0
Miner, c.f.,	3	0	0	0	0	1	0
Total	32	1	5	2	24	14	1

First base on balls—off Douthett, 0; off Houghland, 1.  
Struck out—by Douthett, 6. by Houghland, 4.  
Double plays—Rose, 1.

**WASHINGTON 1, ROSE 3.**

On May 19, Rose Poly defeated Washington University in a very fast ten-inning game by the score of 3 to 1. Daily pitched a very good game,

and though Rose did not score the winning run till the tenth inning, they outplayed their adversaries at every point, as will be seen by following detailed score below.

Washington scored in the fourth. Anderson walked, stole second and third and came in on Title's grounder. Rose first scored in the seventh, when Mooney walked, took second on Miner's sacrifice hit, stole third, and scored on Douthett's single.

Although Rose only needed one point to win, two were made in the tenth, even after there were two outs, thus giving us the game with some to spare.

Score :

W. U.									
A.B.	R.	B.H.	S.B.	S.H.	P.O.	A.	E.		
Robinson, s. s.,	3	0	0	1	0	1	0	1	
Krause, r f.,	4	0	0	1	0	3	0	1	
Thomas, 1,	4	0	0	0	0	14	0	2	
Anderson, c.,	3	1	1	3	0	4	2	0	
Title, p,	4	0	0	0	0	0	4	0	
Richardson, 2,	4	0	1	0	0	4	7	1	
Logan, c. f.,	4	0	0	0	0	1	0	0	
Morgan, l. f.,	3	0	0	1	0	0	0	0	
Benecke, 3,	4	0	0	0	0	3	0	2	
Totals,	33	1	2	6	0	30	13	7	

R. P. I.									
A.B.	R.	B.H.	S.B.	S.H.	P.O.	A.	E.		
Reed, c.,	5	0	0	1	0	7	1	0	
Bland, l. f.,	5	1	1	0	0	3	0	0	
Douthett, 3,	4	0	1	1	1	3	4	0	
Daily, p.,	5	0	0	0	0	1	2	0	
Freudenreich, 2,	5	1	1	0	0	1	3	0	
Stoddard, s. s.,	5	0	1	0	0	2	2	1	
McBride, r. f.,	5	0	0	0	0	1	1	0	
Mooney, 1,	1	1	0	0	0	11	1	0	
Miner, c. f.,	3	0	1	0	1	1	0	0	
Totals,	38	3	5	2	2	30	14	1	

First base on balls—Off Daily, 2; off Title, 2.  
First base on errors—Rose, 7; W. U., 1.  
Left on bases—Rose, 10; W. U., 5.  
Struck out—By Daily, 7; by Title, 4.  
Two-base hits—Stoddard.  
Earned Runs—Rose, 2; Washington, 0.

**INDIANA 5, ROSE 0.**

In a fast and exciting game I. U. shut out Rose by the score of 5 to 0. It was almost entirely a pitcher's battle and Daily had considerably the

best of it ; except for the seventh inning he played a better game than Hunter. Daily's support was not all it should have been or we would not have had such a score against us.

Indiana scored first in the second inning, this score was the result of a base on balls and a combination of errors and wild throwing, which let Reasoner have three bases in succession after he started for second.

In the seventh inning Daily went up in the air for a few minutes but before he had settled down there were three hits and three runs against him with men on the bases. After this he allowed only one hit, but it brought in another run.

Rose Poly's hopes rose in the ninth when Daily walked, Freudenreich, singled and Stoddard walked, but there were two outs and McBride knocked an easy grounder to Boyle. Score :

	I U.						
	A.B.	R.	B.H.	S.B.	P.O.	A.	E.
Bradbury, 3, . . . . .	5	0	1	0	3	3	0
Robinson, s.s., . . . . .	4	0	0	0	0	0	0
Boyle, 2, . . . . .	4	0	3	1	2	4	0
McFerran, c., . . . . .	4	0	0	0	10	1	0
Kempf, r f., . . . . .	3	1	1	0	1	0	0
Reasoner, 1, . . . . .	3	2	1	0	10	0	1
Rau, c.f., . . . . .	4	1	1	0	0	0	0
Fox, c.f., . . . . .	4	1	1	0	0	0	0
Hunter, p., . . . . .	4	0	0	0	1	3	0
Total, . . . . .	36	5	8	1	27	12	1

	R. P. I.						
	A.B.	R.	B.H.	S.B.	P.O.	A.	E.
Reed, c., . . . . .	4	0	0	0	11	0	0
Bland, l.f., . . . . .	4	0	0	0	1	0	0
Douthett, 3, . . . . .	4	0	1	0	0	3	1
Daily, p., . . . . .	3	0	0	0	1	5	0
Freudenreich, 2, . . . . .	3	0	1	1	2	1	1
Stoddard, s.s., . . . . .	3	0	0	0	1	2	1
McBride, r.f., . . . . .	4	0	1	1	0	0	0
Mooney, 1, . . . . .	2	0	0	0	11	0	0
Miner, c.f., . . . . .	3	0	1	0	0	0	1
Total, . . . . .	30	0	4	2	27	11	4

BY INNINGS.

	Total									
R. P. I. . . . .	0	0	0	0	0	0	0	0	0	0
I. U. . . . .	0	1	0	0	0	0	4	0	0	5

First base on balls—off Daily, 3; off Hunter, 4.  
Struck out—by Daily, 11; by Hunter, 8.  
Two-base hit—Miner.

DePAUW 2, ROSE 4.

May 30, DePauw and Rose met for the third time this season, at the League Park, Terre Haute. After a fast and interesting game, D. P. U. went home without having won. In the first game at Greencastle, Poly won 6 to 2; in the second, also at Greencastle, DePauw won 2 to 1, so winning this last game gives us the best two out of three games.

There was considerable hitting done during the game, but the activity of the fielders, especially the Poly men, kept the number of safe hits down low.

DePauw scored first in the third and again in the eighth.

Poly's scores were pretty well scattered through the game.

Daily was once prevented from scoring because the DePauw catcher was in his way at home plate, and when Daily ran into him he failed to touch the plate and was put out.

Score :

	D. P. U.							
	A.B.	R.	B.H.	S.B.	S.H.	P.O.	A.	E.
Gibbons, l.f. . . . .	4	0	0	0	0	1	0	0
Preston, 2, . . . . .	4	0	0	0	0	3	2	0
Thomas, 3, . . . . .	3	1	1	0	0	0	2	0
Shirley, r.f., . . . . .	4	0	1	1	0	2	2	0
Tucker, c., . . . . .	3	0	0	0	1	2	1	1
Davis, c.f., . . . . .	3	1	0	0	0	2	0	0
Watson, 1, . . . . .	2	0	0	0	0	9	0	2
Miller, s.s., . . . . .	3	0	0	0	0	3	0	0
Houghland, p., . . . . .	3	0	0	0	0	2	4	0
Totals, . . . . .	29	2	2	1	1	24	11	3

R. P. I.

	R. P. I.							
	A.B.	R.	B.H.	S.B.	S.H.	P.O.	A.	E.
Reed, c., . . . . .	4	0	0	0	0	2	2	1
Bland, l.f., . . . . .	4	2	2	1	0	2	0	0
Douthett, 3, . . . . .	3	1	1	1	1	0	1	1
Daily, p., . . . . .	3	1	0	0	1	3	3	0
Freudenreich, 2, . . . . .	4	0	3	1	0	0	6	1
Stoddard, s.s., . . . . .	4	0	1	1	0	2	1	0
McBride, r.f., . . . . .	3	0	0	0	0	4	0	0
Mooney, 1, . . . . .	2	0	0	0	1	12	0	0
Miner, c.f., . . . . .	2	0	0	0	1	2	0	0
Totals, . . . . .	29	4	7	5	4	27	13	2

BY INNINGS.

	Total									
R. P. I. . . . .	2	0	1	0	1	0	0	0	0	4
D. P. U., . . . . .	0	0	1	0	0	0	0	0	0	1-2



First base on balls—off Daily, 4; off Houghland, 1.  
 First base on errors—Rose, 3; DePauw, 1.  
 Struck out—by Daily, 2; by Houghland, 1.  
 Three-base hit—Long  
 Two-base hits—Daily (2); Freudenreich.  
 Double plays—DePauw two.

**NORMAL 3, ROSE 14.**

The Poly base-ball team, assisted by a good crowd of rooters, and our old-time friend, the elephant, administered to the Normals a defeat so stinging, so overwhelming, that after the first two or three innings it took all the life and spirit out of the Normal team's playing.

Our boys, on the contrary, played a snappy game throughout, the kind of game it does your heart good to watch. Superior hitting won the game. Three Normal pitchers tried their luck, but all with the same result; fifteen hits in all were recorded for our men. The fielding of the Polys was also much faster than that of the Teachers.

Bland laced out two three-baggers, while Douthett got three safe ones. Daily pitched a good, steady game, allowing but two hits, and striking out thirteen. Lee made his initial bow to the public in base-ball uniform, and made good with the rooters.

The following score tells the tale:

I. S. N.						
	A.B.	R.	B.H.	P.O.	A.	E.
Cauble, c., . . . . .	4	0	0	8	2	2
Nutt, 3b. and p., . . . . .	3	0	0	1	2	1
Spencer, lb., . . . . .	3	0	0	9	1	0
Mitchell, p., 3b. and s. s., . . . . .	3	1	0	2	4	2
Reece, s. s. and p., . . . . .	2	2	0	0	3	0
Keiser, l. f., . . . . .	4	1	1	1	0	1
Medlock, r. f., . . . . .	4	0	0	2	0	0
Francis, c. f., . . . . .	3	0	1	1	0	0
Reeves, 2b., . . . . .	3	0	0	3	1	0
Totals, . . . . .	29	3	2	27	13	6

R. P. I.						
	A.B.	R.	B.H.	P.O.	A.	E.
Reed, c., . . . . .	5	2	2	13	0	1
Bland, l. f., . . . . .	4	2	2	2	1	0
Douthett, 3b., . . . . .	5	3	3	1	1	0
Daily, p., . . . . .	4	2	1	2	3	0
Freudenreich, 2b., . . . . .	4	1	3	1	0	2
McBride, r. f., . . . . .	5	1	1	1	0	0
Stoddard, s. s., . . . . .	5	1	1	0	3	1
Mooney, lb., . . . . .	4	2	2	7	0	0
Lee, c. f., . . . . .	4	0	0	0	0	0
Totals, . . . . .	40	14	15	27	8	4

BY INNINGS.						
	0	1	2	3	4	5
R. P. I., . . . . .	0	2	2	0	2	3
I. S. N., . . . . .	0	2	0	0	0	0

Two-base hits—Douthett (2), Freudenreich, Reed, Keiser.  
 Three-base hits—Bland (2).  
 Double plays—Rose, 1; Normal, 1.  
 Struck out—By Daily, 13; by Mitchell, 3; by Nutt, 1; by Reece, 2.  
 Passed balls—Reed, 2; Cauble, 2.  
 Attendance, 1,000.

**WABASH 6, ROSE 2.**

Wabash, the team which probably wins the state championship, defeated our team in the last game of the season, on June 6. Rose's playing was characterized by several rank errors, which were responsible for the large score. Daily pitched good ball, except in the third, and with good support would have held the Presbyterians down to one or two runs. In the ninth inning, Stoddard was blocked at the plate by the Wabash catcher, and tripped up, breaking his right shoulder in the fall.

Score:

WABASH.						
	A.B.	R.	B.H.	P.O.	A.	E.
Diddle, c. f., . . . . .	5	0	0	0	0	0
Davis, 3b., . . . . .	4	1	1	2	2	0
Coen, lb., . . . . .	5	0	1	8	0	0
Batten, 2b., . . . . .	4	0	0	0	0	1
Hubart, s. s., . . . . .	4	1	0	0	3	0
Sprow, c., . . . . .	3	0	0	12	1	0
Myers, l. f., . . . . .	4	1	1	3	0	0
Valenti, r. f., . . . . .	4	2	2	0	0	0
Rubush, p., . . . . .	4	1	1	2	0	0
Totals, . . . . .	37	6	6	27	6	1

R. P. I.						
	A.B.	R.	B.H.	P.O.	A.	E.
Reed, c., . . . . .	5	0	0	8	2	0
Bland, l. f., . . . . .	3	1	1	1	0	0
Douthett, 3b., . . . . .	4	0	1	1	0	1
Daily, p., . . . . .	4	0	2	0	6	0
Freudenreich, 2b., . . . . .	4	0	0	4	3	2
McBride, r. f., . . . . .	3	0	1	0	0	0
Stoddard, s. s., . . . . .	4	1	0	0	3	5
Mooney, lb., . . . . .	2	0	0	12	0	0
Lee, c. f., . . . . .	4	0	1	1	0	0
Totals, . . . . .	33	2	6	27	14	8

SCORE BY INNINGS.												
	0	1	2	3	4	5	6	7	8	9	10	11
Wabash, . . . . .	0	0	3	1	0	0	1	0	1	0	1	6
R. P. I., . . . . .	0	0	0	1	0	0	0	0	0	0	1	2

Base on balls—Off Daily, 1; off Rubush, 3.  
 Struck out—By Daily, 6; by Rubush, 11.  
 Double plays—Rose, 1; Wabash, 1.

Below are given the individual averages of the players:

BATTING.		FIELDING.	
Daily, . . . . .	315	A. Lee, . . . . .	1000
Douthett, . . . . .	268	Daily, . . . . .	986
Bland, . . . . .	240	Reed, . . . . .	980
Freudenreich, . . . . .	200	Mooney, . . . . .	974
Reed, . . . . .	191	McBride, . . . . .	929
Miner, . . . . .	163	Bland, . . . . .	920
McBride, . . . . .	151	Douthett, . . . . .	910
Mooney, . . . . .	137	Miner, . . . . .	882
A. Lee, . . . . .	125	Stoddard, . . . . .	800
Stoddard, . . . . .	87	Freudenreich, . . . . .	800
Lewis, . . . . .	0	Lewis, . . . . .	334
Thurman, . . . . .	0	Thurman, . . . . .	0



PAUL E. TURK.

Mr. Turk was the star of the Rose track team in the past season. He won 28 of Rose's 47 points in the I. C. A. L. meet. He has been elected captain of the team for next year.

**TRACK ATHLETICS.**

**THE CULVER MEET.**

On May 6, nine men from the Rose track team defeated the Culver Military Academy team by a score of 66 to 51 on their own field.

This was the first meet this year in which our team competed, and everyone was anxious to see what the result would be. Although no records were broken, everyone was well satisfied with the outcome.

Modesitt finished the high hurdles in 16 seconds, but it was discovered afterward that there were only nine hurdles in the course.

Neither Turk nor Wischmeyer was pushed in the broad jump, and Modesitt almost took third place. In the high jump no one was able to push Wischmeyer over 5 ft. 4 inches.

Ryan failed to notice the last hurdle while running his heat of 120-yd. hurdles, and although he cleared it, he was a very little behind Barnes at the finish.

We wish to thank Manager Fleet and all the faculty and student body of Culver for the fine treatment the team received while their guests. All who took that trip will remember it as one of their most pleasant experiences.

**SUMMARY OF EVENTS.**

100-yd. dash—1, Turk, R.; 2, Lee, R.; 3, Sohl, C. Time, 10<sup>2</sup>/<sub>3</sub>".

12-lb. hammer throw—1, Brannon, R; 2, Cavanah, C.; 3, Fegan, C. Distance, 131' 4".

120-yd high hurdles—1, Modesitt, R.; 2, Fleet, C.; 3, Barnes, C. Time, 16<sup>1</sup>/<sub>3</sub>".

12-lb shot put—1, Cavanah, C.; 2, Turk, R.; 3, Owen, C. Distance, 47' 9<sup>3</sup>/<sub>4</sub>".

Half-mile run—1, Neidig, C; 2, Holuback, C.; 3, E. Lee, R. Time, 2' 12".

Discus throw—1, Turk, R.; 2, Cavanah, C.; 3, Owen, C. Distance, 101' 3".

220-yd. dash—1, Turk, R.; 2, Lee, R.; 3, Sohl, C. Time, 24".

Running broad jump—1, Turk, R.; 2, Wischmeyer, R.; 3, Maders, C. Distance, 20' 7<sup>3</sup>/<sub>4</sub>".

Pole vault—1, Lee, R.; 2, Smith, C.; 3, Willien, R. Height, 10' 0".

220-yd. low hurdles—1, Sohl, C.; 2, Lee, R.; 3, Barnes, C. Time, 28<sup>2</sup>/<sub>3</sub>".

Running high jump—1, Wischmeyer, R.; 2, Turk, R.; 3, Smith, C. Height, 5' 5".

Mile run—1, Cannon, R; 2, Sohl, C.; 3, Holuback, C. Time, 5' 27<sup>1</sup>/<sub>2</sub>".

440-yd. dash—1, Neidig, C.; 2, Brewer, C.; 3, Cannon R. Time, 56".

\*Only 9 hurdles.



THE NORMAL MEET.

On May 13, the Poly track team held a dual field meet with the State Normal team, with the result that our ancient rivals were defeated by the *low* score of 92 to 25!

Despite the fact that the day was rainy and the track slow, two I. C. A. L. records were beaten and one tied. Turk, in the running broad jump, cleared 22 ft., 4½ in., better than both the I. I. A. A. and the I. C. A. L. records. Brannon threw the hammer 105 ft. 3 in., and Modesitt tied the record of 28½ for the low hurdles. From the very first the Rose men had their adversaries outclassed at nearly every point, the Normalites getting only one first in the whole meet.

Turk, as usual, was the high score man, winning five firsts.

All the men were in fairly good form, but they did not do so well in the meet that they quit working for the state meet; seeing where improvement was needed, they worked all the harder the following week, with the result that all entered the state meet in good condition.

SUMMARY OF EVENTS.

220-yd Hurdles—1, Modesitt, R.; 2, Ryan, R.; 3, Willien, R. Time, 28½'.

Discus hurl—1, Turk, R.; 2, Brannon, R.; 3, Payne, N. Distance, 97' 8''.

220-yd. dash—1, Turk, R.; 2, A. Lee, R.; 3, Benham, N. Time, 24½'.

Running high jump\*—1, Eastwood, R.; 2, Wischmeyer, R.; 3, Weathers, N. Height, 4' 8''.

Mile run—1, Gates, N.; 2, Brice, N.; 3, Cannon, R. Time, 5' 7½'.

440-yd dash—1, McCormick, R.; 2, Willien, R.; 3, Greene, N. Time, 57½'.

One-half mile run—1, McCormick, R.; 2, Gates, N.; 3, E. Lee, R. Time, 2' 7½'.

Running broad jump—1, Turk, R.; 2, Wischmeyer, R.; 3, Modesitt, R. Distance, 22' 4½'.

120-yd. hurdles—1, Ryan, R.; 2, Modesitt, R.; 3, Barnes, N. Time, 18½'.

Shot-put—1, Turk, R.; 2, McDonald, N.; 3, Cissna, N. Distance, 35' 8''.

100-yd. dash—1, Turk, R.; 2, A. Lee, R.; 3, Benham, N. Time, 10½'.

Hammer throw—1, Brannon, R.; 2, Greene, N.; 3, Cissna, N. Distance, 105' 3''.

Pole vault—Normal defaulted to Rose.

\*High jump unfinished on account of rain.

I. C. A. L. FIELD MEET.

On May 18, 19 and 20, was held the third annual championship meet of the Indiana College Athletic League. This meet consisted of tennis tournaments and a track meet. The tennis tournaments were held on the Poly campus, with results as follows:

DOUBLES.

Hanover from Earliham, . . . . . 6-3, 6-2  
Hanover from Rose, . . . . . 6-1, 6-0

SINGLES.

Earlham from Rose, . . . . . 10-8, 7-5  
Hanover from Earlham, . . . . . 6-2, 6-0, 6-0

In the doubles Rose was represented by Wickersham and Hathaway; Earlham by A. W. Jenkins and W. W. Jenkins; and Hanover by Whalen and Oldfather. In the singles Willien played for Rose, W. W. Jenkins for Earlham, and Oldfather for Hanover.

The track meet proper took place on Parsons Field, May 20. Rose, Earlham, Wabash and the State Normal were each represented by a team.

The weather was pleasant, and a fairly large number witnessed the events.

Mr. Wm. E. Day, of the Dayton Y. M. C. A., acted as referee, and it was due to him that everything went off smoothly and to the satisfaction of all concerned.

Although the track was in a very bad condition, five records were broken. Andrus ran the high hurdles in 16½ sec., thus breaking Peddle's (Rose) record of 17 sec. Turk broke the 440-yd. dash and the running broad jump records of 54 sec. and 21 ft. 5¾ in., respectively, by making 53½ sec. and 21 ft. 6½ in. In the hammer throw, Brannon, of Rose, broke his own record (100 ft. 6 in.) and threw the weight 110 ft. 9 in. Kramien and Brunson, of Earlham; Miller, of Wabash, and Larkins, of Rose, all made 10 ft. 2 in. in the pole vault. This is one inch better than the record, but Kramien was able to reach 10 ft. 6 in., thus making a new record. H. Bond, Earlham, hurled the discus 102 ft. ¼ in., and as this is a new event in the I. C. A. L., that will be a record.

Both trial heats of the 220-yd. hurdles were



run in 28 seconds, but, through a mistake, no time was caught officially on the final heat. It is thought by most of those in a position to know that the final was some faster than the trial heats.

The contest between Rose and Earlham was close and exciting, as the scores would first favor one and then the other. These two colleges have always been the leaders in this league, and Earlham has for the last two years held the championship.

Things looked dark for Rose when Wischmeyer, holder of the record of 5 ft. 7 in., failed to score in the running high jump, and when McCormick did likewise in the half-mile run, but he, like Wischmeyer, was so unfortunate as to have an "off" day at the wrong time.

Peddle, formerly holder of the high hurdle record, has been unable to train for the hurdles this year, and consequently did not score in that event.

Turk, of Rose, had the highest individual score—28 points—to his credit.

SUMMARY OF EVENTS.

100-yd. dash—1, Turk, R.; 2, A. Lee, R.; 3, Hartman, W. Time, 10 $\frac{1}{5}$ ".

Half-mile run—1, Wann, E.; 2, L. McCreary, E.; 3, Reed, W. Time, 2' 8 $\frac{1}{5}$ ".

120-yd. hurdles\*—1, Andrus, W.; 2, Miller, W.; 3, Maple, E. Time, 16 $\frac{2}{3}$ ".

220-yd. dash—1, Turk, R.; 2, A. Lee, R.; 3, Sparks, W. Time, 23 $\frac{2}{3}$ ".

Mile run—1, Reed, W.; 2, McKinney, W.; 3, L. McCreary, E. Time, 4' 47 $\frac{2}{3}$ ".

220-yd. hurdles—1, Modesitt, R.; 2, A. Lee, R.; 3, Andrus, W. Time, none

440-yd. dash\*—1, Turk, R.; 2, Wann, E.; 3, Grave, E. Time, 53 $\frac{2}{3}$ ".

Discus hurl\*—1, H. Bond, E.; 2, Turk, R.; 3, Spaulding, W. Distance, 102' 0 $\frac{1}{4}$ ".

Running high jump—1, A. Bond, E.; 2, Kramien, E.; 3, Weathers, N. Height, 5' 4 $\frac{1}{2}$ ".

Shot-put—1, Turk, R.; 2, Wann, E.; 3, Spaulding, W. Distance, 34' 2 $\frac{1}{2}$ ".

Running broad jump\*—1, Turk, R.; 2, Brunson, E.; 3, A. Bond, E. Distance, 21' 6 $\frac{1}{2}$ ".

Hammer throw\*—1, Brannon, R.; 2, Greene, N.; 3, Cissna, N. Distance, 110' 9".

Pole vault\*—1, Kramien, E.; 2, Miller, W.; 3, Brunson, E. Height, 10' 6".

\*Events marked with an asterisk (\*) are those in which records were broken.

Points won by each school:

Rose, . . . . .	47
Earlham, . . . . .	40
Wabash, . . . . .	25
State Normal, . . . . .	5

THE I. I. A. A. MEET.

Rose entered a team of six men in the annual Intercollegiate Athletic Association meet this year at Bloomington. Of course, no one expected them to win the meet, or even to come out near the top, the gaining of a few points being all that was hoped for. Turk, of Rose, took first in the 220-yd. dash and in the broad jump, while A. Lee (Rose) took third place in the 100-yd. dash, making, in all, 11 points.

The scores of the different contesting schools were as follows:

Indiana University, . . . . .	56 $\frac{1}{3}$
Purdue, . . . . .	37 $\frac{2}{3}$
Notre Dame, . . . . .	16
Rose, . . . . .	11
Wabash, . . . . .	5
DePauw, . . . . .	0

MANAGERS AND CAPTAINS, 1905-1906.

The following have been elected managers and captains of their teams:

Foot-ball—F. N. Hatch, manager; A. W. Lee, captain.

Basket-ball—E. S. Butler, manager; J. M. Johnson, captain.

Track Team—Donald McDaniel, manager; Paul E. Turk, captain.

Base-ball—A. W. Worthington, manager; Frank P. Mooney, captain.

GENERAL NOTES.

We are glad to be able to present in this number pictures of both the base-ball and track teams.

The track team received a telegram from Rose Tech Club, Louisville, Ky., congratulating them on their victory, May 20.

We quote the following from *The DePauw*:

"He (Daily) is the best visiting pitcher seen on McKeen Field this year. He has a good assortment of curves and a remarkably cool head."

We would come nearer to agreeing with them if they should leave out the word "visiting."



Our track team has won the I. C. A. L. championship at last. The third time was the charm.

The maker of the pennant displayed very good taste, as well as keen foresight, when he made it in Old Rose and White.

We should perhaps republish Addie's smile, but we fear that the cut is almost worn out. However, we want it known that the smile is still there.

Normal scored one first place in the dual meet with Poly.

Mexico, addressing a brewery in quest of a job, asked what they could offer a technical graduate. He received a reply stating that they would be pleased to offer him a glass of beer whenever he happened to be visiting the city.

E. B. Hunley, '08, has been initiated into the M. E. P.

Strange, isn't it, that when Mac took a sun observation with a non-inverting telescope, the sun was moving the wrong way?

At a ball game—"Down in front, there; we want to see something of the game."

Turk—"Pardon me, but I have a pain in my back, and I thought you could see right through me."

Routledge (on Decoration Day)—"This seems like Sunday to me."

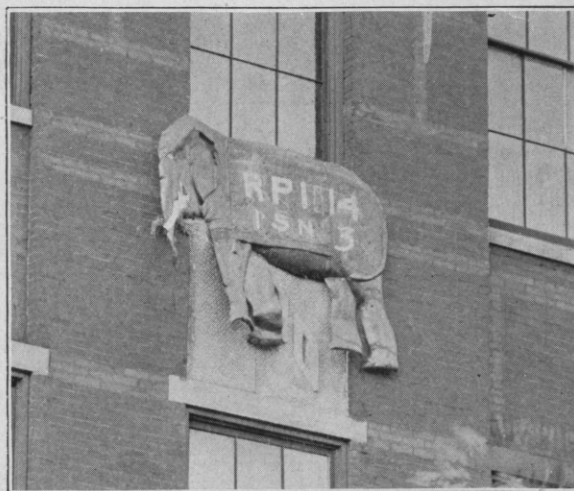
Albin—"It don't to me; if it had been, I'd gone to church."

From a Senior's thesis—"The pipe line is 300 feet long, and terminates in a crib." And this right at examination time!

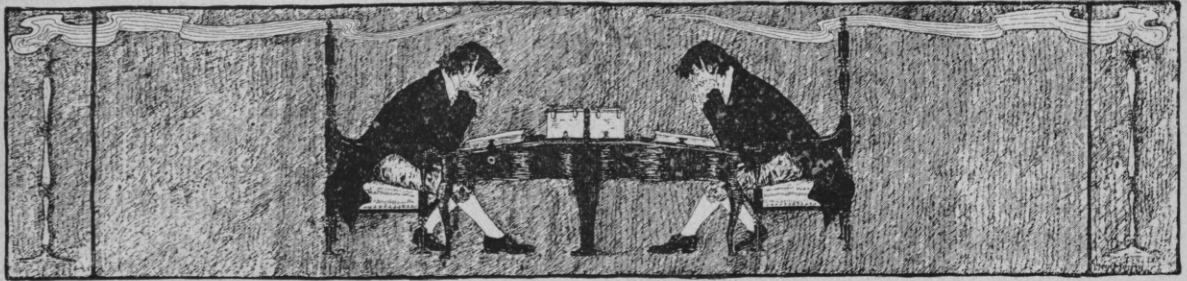
We note in the *Star* that "the Rose Poly boys purchased the elephant."

It was a surprise to some of Mexico Wood's many friends to find him one Sunday evening recently engaged in hydraulic engineering, as he called it, but which looked to others like the pumping of a pail of water; and all for the benefit of a certain charming young lady who plays an important part in supplying the wants of the inner man at the place which Wood visited thrice daily, but his friends join in wishing him all happiness.

The elephant ate all night,  
The elephant ate all day,  
We took him to the I. S. N.,  
And still he cried, "More hay!"







## REVIEWS

LAREDO, Texas, was visited, on the night of April 28, with a tornado, which must have been one of terrific violence. The most unusual destruction which it accomplished was the havoc which it wrought with the International Bridge, which spans the Rio Grande River at that place. The bridge consisted of five spans of 150 ft. each, and an approach of 60 ft. on the Texas side. The storm apparently came down the river close to the Mexican side, and hit the two spans of the bridge close to that side. These two spans were lifted completely from their moorings and hurled into the river. The rest of the structure received comparatively little damage. The bridge was carried on steel cylinders filled with concrete, and they in turn were imbedded in good concrete foundations. Cracks occurred in the foundations some time ago, but they were recently repaired. The storm produced such a strain on the down stream side that the foundation was cracked again, but this is not considered serious. The damage is estimated at \$20,000.

THE TECHNIC is in receipt of an extremely handsome and interesting little booklet, descriptive of the Lifting Magnets manufactured by the Electric Controller & Supply Co. These magnets are coming into very general use, and have proved great labor savers wherever iron of any description is handled in quantity. It is very interesting to see them at work, and we publish herewith a list of the places where they are in use:

Central Iron & Steel Co., Harrisburg, Pa.  
Wellman-Seaver-Morgan Co., Cleveland, O.

New York Ship Bldg. Co., N. J.  
Panama R. R. Co., Panama, Central America.  
Moran Bros. Co., Seattle, Wash.  
American Sheet Steel Co., Scottsdale, Pa.  
Standard Steel Wks., Burnham, Mifflin Co., Pa.  
Mosler Safe Co., Hamilton, Ohio.  
Illinois Steel Co., Chicago, Ill.  
American Bridge Co., Ambridge, Pa.  
Milliken Bros., Brooklyn, N. Y.  
Lackawanna Steel Co., Buffalo, N. Y.  
LaBelle Iron Wks. Co., Steubenville, Pa.  
Lukens Iron & Steel Co., Coatesville, Pa.  
Jones & Laughlin Steel Co., Pittsburg, Pa.

COMPARATIVE locomotive tests on the New York Central experimental track near Schenectady, were made on April 29 with one of their new electric locomotives, and a steam locomotive of the Pacific type. The latter was about 67½ ft. long and weighed 342,000 lbs. The electric locomotive was 37 ft. long and weighed 200,500 lbs. The track was 6 miles long, laid with 80-lb. rail, and was in good condition. On account of the restricted cross-section of the conductors, the voltage of the electric locomotive dropped considerably lower during acceleration than it will in actual practice within the New York Central electric zone, near New York. Consequently the results obtained with the electric locomotive are much less favorable than those to be expected in actual practice. Six runs in all were made, but the most important was one with six car trains, in which the electrical conditions were closer to those of practical conditions than the others. On this test the electric locomotive,



hauling a revenue bearing load of  $307\frac{1}{4}$  tons, reached a speed of 50 miles per hour in 127 seconds, while the Pacific type locomotive, hauling 256 tons of revenue bearing load, required 207 seconds to attain this speed. In every case the electric locomotive overtook and passed the steam locomotive before the power was shut off.—[From *Engineering Record*.

**E**VER since the scheme of developing electrical power from Niagara Falls was proposed, its development has met with hearty opposition on the part of those who wish to preserve the beauty of the Falls. This opposition looked foolish at first, but now matters are beginning to take on a more serious caste. A total of no less than 74,200 cubic ft. of water per sec. is now authorized to be drawn from the Niagara River and the great lakes above the falls. This volume of water is 33 per cent. of the normal and 45 per cent. of minimum discharge. Of course all of this water is not in use yet, and what is being used is scarcely missed, but what will happen when all the amount is used? Mr. Alton B. Adams, in the *Engineering Magazine*, says that "If the diversion of this water above the falls does not entirely dry up the American cataract, this result will certainly be accomplished by a few more large grants."

Such a thing, of course, ought not to be allowed to occur. Mr. Adams suggests that instead of using the water above the falls, that the

power going to waste in the White Horse Rapids be put to use. He suggests two schemes for doing this. First, by constructing a tunnel 10,000 ft. long, with the intake near the Canadian bridge, and exit near Lewiston, a fall of 80 ft. and a total of 2,000,000 horse power may be obtained. The second scheme is a stupendous one. He proposes to dam the river at Lewiston with a dam 100 ft. high. This would make a tremendous storage reservoir of the Gorge, a place where there was almost unlimited power on tap, so to speak. As Mr. Adams says, "This would provide all the energy that could be utilized within 300 miles of the falls in at least the next half century. Those who have enjoyed the wild scenery of the White Horse Rapids at close range will be loath to give them up, but when the hard alternative is to drown these rapids or dry up the American Falls, the former seems much the less of the two evils."

**T**HE *Proceedings of the American Institute of Electrical Engineers*, for May, among other valuable articles, contains an interesting mathematical discussion on "The Limits of Injurious Sparking in direct-Current Commutation," by Mr. Thorbwin Reed. The *Proceedings of the Society of Civil Engineers* contains an unusually interesting article about "The Hydraulic Plant of the Puget Sound Power Company," by Mr. Edwin H. Warner.



