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VOL. XXIII

TERRE HAUTE, IND., NOVEMBER, 1913

No. 2

THE TECHNIC

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TERMS.

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ON December 5th the ladies of the faculty expect to entertain one-half of the student body with a dinner at the Herz Tea Room, and at a later date, probably in February, to entertain the remainder. Those of us who attended the dinners of last year remember with satisfaction the delicious repast and the pleasant toasts and talks that followed. Our ladies are to be highly commended for their generous hospitality. These entertainments have been the means of drawing more closely the ties which bind us to our school and will be held as bright spots in our memories of our sojourn at Rose.

However, let us, the student body do our part as guests. Last year quite a number were dilatory in replying to their invitations and a few who were expected failed to arrive. Now the fact that we are training ourselves to be engineers does not mean that we need not be gentlemen in every sense of that word and obey those conventions and proprieties which society demands of us. Every one who has been invited should make every effort to attend, and when he does arrive give himself over most thoroughly to the spirit of the evening. The place cards will be arranged haphazard and though we may not be sitting amongst our own particular clique or set of friends we must remember that every Rose man is a particular friend to every other Rose man. The purpose of these entertainments is to acquaint us more thoroughly with each other for it is upon democracy in its widest meaning that school spirit depends and upon school spirit, in a large measure, depends the success of a school in its task of training men.

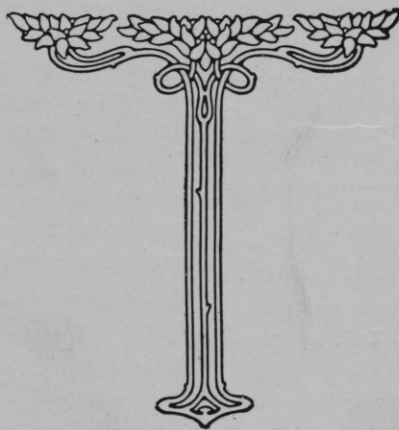
Let us not forget then the kindly, generous spirit in which these dinners are given, and our duty to our hostesses. Let us go, thaw out, and enjoy ourselves. Remember our motto is Boost!

BOTH the leading and Alumni articles this month are by members of the class of '01. The leading article is by Harvey A. Schwartz, who at present is Assistant Superintendent of the National Malleable Casting Co. in Indianapolis. His subject, while not strictly technical, is one of great interest to students of engineering, as it deals with the relation of engineers

towards the labor which comes under their hand. It gives an idea of what is demanded of an engineer in a line which the curriculum of a school does not include.

The Alumni article is by Max J. Hammel, who at present is located in Terre Haute with the Herz Bazaar. It is a general discussion of

fraternities, their effects, defects and advantages as they are found in Rose. The fraternity question is one which is being discussed by all college men throughout the country, and the points brought out by Mr. Hammel furnish food for thought for every student and alumnus.



OUR FELLOW CITIZENS

BY HARRY A. SCHWARTZ, '01

IN presenting an article of a non-technical character to the readers of the *TECHNIC*, a preliminary word of apology is necessary, and yet the subject which the writer hopes to present is perhaps as truly suitable for discussion in an engineering journal, as one dealing with more strictly technical subjects.

The commercially successful engineer is not so much he who has a most profound knowledge of pure and applied science, as he who combines with satisfactory scientific attainments, an understanding of how to so deal with the human material of his undertaking as to secure the best results. Economy, efficiency, accident, prevention, these goals toward which all modern industries are apparently being pressed on by stress of competition, are in the end most fully attained by those whose insight into the thoughts and character of the laboring class is truest and clearest.

An enormous portion of the world's work is carried on by that part of the working community, known as "common labor"; the men who sell their strength and not their skill. The men who possess the qualifications currently supposed to be required of a molder "a clear conscience, a strong back and a weak head," the first qualification being the least necessary. Now, where do these workers come from to mine our coal, to build our railways, bear our burdens and work our roads. A continual supply of these workers, "strong in the arm and weak in the head," is needed that the country's industries may not wither and die. To keep the car of progress moving, an ever increasing army of lowly workers must level the road and put shoulders to the wheels. The United States

add to their population in two ways. The native American population increases fairly rapidly, the birth rate being considerably ahead of the death rate. Also, we import citizens from abroad at a rapidly increasing rate until at present the population is increased considerably over half a million a year from this source alone. For some time this foreign born population and the southern negro have been the principal source of common labor. The young native Americans, at least a generation or two removed from this immigrant ancestor, as a rule is not content to labor. He is impatient of the restraints and drudgery of those who toil with their hands alone.

Ambition drives the able on to become skilled mechanics, foremen, engineers, office or professional men. Others lacking any force to raise them to the upper strata of the industrial atmosphere, save perhaps the buoyancy of an inflated head, become drones, seek some lighter, if less honest, means of maintaining themselves and all too frequently become parasites living at the expense of those more industrious than themselves.

The foreign-born worker is, therefore, of prime importance to the engineer, and it is with this class of the working population that I will deal here, hoping that what I have to say may perhaps be new to a few of the *TECHNIC* readers, who have never been thrown in contact with the "Hunky" laborer.

The so-called native American of the middle west is, as a rule, of course, of British ancestry, his forefathers having come over, if not in the Mayflower, at least quite early in the country's history. This colonial Englishman met the

need for labor in the forcible importation of the negro. English immigration continued for some time. These men, however, were not usually common laborers, but mechanics. The English and Scotch machinists and engineers still remaining in our industries, though now frequently as old and somewhat superannuated employees. The Welsh and Irish, however, were not generally so fortunately situated, and constituted a large part of the early common labor class, so much so that railroad section foremen was almost synonymous with Irishmen. Following these came Germans, many laborers and a large proportion of professional men and others of intellectual type driven from the Fatherland by the troubles of 1848. This population has done but little for the present class of common labor, even those who were originally hand toilers having in the course of generations raised their condition to that of more skilled workers, or been entirely assimilated by the resident population. The Dane and Swede came next, but those who were not skilled tended largely to agriculture and similar pursuits and drifted in most cases to the wheat fields of the great northwest or to the lumber camps.

After them the Jew, who, possessing the instinct of the trader rather than of the toiler, did not enter into the labor field, save only as a worker in the garment industries, which he monopolizes.

After these came the races of Southeastern Europe, Italy, Austria, Russia, Hungary, Poland, the Balkan countries, Turkey, Greece and Syria, largely men of the meaner sort, without education, of low standard of living who have come to compete here for what they believe to be wealth. This class and the negro now constitute the laboring population of the country, together with the restricted oriental immigration of the Pacific States. In the place of the Rafferty's and O'Tooles, who built our railroads yesterday, and the Williams and Evans, who mined our fuel, we have now Demitri, Traike, Malpieri and Cicigoi.

The general public is quite generally of the

opinion advanced by Mark Twain that the Italian does not engage in manual labor, but confines himself to the lighter arts, such as opera singing, organ grinding and assassination. This is in a sense true of the Neapolitan and Sicilian, whose mind runs to a push cart or a monkey as a means of honest livelihood, or if of unscrupulous bent, to the Black Hand.

The Syrian has not yet reached the middle-west in great numbers, and in this section lives mediate district between the two districts comprising largely the countries bordering the Adriatic and Black Seas, however, furnishes the laboring class with which the engineer of the present and near future must accomplish his results. Let us look a little at this alien's antecedents, how he got here, his mode of life and habits of thought in order that we may deal with him as intelligently as we may who will never entirely penetrate the inmost recess of his character.

At home he is generally a tiller of the soil at the best, a bandit at the worst. If he comes from the Balkan States or Austria-Hungary he has served in the army or deserted from it. In either case he has been very thoroughly impressed with a respect for authority. If he is a Macedonian, he has been misgoverned by the Turk whom he cordially hates—and fears; which feeling is reciprocated by the Armenian, who is of Turkish descent. The Austro-Hungarians (Austrians, Slavs, Croats and Hungarians), as well as the racially identical northern Italians, are devout Roman Catholics, Russians, those from the Balkan States, and Macedonians are equally devout Greek Catholics. The two mutually dislike each other's religion and generally each other individually, the Slav's greatest term of disrespect being (spelled phonetically) "Ah Matzedohn." The Armenian is Moslem, as such he is despised by both Greek and Roman Catholics, and himself looks down on the "dog of an unbeliever," who does not agree with him that "there is no God but Allah," and Mohammed is his prophet."

Each race is patriotic and proud of its country and its possibilities. This patriotism is not

mere boasting, for witness the return of Bulgarians, Greeks and Servians by thousands to fight the hated Turk during the recent Balkan war.

The Roman Catholics are usually not illiterate, there being apparently a compulsory system of education as well as the army discipline. Nearly all have learned German, since that is the language of the army. The Hungarian, however, as a rule, will pretend not to know this language, being antagonistic to the Teutonic race which dominates the Dual Empire. The Bulgarian and Greek of the younger generation also has some educational attainments, the older men, however, as well as many Macedonians, are entirely illiterate. All the races are tenacious of their customs and habits, their prejudices and superstitions.

Generally they fear authority, but distrust its disinterestedness. They are clannish and suspicious of the outsider. Docile even servile under rigid discipline they are treacherous in many cases, though usually peaceful when in contact with Americans. Raised in wine growing countries they are habitual drinkers, and very frequently habitual drunkards. Their sense of cleanliness, of modesty and decency, in both men and women is, except in the better classes, purely rudimentary. Their motives in coming to this country are varied. A few leave the country as fugitives from justice, generally having committed some crime of violence, ranging from assault and battery to murder; or have deserted from the army. Such men frequently make most desirable employees. Being unable to return to their homes they are more likely to remain permanently in one's employ and show more tendency to adapt themselves to American conditions. As an example of such men, the writer has observed the work of an Hungarian who left between dark and dawn after having stabbed to death two men in a brawl at a country fair. In some five or six years I have never seen him angry or violent, rarely drunk, and to all orders and instructions the reply is a very cheerful "Oh! Roight."

The great majority come with the intention

of remaining a few years, and then returning to their native land with their savings upon which they expect to live happily ever after. These men are industrious while here, but cannot be counted on owing to a tendency to "go ahead old country" without notice.

A few more are merely afflicted with "wanderlust," a spirit of adventure leading them to roam the earth. One such man, Austrian by birth, I have traced from his own country through Italy to England, to Brazil, where he cut mahogany on the headwaters of the Amazon, through the coal fields of Pennsylvania to the Cripple Creek district of Colorado, and back to Indiana. A man whose spirit of unrest drives him so is rarely to be counted on as a permanent employee.

The last and most desirable element are those who for political or industrial reasons seek this country as a permanent home. They are often married or at least expect to marry soon. They are industrious, saving, hoping to make a home in a new land. An example is an ex-corporal of Austrian cavalry, who left his home on account of a brawl with some civilians and has since married and risen to be a foreman. He and his children speak good English, his wife maintains a neat and cozy home, and he is a power among his own people. Be his reason what it may the immigrant is usually short of funds, consequently he travels steerage. If very short of funds, he takes ship at either Trieste or Salonica, and travels by water the entire way. This is cheap, but slow, also the food is said to be poor. If he be wealthy enough to afford it, he travels by rail to Hamburg, Havre or crosses the channel to England and sails from Liverpool. This journey takes nearly a week less, but is expensive. In either event a necessary preliminary to boarding ship is to pass inspection by the liner's medical officers. These ships' surgeons, quoting a young Slavish boy who came over at the age of fourteen, "fixen you three punches on the arm and turn yo' eye round: hurt like h—," which being translated, means vaccinate you and examine the lower surface of the upper eyelid for glau-

coma. Since emigrants ordered deported by the United States immigration authorities have to be returned to their port of embarkation without charge by the line bringing them over, the transportation companies naturally do what they can to avoid taking on aliens who can not pass examination on this side. The destination of most of the immigrants is New York, a few sailing for Boston, Philadelphia, and Baltimore.

As you stand in Battery Park, New York, besides the Aquarium, which was formerly the immigrant station, after having been a fort and a place of amusement as Castle Garden, you see in the haze of the harbor a small island crowned by a group of brick and stone buildings. This is the government immigrant station on Ellis Island, the gateway through which the immigrants enter the country by hundreds and thousand every day. The island is reached by a government tug, which makes hourly trips to and fro. Passage for visitors is obtained by application to the commissioner of immigration, which involves red tape, or by persuasion of the local authorities. Arriving at the island you are directed to a gallery overlooking the hall, where the new arrivals are examined as to their fitness to enter the country. Roughly, the requirements are freedom from contagious diseases, and from physical disability, which might cause the immigrant to become a public charge. The alien must also show that he has not been convicted of crime, has sufficient resources to maintain himself while seeking work (\$25.00, I believe), and does not hold political opinions not compatible with our form of government, as anarchism, nihilism, etc.

The immigrant is taken from his ship at quarantine by a tender and removed to Ellis Island. Any suffering from curable diseases are held at quarantine or in the Ellis Island infirmary till recovered at the expense of the line which brought them.

The alien then enters the receiving station by a basement door, carrying with him his worldly goods usually tied in a sheet. He has been

caused to bathe and his belongings were fumigated before leaving the liner and he has had a number pinned on him as means of identification.

As you stand in the gallery you see a constant stream of aliens climbing from the basement up an incline to the main floor of the station. Here they pass a desk where they are directed to one of several long passages at each end of which stands a surgeon. The one at the entering end of the passage notes each one's general physical condition. Any appearing in any way defective is stopped and superficially examined. Deformities, etc., are easily stopped, since each man must walk with his hands at his sides carrying his bulky belongings. If the surgeon be suspicious of some defect not readily recognizable by casual examination, tuberculosis, heart diseases, etc., he chalks a symbol on the immigrant's shoulder and passes him on with the sound.

The surgeon at the other end of the passage inspects the men again as they walk toward him, and examines each man's eyelids for glaucoma. Beyond this surgeon the stream separate, those bearing chalk marks go to the detention pens, the others passing on down another long aisle to satisfy an examiner as to their moral and financial condition and destination. The physically unsound are removed, one at a time, and given an exhaustive physical examination. If the suspicions of the first examiner are confirmed, they are held on the island until cured, if this be possible, if incurable, they are deported as are those whose story does not satisfy the examiners.

New York City was formerly a hot bed of persons preying in every possible way on the newly arrived alien. At present only those expressly desiring to live there are put on the government tug and landed at the Battery. Here stands a line of representatives from various benevolent societies, each of whom has convinced the immigration officials of his honesty of purpose. These men endeavor to assist their countrymen in every way possible. Very special precautions are taken in the case of

women coming to join relatives here; to insure their reaching the proper persons in safety, they being detained in the island until the relatives have been duly identified. Those immigrants who do not give New York as their destination are sold railway tickets on the island and ferried to the Jersey City terminals to take their trains.

So far, from his port of embarkation to the train, the immigrant has been under the watchful eye of officers of his ship or of the government. From here on he must wrestle as best he may with the manners and language of a strange country. Generally he is going to some city where he has a "bruder," i. e., some more or less distant relative or friend, who will look out for him. This bruder has often secured him a job in advance; if not, he takes him to his own employer and does what he can.

Occasionally a bruder is not entirely disinterested and collects a fee on the plea of having to bribe the boss. Unfortunately the boss sometimes takes such a fee, though this practice is becoming rare, except in the case of professional employment agents. Some of these even take a fee without furnishing a job.

The alien's next step is to find a home. The Austro-Hungarian usually finds a married man of his own race who runs a boarding and rooming house. The Balkan native joins a club where all share in the cost of food and rent, and hire one man to cook, there being very few Bulgarian or Macedonian women in America. In either case the "hunky" boarding house is a problem to the local health officer. The best location is over or next door to a saloon. For reasons of economy and warmth, five or six persons share a room and every room is a sleeping apartment, including the kitchen.

The ordinary meals are very simple, rye bread, onions, stewed or more rarely roast meat in small amounts and beer being the principal staples. Everybody tears a piece from his own loaf, bites a chunk from his onion, and dips his spoon in the common stew. He resents any invasion of his individual beer bucket. The foreign labor lives thus, not because he does

not earn enough to live decently, but because he wishes to save either for the future or for drink. Wages run from 17c an hour up to \$3.50 or \$4.00 per day, according to the nature of the laborer's work. The decent married men rent a house, or finally buy one, and live as any American worker. The cause of his manner of living is rather to be sought in his tendency to miserliness, sometimes for a laudable purpose, often a mere wish to get something for nothing, as, for example, a Macedonian, who in 1907 joined the bread line at a local church while wearing a money belt containing about \$2,000 in coin. The worthy but misguided ladies who were ministering to his supposed needs, little dreamed that his resources were as great as many of their own. Since he is always seeking an advantage, he believes all others are doing the same thing, and distrusts any innovation even if intended for his benefit. Being unfamiliar with paper money, he has been known to refuse his pay except in coin. If shown new and better ways to work he hesitates, lest his employer reaps a benefit. He is not much of a union man, distrusting the management when not of his race. Socialism and the doctrines of the I. W. W. are more to his taste, being preached by men of kindred nationality. He has a wholesome respect for American law, but will invariably shield his countrymen from its effects, even at a disadvantage to himself. In only one case can I recall a foreigner's turning to the police to secure the punishment of a criminal of his own race. In that case a half-crazed Macedonian killed two and wounded four countrymen in brawl over some money to secure his passage home. Generally he seeks vengeance himself, and bears a grudge for a long time, seeking a suitable opportunity when his enemy may be off his guard. A case was recently noted when a Turk wounded, by shooting, on a crowded street, a negro with whom he quarreled and fought two weeks before. With his employers and other Americans he is almost always harmless, even most abusive and unpopular foremen going unmolested among their men at night. In a few

cases Americans who courted trouble have been injured in foreign saloons and dance halls, but this is very rare.

His English is usually very poor being reminiscent of the language of a parrot which has long been in the society of a drunken pirate. Business with him is conducted in a Pidgin English of mixed bad English, Slavish, Hungarian, German and gestures. At the best he often does not understand, if the duty is distasteful, he shrugs his shoulders, says "me no versteh," and leaves you to explain if you can. He is by nature slow and sluggish and would rather do a job in twelve hours, instead of ten, even for the same money. The Macedonian form an occasional exception to this rule. Politically he has no views. He talks socialism, has been taught in some quarters that "Democrat times" are hard times. In general he is taken into court, swears to his intention of becoming an American citizen, without knowing what he is doing, and then votes as some one else tells him; having, like W. S. Gilbert's *First Lord of the Admiralty*, "never thought of thinking for himself at all."

For protection in case of illness or accident he joins the local branch of one of the many national benefit associations.

Premiums range from 80 cents to \$1.00 a month, increasing with the age of the insured up to 35 years. An additional amount for the wife and each dependent child insured is collected. The applicant is required to be a member in good standing of the Catholic Church

and to pass a physical examination. During disability he received \$2.00 per day, and \$1,000 is paid his widow or other surviving relative on his death. In case of death the entire society attends the funeral, under penalty of fine. A brass band heads the procession, the president of the society walks next, after him two color bearers carrying the American and Austrian flags, then the members two by two, followed by the hearse and members of the deceased's family in carriages. The societies, as a rule, have a useful influence, for example, they do not pay benefits to men injured while drunk.

The customs of the "old country" are strong in all the nationalities. The Macedonian here as abroad, uses the Julian calendar, and celebrates Christmas eleven or twelve days after every one else. All Saints Day and other so-called "big days" are duly observed. If a wedding or christening is celebrated, everybody lays off two or three days and usually comes back drunk.

The "hunky's" greatest disadvantages are drunkenness, lack of responsibility, desire to take advantage of his employer whenever possible, and sluggishness. His strong points are that he is present in large numbers, and will do nearly any class of work. At any rate he is the only class available for common labor, hence the engineer may well study his idiosyncrasies in order that that he may as far as possible overcome his weaknesses and add to his strength.





THE USE OF FRATERNITIES

BY MAX J. HAMMEL, '01.

IT is easier to write something myself than it is to meet the demands of your Alumni Editor to "get" some member of the local Rose Tech Club to write an article for the *TECHNIC*. This is especially true since the requirements plainly state that the paper need not necessarily be of a strictly technical nature.

What then, can a man write, who has finished at Rose, and who has not followed the profession for which he was specially trained?

An article that should interest the technical student body of the school must have something to do with the school.

After much study on my part and an examination of the various uses to which I have put my technical training I find that I might be able to tell you of the "resisting strength" of an improperly prepared beef steak, the breaking strength of a hammock hook (a subject in which I suppose many of you are interested), or, perhaps the proper metal to use as a trunk bumper, in order that the baggage-man would have as hard a time as possible.

You wouldn't be greatly interested in reading a long paper on any of these subjects, I am sure.

Only one theme then that you might want to read about—*Fraternities—Are They Good in Technical Schools?*

Right at the start I want to say that whatever evils I may point out in the following sentences, I firmly believe that fraternities of the proper sort are more beneficial than harmful. This applies to technical schools as well as to the numerous other sorts.

The evils of fraternity life have been enumerated to you many times, and I do not intend to take up every phase of the matter here.

In the first place the method of "spiking" is, in my mind entirely wrong. It costs too much money for the average man going through school, and it takes too much of his time away from his studies and from those of the man about to be "spiked."

It is easy to criticise, but harder to suggest a remedy. Not only is this true in this case, but also in any other effort at reform.

However, in the matter of "spiking" members for fraternities, I believe the bad part may be very easily eliminated, and in a way that no one deserving fraternity will suffer in the least.

Every fraternity man will agree with me when I say that the fraternity does more for the individual than that same individual does for the fraternity.

Why then, should the governing body, the part which gives more than it accepts, do all the asking? In other words, why not establish a rule whereby the man must ask for entrance into the fraternity instead of the fraternity asking him to join, spending time and money?

If this method would be in force the fact that one is a member of a fraternity would be a true asset,—much more so than under the present conditions.

It is a privilege for most men to belong to a fraternity,—but any fraternity can get along without any one particular man. Then why as a body, do they fight for men? Why do they not let the man choose the fraternity he sees fit to join and *make his own application to this end?*

Many of you will say that this method would not prove out in practice. I have only to point to the success of many of the larger lodges of the world—in most cases the man prays the lodge for admittance. In many cases the lodge or its individual members are not allowed to solicit a man's membership.

I think this method, if tried, would effectively eliminate all the bad features and yet every fraternity will flourish in getting the men who really wish to join it.

True, it will probably be a case of the "survival of the fittest," and it should be so. If there are any fraternities in Rose that would be unable to get new members under this ruling, it is right and proper, that, not being good enough, they should suffer.

I have been told many times in the last few months that there are too many fraternities in the field at Rose. I have been told by a member of your faculty, by a fraternity man and by a so-called "barbarian." There must then be some truth in the statement as all concerned seem to be agreed.

Under these conditions wouldn't it be a good thing to give the "weak sisters" a chance to

weed themselves out by adopting the suggestion above? No man will be foolish enough to pick a poor fraternity, but many are talked into joining such a one.

The next question that naturally comes up is that of *Fraternity Houses*.

I have heard this question discussed pro and con. Some think well of it—others are as heartily opposed. When I was in school there were no fraternity houses at Rose. I am, therefore, unprepared to give an expert opinion based on actual experience. What I have to say is mere conjecture and my opinion is formed from what I have heard on the outside and is, therefore, based entirely upon hearsay.

One fraternity house of which I have heard is fine in every sense of the word, another is only fair and a third seems to be doing very much more harm than good.

The average of the three, as you see, is practically neutral.

The fraternity house does, in a measure, keep down living expenses, but, on the other hand, requires a certain appreciable amount of money to help "keep the house in order." In this instance, then, you are as well off without as with the house.

A fraternity house does create a better spirit of fellowship among those that live there.

On the other hand does it not take away the democracy of the student body taken as a whole?

In this way comparisons of the good and evils of the fraternity house might be made ad infinitum.

There are many good features of fraternity homes.

And there are many undesirable features as well.

I am unable to weigh one side against the other, neither do I presume to say which is right, but I am sure that anything that tends to take away the spirit that all are equal, that all are for Rose first, last and all the time, is not good for the school, though it may *seem* to be good for the individual.

The spirit that pervades a fraternity—I

mean that tie that binds one member to the other, is fine—on the face of it. It isn't nearly so fine after you've examined it closely.

It's all right to have one man think well of every other man in his fraternity, but he must not let the idea get away with him. There are many good men in the other fellow's fraternity—don't ever forget that.

And there are many fine fellows who never join a fraternity—don't forget that either.

If the X Y Z fraternity has some good men, and you who belong to the A B C know it, there is no good reason why you, as individuals, should not gain by his acquaintance, or he by yours. There isn't a fraternity at Rose that hasn't some good men, but here are good men in the A B C that will have nothing to do with the good men of the X Y Z merely because they have nothing in common—that is they have nothing in common but the honor of Rose.

Nothing at all but that—nothing very much to be sure.

Sarcasm isn't my forte, so I'll use no more of it.

If an X Y Z man is at the head of the ball team is there any reason why an A B C man should not beat an X Y Z man for a place on that team if he is able?

The man who is so narrow as to be blinded that he will not see the injustice to the school when he is a party to these things, does not deserve a membership in any fraternity, and above all has no place at Rose.

Just a few more words in conclusion:

Fraternities are all right.

Fraternity houses are all right.

Fraternity spirit is all right, and pretty nearly everything about fraternities is all right

—IF—

—you do not allow it to interfere with the work you are expected to do.

—you do not allow it to hurt the feeling of brotherhood that must exist between one student and another in order to make the school in its entirety a success.

—you do not allow the fraternity to take the

place the school rightfully has and must keep in the minds of its students.

Stand up for your fraternity, but fight harder for Rose. Do not let anything stand in the way of her progress—not even your fraternity.

If it is impossible to have *Rose come first, your fraternity is not healthy—nor good.*

ALUMNI NOTES.

Irwin D. Torner, '04, is with the American Brake Shoe and Foundry Company of Chicago. Office address is 1414 McCormick building.

S. I. Stocking, '13, is with the Irwin City Rapid Transit Co., at Minneapolis, Minn.

Davis Levi was, by mistake, omitted in the October TECHNIC in the class of 1913. He is with the American Rolling Mills Co., at Middletown, Ohio.

W. R. Bell, '12, who has been with the Westinghouse Co., at Pittsburgh, Pa., has gone to Baton Rouge, La., with the Stone & Webster corporation.

Ben G. Elliott, '10, has been appointed instructor in mechanical engineering in the Extension Division of the University of Wisconsin at Oshkosh.

Carl J. Krieger, '12, is with the Underwriters Laboratories, Inc., at 135 William street, New York City.

Henry J. Bangert, '09, who has been chemist for H. Loescher & Co., at Chicago, has taken a sales position with the Vacuum Oil Co. at New York City. Address 29 Broadway (Tan-ners Dep't.).

The Rose Tech Club of Pittsburgh held a meeting October 18th at the German Club. It was decided to hold a banquet on Saturday evening, February 21, 1914, at the Ft. Pitt Hotel. Officers elected were H. S. Heichert, '97, president; O. M. Bercaw, '10, vice-president, and A. F. Gordon, '97, secretary-treasurer. The following alumni were present: W. R. Bell, '12; O. M. Bercaw, '10; H. W. Craver, '95; E. D. Frohman, '94; A. F. Gordon, '97; H. S. Heichert, '97; H. A. Howe, E. E. Hughes, '13;

R. M. Ostrander, '13; W. W. Reddie, '12; R. C. Slocomb, '12.

Mr. and Mrs. Jay H. Hall, '97, announce the birth of a son, Jay Fox, on October 26th, 1913.

On August 25, 1913, Clifford Drake Speaker, '36, arrived at the home of Mr. Clifford B. Speaker, '05, and Mrs. Speaker, Drake University, '08. Mr. Speaker is with the Portland Gas and Coke Co. at Portland, Oregon.

Ralph C. Gray, '05, was married October 11th, to Annetta Paxton Fry at Oley, Penn. Residence 216 Sidney street, Mount Airy, Philadelphia.

Mr. and Mrs. H. C. Offutt, '11, announce the birth of a daughter, Frances Mercedes, on November 9, 1913.

Mr. Leon J. Willien, '06, who has been chief

chemist for Chas. H. Tenney & Co. at Boston, Mass., has gone to Karlsruhe, Germany, to check up some investigations which are being made for the International Agriculture Corp regarding a process for the extraction of phosphoric acid from phosphate rock and the simultaneous fixation of atmospheric nitrogen with formation of ammonia.

W. E. Baker, '11, was married to Miss Rachael Thomas on May 8, 1913.

Benjamin L. Heer, '12, was married to Miss Ruth Diekemper on September 11, 1913.

E. C. Bradford, '11, was married to Miss Laura McFall on September 16, 1913.

W. Scott Heer, '12, was married to Miss Edith Cristopher on September 10, 1913.

Word has been received of the death of H. Lamar Smith, '10, of Topeka, Kan., on November 16th.





HALLOWE'EN.

THIS year the Junior memorial was finished and set up on Hallowe'en. The 1915 memorial is a panelled oak bulletin board, seven feet five in size. It is provided at the top with four shaded electric lights, in special brackets designed to illuminate the whole board evenly. The upper portion is divided into four panels, one of which is assigned to each class for class notices, etc. Each of these panels has a brass plate, bearing the name of the class. Below this is a large space for general notices, and the bottom portion is given up to the large official schedule cards. The board makes a very good appearance, and is an unusually happy selection, as it is both ornamental and useful, and occupies the most conspicuous position in the institute.

The Juniors indulged in the usual Hallowe'en celebration, now not quite so riotous as in years past because of the firm stand of Dr. Mees for law and order. A big conservatory of music sign was hung over the front door and signs were also left around the shop as mementos of the occasion. The usual raid on the wood shop was executed to provide material for a big bonfire on the campus. The whole class gathered around to see the Freshman patterns and frames go up in smoke, and a procession was

formed, which marched around the fire carrying the old bulletin board. A dirge was sung and a few short words of tribute for the departed were said. Appropriate ceremonies having been completed, the old board was tenderly laid upon its funeral pyre, and was soon converted into carbon dioxide, water vapor, etc., with the evolution of an unknown number of B. T. U.

With John Reid and the shop bell in the lead, the class then marched to the Terre Haute House, where the banquet was served. On account of the DePauw game the next day no football men were present, but practically everyone else sat down to the big feed. This having been duly disposed of, the serious business of the evening was begun by Toastmaster Bug Arnold. The following were the scheduled speeches: Burns, Society; Fink, The Business; Bundy, Views of an Old Timer; E. Hegarty, The Modulus; Sullivan, Just Con; Drake, Why I Am a Student; Compton, Life in the Lab; Brauns, Our Memorial; Turner, "Why I Asked to Be Allowed to Talk."

In addition to these, a number of other men were called on and responded appropriately. Chester Cotten, the blonde beauty from Colorado, was especially inspired, and many regretted that similar inspiration had not been given to everyone.

ATHLETIC ASSOCIATION. MEETING OF OCTOBER 18, 1913.

CALLED to order by President Eshelman.
Present—Dr. White, Prof. Hathaway, Eshelman, Schopmeyer, W. Carter, J. Carter, Trimble, Hewitt and Davis. Absent—Stevens.

Moved by Dr. White and seconded by Davis that bid of J. Carter for cleaning the gym be accepted. Motion carried.

Discussion of amount due from Wiley and Garfield High Schools for use of grounds and gymnasium for football season. Definite report to be made at next meeting.

Resignation of Assistant Football Manager E. P. Wallner received and accepted.

Moved by Dr. White and seconded by W. Carter that regular meeting of the board be held on the second and fourth Mondays of each month. Carried.

Moved by Prof. Hathaway and seconded by Schopmeyer that Maple Avenue M. E. Church gymnasium be allowed to use apparatus not in present use in the Rose gym, with the understanding that it be kept in proper condition and returned in such condition when called for. Carried.

Stiltz and Compton proposed to be voted on for assistant football manager to succeed Wallner. Stiltz elected. Vote: Stiltz 5, Compton 3.

Moved by Prof. Hathaway and seconded by W. Carter that meeting be adjourned. Carried.

MEETING OF OCTOBER 25.

CALLED to order by President Eshelman.
All present.

Reports of officers. Football Manager Henry: Lost \$109.00 on Moore's Hill game. Cleared \$65 on Wabash game.

Reports of committees. Dr. White reports that Maple Avenue Church received one parallel bar, four mats and one horse from school gym.

Prof. Hathaway reports that school board is in favor of paying for football privileges for Wiley High School.

New business. Moved by Dr. White and sec-

onded by Davis that bill of Dr. Morrison in favor of J. Carter be paid. Carried.

Moved by Dr. White and seconded by Prof. Hathaway, that purchasing of football material be left to the manager and captain. Carried.

Moved by Schopmeyer and seconded by Prof. Hathaway, that meeting be adjourned. Carried.

STUDENT COUNCIL.

SPECIAL meeting of November 3rd was called to order at 4 P. M. by President Hansen. Nehf absent.

Report of Finkelstein, chairman of finance committee, for Grencastle trip:

Eight tickets sold at \$1.00.....	\$8.00
Ninety-two tickets sold at 50c.....	46.00
Total amount received.....	\$54.00
Nineteen tickets bought at station.....	19.00
Balance	\$35.00
Five of these sold at 50c.....	2.50
	\$37.50
Received for the other fourteen.....	14.00
	\$51.50
Refund for 24 football men.....	12.00
Balance returned	\$39.50
Original appropriation from General Fund...	\$100.00
Returned	39.50
Amount taken from appropriation.....	\$60.50

Moved by Henry and seconded by Deming that above report be accepted. Carried.

Moved by Eshelman and seconded by Barrett, that the faculty be petitioned for a vacation Friday and Saturday after Thanksgiving. Carried.

Ransford and Sanford appointed to have new report blanks printed.

Moved by Ransford and seconded by Arnold, that 500 be printed and given to financial secretary. Carried.

Moved by Eshelman and seconded by Arnold, that financial secretary should not be required to give bond on account of shortness of term. Carried.

Moved by Eshelman and seconded by Arnold, that meeting adjourn. Carried.

A. I. E. E.

THE A. I. E. E. has held two very successful meetings this year. At the first meeting the subject was "High Frequency Phenomena." Interesting and instructive talks were given by Dr. Johonnott and Prof. Knipmeyer, and experiments were performed by means of high voltages from the big Tesla coil. Sparking phenomena, common effects and X-rays were shown and explained, and several X-ray photographs were taken and developed by Prof. Peddle.

At the second meeting Prof. Peddle gave a talk on color photography, and showed a number of lantern slides, including both colored photographs and X-ray photographs. Another very enjoyable part of the evening's entertain-

ment was a big bucket of Sam's best lemonade and a plentiful supply of peanuts. The novelty of smoking in the institute was also enjoyed by everyone so inclined.

SCIENTIFIC SOCIETY.

PRESIDENT Poggensee of the Scientific Society, with the aid of his learned colleague, Secretary Tommy Walsh, has planned to hold monthly meetings of the society, beginning after mid-terms. Instead of having papers presented by students, Mr. Poggensee hopes to have members of the faculty give the young scientists the benefit of their experiences and observations, scientific, professional or otherwise. The plan seems to be a good one, and, it is hoped, will revive interest in the organization.





ROSE 6, WABASH 6.

THE game with Wabash was somewhat of a disappointment to both the team and to the students, as the chances for undisputed possession of the state secondary championship were lost.

Rose scored in the first two minutes of play, Joe Carter placing the ball on the Wabash five-yard line by a 75-yard dash through the entire Wabash team. On the next two plays he carried the ball over for a touchdown. Baxter made a poor kick and Rose had no chance at goal.

In the second quarter Wabash evened the count by a 35-yard run by Pfohl, but failed to kick goal. After the score was tied, neither team could manage to push the ball over for another touchdown, although Rose was put on the defensive and were forced to fight hard to keep Wabash from scoring. Individual stars were few and neither eleven displayed the expected trick plays, but resorted to line plunges and end runs. Joe Carter showed up well as also did Stoms, Moore and Hansen. The mainstays for Wabash were Pfohl, Showalter and Rowe.

Upon another page of this department will be

found a chart of the game, giving every play in detail.

Summary and line-up:

Rose, 6.	Wabash 6.
Moore	L. E.....H. Showalter
Stevens, Somers	L. T..... Caldwell
Wilkins	L. G..... Foster
LeForge	C..... Cravens
W. Carter	R. G..... Turner
Davis	R. T..... Hurd
Sheldon	R. E..... Newsbaum
Baxter	Q. B.....Pfohl, Coffling
J. Carter	L. H.....Sweet, Rowe
Hansen	R. H..... Christian
Stoms	F. B..... Showalter

ROSE 7, DE PAUW 14.

IN one of the best, if not the best game of the season, Rose went down to defeat at the hands of DePauw at Greencastle November 1.

Clearly outclassing her opponents in all stages of the game, except the second quarter, Rose started the scoring early in the first quarter, Joe Carter running 80 yards from a kick. This was the only score Rose was able to make, but in the last quarter started a spectacular rally and marched almost the length of the field, only to lose the ball on a costly fumble.

DePauw scored both in the first and second quarters, but could go no further.

Rose was aided on defense by the excellent work of Moore, LeForge and Poggensee, and on the offense by Carter, Hansen and Stoms. DePauw depended on Rowan, Thomas and Harvey to make gains. Rowan acted as quarter, giving the signals from a half-back position.

Line-up and summary:

Rose 7.	DePauw 14.
Moore L. E.....	Moore
Somers, Poggensee.. L. T.....	Grady
W. Carter L. G.....	Long
LeForge C.....	Gardner
Wilkins, Stevens ... R. G.....	Sefton
Davis R. T.....	Dunn
Sheldon, Baxter R. E.....	Sharp
J. Carter L. H.....	Thomas
Stoms, Hansen F. B.....	Rowan
Hansen, Goldsmith.. R. H.....	Harvey
Cox Q. B.....	Anderson

Touchdowns—Carter, Rowan, Harvey. Goals from Touchdown—Stoms, Rowan (2). Referee—Redden, Michigan. Umpire—Donnelly, Trinity. Headlinesman—Davis.

PURDUE 62, ROSE 0.

FACING overwhelming odds, Rose was defeated on November 8 by Purdue, the final score being 62-0, in favor of the Boilermakers. Of these, forty-eight points were made in the first half. Then, with a number of substitutes in Purdue's line-up, Rose braced and put up a hard fight that called for applause time and again.

Rose held Purdue to two touchdowns in the second half, and Joe Carter made the only first down Rose secured during the game. He intercepted a forward pass and ran fifteen yards, following it with a ten-yard gain.

Purdue was never held for downs. Cox at quarter played a good game, stopping many men who broke through the line. Oliphant, while he was in the game, made many sensational runs, seeming to gain ground at will.

The line-up:

Purdue 62	Rose 0.
Turner R. E.....	Sheldon
Usner R. T.....	Davis
Routh R. G.....	Wilkins
Bishop C.....	Somers
Burns L. G.....	W. Carter
Becker L. T.....	Stevens
Stinchfield L. E.....	Moore
Wherell Q. B.....	Cox
O'Brien R. H.....	Hansen
Oliphant F. B.....	Stoms
Glosson L. H.....	J. Carter

ROSE 23, CULVER 0.

ON a muddy field, which put both elevens at a disadvantage, Rose defeated Culver Military Academy on November 15 by the score of 23-0. On account of the mud, straight football was resorted to almost entirely, and few end runs were successfully made, while the forward pass failed more often than it worked.

Although outweighed by Culver, Rose played a much better brand of football and the old-time fighting spirit was in evidence, although every inch of ground gained was earned.

At one time Culver had the ball on the Rose ten-yard line, but could not cross the goal line.

Twenty-one men were used by Rose, and all showed up well in their respective positions.

The line-up and summary:

Touchdowns—Cox, Hewitt, LeForge. Goals from Towndown—J. Carter (2). Field Goal—J. Carter. Referee—Wann, Earlham. Umpire—Robinson, Indiana. Head Linesman—McCarthy, Indiana.

Rose 23.	Culver 0.
Moore, Sheldon L. E.....	Sawyer
Poggensee, Stevens.. L. T.....	McLean
W. Carter L. G.....	Northcott
Le Forge, Somers	

Mills C..... Falcon
Pirtle, Dutton,

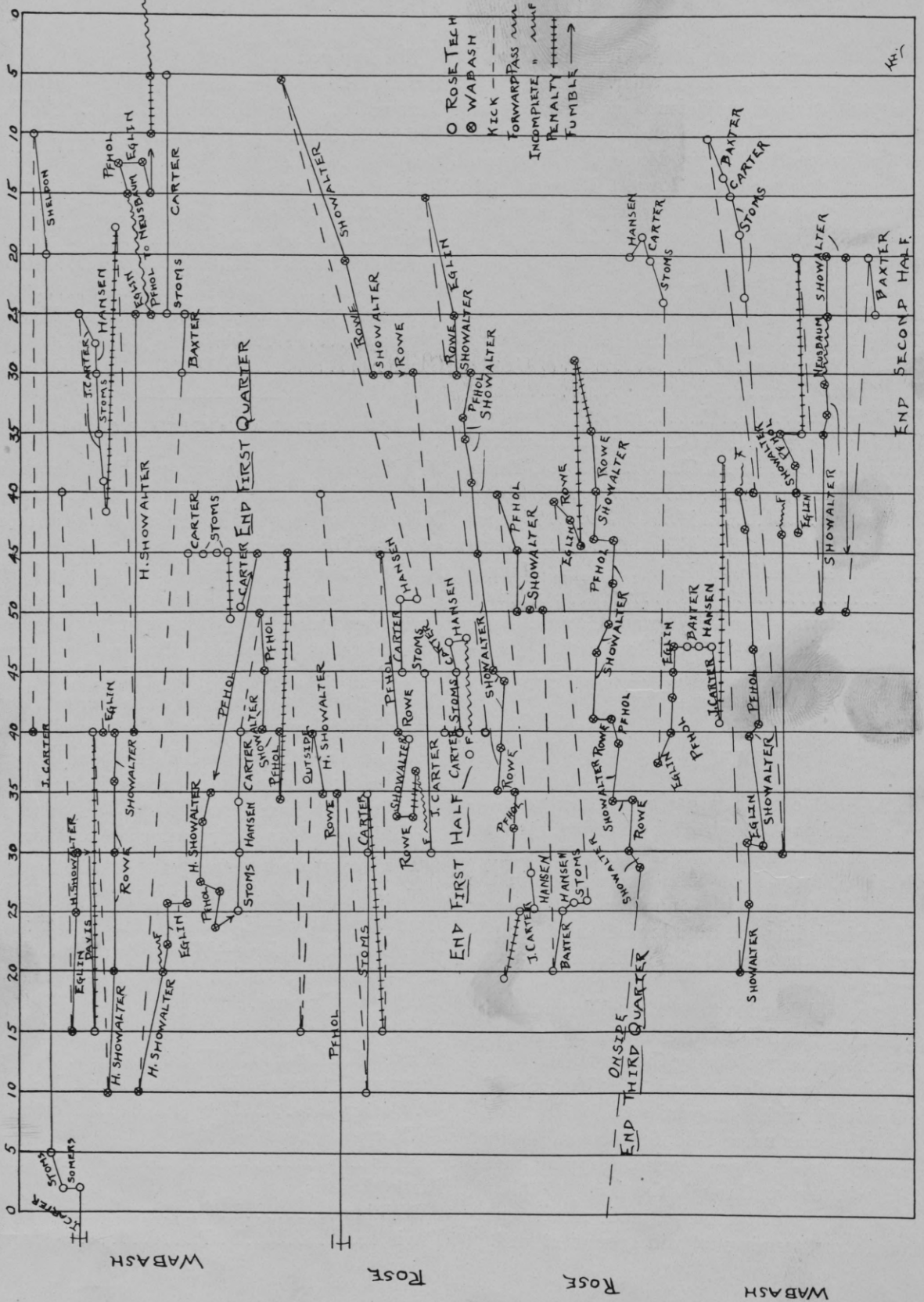
Wilkins R. G..... Meeske, Rogers
Davis R. T..... Weeter

ROSE 6

WABASH 6

WABASH

ROSE



Sheldon, Baxter,

Tygart R. E. Porter
Cox, Hewitt Q. B. Hanger
Hansen, Goldsmith. L. H. Bathrick, Jones
J. Carter, Smith. F. B. Stirratt

TRACK.

ONE of the features of the recent Corn Show was the Marathon run on Saturday, November 15th. Fourteen runners from both Rose and Normal were started by S. E. Huffman, and a large crowd gathered to see them off. R. W. Hyndman of Normal was the winner of the event, and his time was 31 minutes, 28 seconds for the course.

Owing to the weather the proposed course was changed at the last minute in order to allow the men to run on the paved streets, and the following course was used: Starting at Fifth

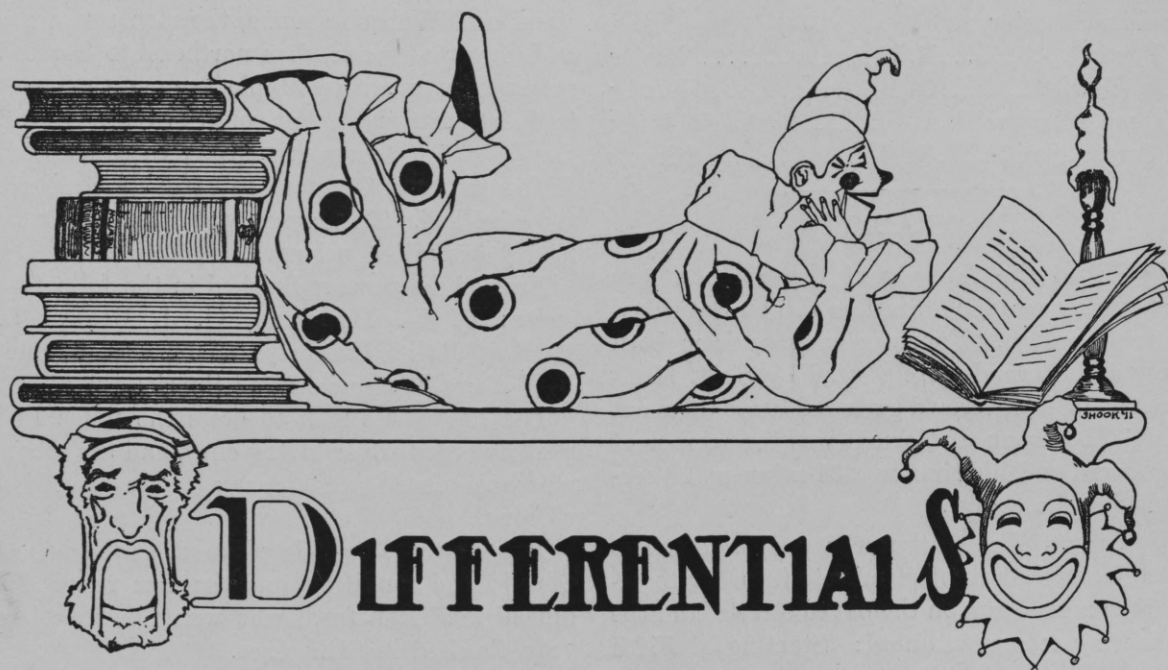
street and Wabash avenue, the men ran north to Lafayette avenue, then northeast to Seventh street, then north to Maple avenue, then east to Thirteenth street, then south to Locust street, then east to Fourteenth street, then south to Ohio street, and then west to Fifth street, where they finished. This course was estimated to be nearly five miles in length.

Nine of the starters finished in the following order: R. W. Hyndman, G. J. Brown, L. Hughey, Ralph Stewart, Ransford, F. Givinn, R. Volkers, W. Shriner and Sporks.

The first three men to cross the finish line were awarded silver loving cups, and the others who completed the course were awarded ribbons.

The time was considered good, as the streets were in bad condition, and the men ran under difficulties. Ransford, who won this race last year, finished in fifth place.





Hoberg (picking up a Columbian dry cell):
"Say, fellows, let's have a ball game, here's the battery."

W. O'Laughlin (in the rear of the Thermo class): "Hey, Fat, how do you work that problem on the board?"

Fat O'Laughlin: "Wait until after class and I'll explain it to you. That's too deep for your weak and untrained mind."

Prof Thomas (in hydraulics): "Boys, you will have to keep quiet this morning, I'm not feeling very well. I guess I drank too much cider yesterday."

Senior Civils—Haw! Haw!

Failing (not liking the way a Freshman took his good advice): "I'm all right, even if a lot of these guys do think I'm a damn fool."

She: "And would you really put yourself out for my sake?"

Byron Deming: "Indeed, I would."

She: "Then do it, please. I'm awfully sleepy."

Harvey: "There's one thing I'll miss very much this winter."

She (tenderly): "Whats that, dear?"

Harvey: "Breakfast, I've got five eight o'clocks."

She: "That 'Blue Danube' is just intoxicating."

Cox (absently): "It can't compare with 'Green River.'"

Derr: "What kind of a stone would you like in your ring?"

She: "Oh George! I've heard so much about baseball diamonds. Do you suppose they're expensive?"

Lancet (nervously): "There's been something trembling on my lips for months and months—"

She: "Yes, so I see. Why don't you shave it off."

Ott (in organic): "You had better take up the note books now. Some of us might not be here for exams."

According to the latest circle is spelt curcle and zero, zuro, by Hath.

Mac (in Applied): "I don't expect you fellows to learn this stuff like parrots, although you are Polys."

Hath (in Quaternions): "Did some one throw that eraser or did it just fall there?"

Dodson (during a lengthy interview between Dr. White and a few of the Sophomore chemists): "Didn't you ever cut when you were in college? I ain't tryin' to run down your character, but I'd just like to know."

"My daughter," and his voice grew stern,
"You must set this matter right.
At what time did that fellow leave,
Who came to call last night?"

"His work was pressing, father dear,
And his love for it was great,
He took his leave, and went away
Before a quarter of eight."

Then a twinkle came in her bright blue eyes,
And her dimple deeper grew.
" 'Tis surely no sin to tell him that,
For a quarter to eight is two."

She went down to the round house,
And interviewed an oiler;
"What is that thing?" "Why," he replied,
"That is the engine boiler."

"And why do they boil engines?" asked
The maiden, sweet and slender;
"They do it," said the honest man,
"To make the engine tender."

Asking permission of a girl before you kiss
her is cowardly. It is putting the responsibility
up to her.—Case Tech.

It was in the conservatory.

"Won't you let me hug you?" he murmured
ardently.

"Not here," she replied. "It would not be
proper."

Going out on the dance floor, they engaged
in a clinch and tangoed under the scrutiny of
staid chaperones.—Ex.

Why do we always speak of a blush as creep-
ing over a girl's face?

If it went any faster it might kick up a dust.

"Johnnie, if you swear again you'll never go
to Heaven."

"Don't want to."

"But, Johnnie, why not?"

"Ain't a damned soul there."

The man who asks every girl he meets for a
kiss gets a lot of rebuffs—also a lot of kisses.—
Life.

Freshman—Professor, is it possible to take
the greater from the less.

Professor—There is a pretty close approach
to it when the conceit is taken out of a Fresh-
man.—Ex.

THE TEXAS SORT.

"Gracious! That skirt is so tight that I can
plainly see what you have in your pocket!"

"But I have no pocket."

"Then what is that lump?"

"Oh, that's a mosquito bite!"—Houston Post.

ALAS, POOR SAGE, WE KNOW HIM.

A sage is a man who will sit up all night and
worry over things that a fool never even heard
of.

He asked a Miss, "What is a kiss Grammati-
cally defined?"

"Its a conjunction, sir," she said,

"And cannot be declined."

—Ex.

Absence makes the marks grow rounder.—
Case Tech.

APPROPRIATE SONGS FOR THE

Rockpile—"They Always, Always Pick on Me."

Kicked Out Suitor—"Take a Little Tip from Father."

Skater who Slipped—"On the Tail of My Lonesome Spine."

Handkerchief—"That International Rag."

Wrestling Match—"Cuddle Up a Little Closer."

Mexican Dinner—"Too Much Mustard."

Freshman—"Please Take Me Home."

Sophomore—"I Want a Girl."

Junior—"We Won't Go Home Until Morning."

Senior—"Thesis the First Verse, Thesis the Second Verse, Thesis the Last."

Fair Bud—Uncle, I wish you'd give me that beautiful lace handkerchief we saw today. It was only five dollars.

Uncle—Nix, that's too much to blow in.—
Princeton Tiger.

Entrance examination questions:

1. When was baseball discovered? By whom was it discovered?

2. Name ten prominent infielders of the present time.

3. Give the methods of throwing a spit ball; an out-curve.

4. Draw a baseball diamond showing the nine positions.

5. What is the best position for the hands in pole vaulting?

6. Define the following terms: punt, goal kick, drop kick, touchdown, gridiron, sidelines, fumble, forward pass.

7. Draw a rough diagram of the football field showing positions of the teams at the kickoff.

8. Name the eleven positions on a football team.

9. Outline a situation where the forward pass could be used advantageously, tracing the path of the ball as thrown.

10. What is a good diet for an eleven in training?

11. What is the best method for putting an umpire out of business?

12. Who discovered America? When? What part of speech is the word "Man?" How much is 2354×8796 ?—Wisconsin Cardinal.

He was teaching his girl arithmetic,
He said this was his mission;
He kissed her once, he kissed her twice,
And said, "Now that's addition."

And while he added smack to smack
In joyful satisfaction
He stopped to take a few from her,
And said, "Sweet, that's subtraction."

And still they lingered there to kiss,
In mutual elation,
The bold lad doubled up the sum,
And said, "That's multiplication."

Then father came and raised his foot,
And snorted in derision,
That chap struck earth a mile away,
Pa said, "That's long division."

The gowns they wear are now so tight
That women scarce can hobble;
Their walk is oftentimes a fright,
Half scuffle and half wobble.
Who was it started such a style
Which women seized with passion?
We find—on looking back a while—
A mermaid set the fashion!
The dances now are sumthin' fierce,
Most all are just plain wobble;
They never step, nor glide, nor turn,
Half scuffle and half hobble.
Who was it started such a style
Which every girl seems to wish?
We find—on looking back a while—
It was a jelly fish.

—Ex.

NEWS OF OTHER COLLEGES.

The Freshmen and Sophomores of Rensselaer Polytechnic have a cane rush similar to our own pipe rush, except that the members of each class are thoroughly greased from head to foot, so that they will be harder to hold. The Sophs won this year, the result being 37-12 in their favor.

The editor-in-chief of *The Polytechnic*, Rensselaer Polytechnic's monthly publication, is W. C. Henry. Wonder if his name is Walker, too?

The 1913 class of Louisville Male High School is represented by 32 of its 71 members in seventeen different colleges of the United States.

The *Louisiana State Reveille* contained the following article: "Six single girls in Salem, Ohio, recently raised \$10,000 for the Salem Hospital by dispensing kisses at \$1.00 each."

It further adds: "This might be a suggestion for the Senior finance committee."

At Indiana the Senior girls will wear corduroy skirts and the Senior boys will wear corduroy trousers as a mark of distinction.—*Exchange*.

Colorado.—The combined engineering schools will build an enormous "C" on Flagstaff Mountain, overlooking the city of Boulder. Utah built a "U" some years ago.—*Exchange*.

Plonyans Gbe Wolo, the son of an African chieftan, has entered Harvard.—*Exchange*.

The Juniors at Purdue wear regulation head-gear, namely, a slouch hat direct from Paris.—*Exchange*.

Indications at Columbia University are that this year the honor system will be adopted, and the present proctor system will be done away with.—*Exchange*.

University of Texas has a picture show owned and operated by the student body. The profits help needy boys.—*Exchange*.

At Cornell University there are 1,069 students who are almost wholly self-supporting, and 124 students who earn from \$100 to \$200 more than their expenses.—*Dekaturian*.

The rates of tuition for foreign students in German universities have recently been doubled.—*Exchange*.

The tuition of each student in the University of Illinois costs the taxpayers of the State \$300 per year, according to President E. J. James.

Through a vote of the student body the tango, turkey trot and other new dances have been barred for the year at the University of Vermont.—*Reserve Weekly*.

As a result of the Freshman exams held at W. and J. only one man was dropped, while thirty to forty has been the usual number of students lost annually.—*Exchange*.

Georgia Tech has established co-operative engineering courses in which students attend lectures one week and work in the shops of Atlanta the next week for wages.—*The Tartan*.

The class of 1913 of the University of Chicago have voted to present to the university as their class gift a bronze miniature of the campus. This is to be mounted on a stone pedestal and placed on the lawn in front of Cobb lecture hall.—*Exchange*.

A prize of \$1,000,000 has been offered at St. Petersburg for the best biography of Czar Alexander I. The prize is the greatest ever offered for any work. The biography may be written in any language and must be submitted before 1925.—*Exchange*.

The yell leaders of Brown University are said to use a novel instrument. All the leaders yell in unison through a single horn, thereby greatly increasing the volume of sound.—*The Franklin*.

Out of 1,000 Freshmen at the University of Pennsylvania, eighteen are studying Greek. They're training for college presidencies—*Exchange*.

Sixty men at Michigan Agricultural College petitioned the faculty to offer a course in the study of the liquor problem with college credit.—*Exchange*.

Columbia has officially made soccer football a part of the regular training in gymnasium work. At least 600 students will be required to play the game twice a week. A champion squad is to be selected from this number.—*Exchange*.

The number of students enrolled at the University of California this year numbers 5,300. This, added to the number in summer school, gives a total of over 8,000. In point of numbers California is only surpassed by Columbia.—*The Tartan*.

The Chief Justice of the state of Maine says: "The difference between a large university and a small college is that in the large university the student goes through more college while in the small college, more college goes through the student.—*The Tartan*.

California is the second largest school in the country, its enrollment of over seven thousand being exceeded only by Columbia with nearly nine thousand. Harvard has only four thousand and Princeton seventeen hundred.—*Ex*.

That American universities excel in instruction, although foreign schools are more prominent in research, is the decision reached by Professor William McPherson, head of the department of chemistry, at the Ohio State Univer-

sity, who has been studying the methods of the 18 leading universities abroad during the past year.—Silver and Gold.

One hundred and thirty-two foreign students are registered at the University of Illinois this year. The number represents twenty-two nations. China has fifty-three students and also has the only foreign woman registered at the university. The majority of these men are registered in the technical course.

Only two foreign students are registered at Indiana university.

TUG OF WAR RULES.

The men of the Senior and Junior classes, to whom was delegated the task of finding a good substitute for the annual class scrap, after several considerable discussions, drew up the following set of rules which governed the contest held last Tuesday afternoon. The rules no doubt may well be modified next year in some of the minor details but in the essential parts they were found to be all right and should serve as a basis for next years contest rules.

The rules drawn up were as follows:

1. All male members of the Freshman and Sophomore classes shall report at the gymnasium at 1:15 Tuesday afternoon. Penalty: Any male members of the aforesaid classes failing to appear at the gymnasium at above stated time shall be sought out and thrown into the pond.
2. The tug of war shall start at 2:00 p. m. on Tuesday afternoon and the signal for starting shall be given by M. M. Montgomery.
3. The classes may choose the placing of their men. The first man shall be at least fifteen feet from the edge of the pond.
4. No artificial footholds or support or knotting of the rope shall be permitted other than a knot at the extreme ends of the rope.
5. Penalty for anyone losing his hold on the rope shall be inundation in the pond.
6. Tug of war is over when one end of the

rope has been completely drawn thru the entire width of the pond.

7. No knife shall be used on rope.

8. The class having the least number of men shall have their choice of the side of the pond from which they shall pull.

—Hanover College Triangle.

YALE CREW CAPTAIN RESIGNS.

Charles N. Snowden has resigned as captain of the Yale Varsity crew. Thomas B. Denegre has been chosen to succeed him. Snowden's resignation was due to his being ineligible to row in the Harvard regatta next June.

—Pennsylvanian.

Dr. George L. Meylan, director of physical education at Columbia, states that football is the best of all American sports, and develops as no other game can the manly qualities of strength, ruggedness and aggressiveness.

—Reserve Weekly.

Football was first played at Rutgers and Princeton in 1869, Yale taking up the game two years later.—Ex.

Chicago University pays Coach Stagg \$8,000; \$5,000 as athletic director and \$3,000 as baseball coach.—Reserve Weekly.

The girls of Grinnell College, Iowa, have formed a club whose purpose is to relieve football candidates of duties, such as waiting tables and washing dishes, which might interfere with their football practices.—Ex.

U. of Virginia has recently completed a new athletic stadium, costing \$23,000 and seating 7,500. It is called Lambeth Field.—Ex.

To decide a question which has been pending for seven years, the Michigan Daily forced the question of Michigan's return to the Western Conference to a popular vote of the students, faculty and alumni. The result was decisively

against the return and Michigan will continue to play the Eastern teams.

Ames has adopted the pushball contest to take the place of the annual freshman-sophomore scrap.—Case Tech.

A director of rowing at Princeton remarks: "Intercollegiate athletics as at present organized mean that a few men go periodically into training, and the great majority go periodically into hysterics."—Ex.

"The fraternity which rushes you via the saloon route, or the Barbary coast, is not the bunch to join, because they are'n't in themselves true Californians, and we don't want either them or any more of their kind," declares President Wheeler, of the University of California.

—Reserve Weekly.

We quote the following from the editor of the Butler Collegian. Some thought might be derived from it by students of Rose:

The political pot has begun to boil. Already we see signs of unusual activity in certain quarters. There are a few proprieties, it seems, which have not always been observed in the past.

How any fraternity man can get the consent of his mind to nominate a fraternity brother of his for an office is beyond our comprehension. Such action is contrary to etiquette, and should be severely censured by the student body.

Furthermore, if a man is desired for an office, he should be pushed by those desiring him and not by himself. Any man who canvasses the student body to elect himself to office must inevitably lower himself in his own estimation at least.

College politics are generally dirty. "Abe" Ruef, the notorious political crook, now serving his time in San Quentin, used to say that whenever he wanted to work a political frame-up along new lines he went down to Berkeley or Stanford to see how the college boys did it,

and not to the gangsters in San Francisco. May Butler politics this year be clean and democratic!

Syracuse students have commenced the planting of 15,000,000 young trees at the Experiment Station of the N. Y. State College of Forestry. This forest of fifty acres will prove to be a valuable investment.—Ex.

At Cornell University there are 1,069 students who are almost wholly self-supporting, and 124 students who earn from \$100 to \$2000 more than their expenses.—Dekaturian.

A motion picture firm will spend a month at Michigan taking two thousand feet of film of the town, campus, class rooms, pushball contest, and a football game. The film, with similar ones from seven other large universities, will be shown about the country and at the Panama Exposition—Case Tech.

The faculty of the University of Texas has put a taboo on first semester pledging among the Greek fraternities. Only those students who have passed 12 hours work are now eligible to become members of a fraternity.—Silver and Gold.

There were 17,238 students in the University of Paris last year, of whom 3,276 were foreigners.—Ex.

The U. S. Naval Academy rates Spanish as a language of first importance. Since the Spanish-American war the number of students taking Spanish in Yale and Harvard has increased 500 per cent.

It costs more to send a boy through the ordinary college than it costs to send a girl. Statistics that have been compiled at Ohio State University point to this conclusion. The figures show that the boy spends an average of \$450 during the school season of each year, while his sister can make it for quite a lot less, probably between \$50 and \$75.—Ex.

Cincinnati.—In the new freshman rules it is stated that the fresh will not be allowed to look at the upper-classmen when they choose to escort a fair co-ed down the street.—Ex.

Wisconsin.—The penalty for infringement of the freshman regulation concerning the wearing of skull caps is for some "W" man to throw the offenders into Lake Mandata.—Ex.

Girls at Vassar are not permitted to eat butter at meals nor to sleep on hair mattresses according to a recent decision of the college authorities.—Ex.

COLLEGE MEN IN WORLD'S SERIES.

The great Philadelphia team which is making such a remarkable showing in the world's series is composed almost entirely of college athletes. Clean-lived lives and true sportsmanlike spirit has again swept away your "Muggsys," "Larrys" and "half-breeds."—Vanderbilt Hustler.

Oxford University takes pride in the fact that at least one-half of every cabinet that has been formed in England for the past hundred years has been composed of Oxford men.—Reserve Weekly.

A TERROR-STRIKING BATTLE CRY.

The college yell of Kansas University, if we are to believe an American authority, has helped to demoralize the Turks. According to the story, Boris J. Patchjief, the commander of a Bulgarian batalion, is a graduate in engineering from that institution. As a battle-cry for his men he has found nothing so inspiring as the slogan he learned on the football fields of Kansas—"Rock Chalk, Jay Hawk, K. U.!"—University Daily Kansan.

OCCUPATION OF GRADUATE ENGINEERS.

In an interview published in the "New York Times," Oct. 18, Professor Furman of the Stevens Institute of Technology reviews the careers of graduates of that school of mechani-

cal engineering and furnishes diagrams showing that of men graduated 15 to 20 years, about 42 per cent. are filling positions as executive officers, managers, etc.; about 18 per cent. occupy executive positions as superintendents and heads of manufacturing departments and about 5 per cent. are retired or unaccounted for.—Power.

THREE OBJECTS OF COLLEGE MEN.

"Most college men live for three things," said Dr. V. A. Moore, of Cornell, in a lecture to the Ithaca students, "to enjoy physical health, to succeed in the particular work they are taking up and later to establish a home. In order to have these it is necessary to have a pure and sound body, plenty of pure food and, for the average person eight hours of sleep every day.—Pennsylvanian.

One hundred and four men appeared at the first try-out for the University of Wisconsin band.—The Tartan.

RAILWAY COURSE AT UNIVERSITY OF MINNESOTA.

The University of Minnesota has announced an evening course in railroad traffic and rates to be given at Minneapolis during the coming winter. It is designed to provide railway men and traffic clerks of shipping houses with in-

structions regarding the technical and detailed work of those who have to do with railroad traffic and rate making. The course will be under the direction of Professor G. A. Gesell, of the Department of Economics of the University, and Lee Kuempel, chief clerk of the freight traffic department of the Soo Line. Among the subjects to be treated are the following: Theory of Railroad Rates; Freight Classification; "Make up" of Tariffs; Authorities under which Joint Tariffs Are Published; Rail and Water versus All-Rail Rates; Basis for Principal Present-Day Rates; Car Service and Efficiency; Accounting of Freight Revenue; Fast Freight Lines, Tariffs and Guide of Billing Books; Privileges; "Transit and Storage"; Principal Commodity Rates—Lumber, Grain Products, Live Stock, etc.; Conditions Governing the Proper Issuance of Bills of Lading; Tracing of Freight; Methods of Compiling and Presenting Claims; Conditions Imposed by Federal and State Laws on the Acceptance of Freight; Study of the Conference Rulings of the I. C. C.; Federal Control; Interstate Commerce Act of 1887, Elkins Amendments 1903, Hepburn Act 1906, Mann Act 1910; State Control: Conflict of Federal and State Control.—Railway Age Gazette.

Come to Gillum's for groceries where McCormack used to be. Corner Butler and East Washington.—Butler Collegian.





LABORATORY Experiments in General Chemistry. By H. B. North, Associate Professor of Chemistry in Rutgers College. Cloth, $5\frac{1}{2} \times 8$ in.; 205 pages; 37 illustrations. New York, The D. Van Nostrand Company. \$1.00 net.

The object of this manual, as expressed by the author in the preface, is to "cover a laboratory course in general chemistry given in connection with a series of experimental lectures. The book is probably intended to be used in high schools or at least in schools dealing with elementary chemistry for, as may be seen from the number of experiments, none are treated very exhaustively. Taken as a whole, the manual is an excellent one to follow in a short course in elementary chemistry, in which most of the common elements are treated, such as the average high school course and some technical school courses.

The book contains five hundred experiments, starting with the causes of chemical change then taking up hydrogen, oxygen, the halogens, acids, bases, salts, etc., and finally ending with iron, cobalt, nickel and platinum. In the appendix corrections for gas volumes and chemical arithmetic are treated, followed by the usual tables of atomic weights, specific gravity, aqueous tension, solubility and the periodic classification of the elements. This manual would prove a valuable reference for engineers who wished to make simple tests for the different elements.

POWERFUL ARTICULATED ELECTRIC LOCOMOTIVES.

THE New York Central after making trials early in the present year of an eight-motor articulated 600-volt direct current electric locomotive, ordered nine more of the same type from the General Electric Company, Schenectady, N. Y. These locomotives weigh, in working order, 200,000 pounds, are of 4-4-4-4 type and are equipped with eight bipolar, gearless motors, all the weight being carried on motor driven axles. They were designed for operating the heavy limited passenger trains, and are capable of hauling 800-ton trains in continual service between the Grand Central Terminal, New York, and Harmon; they are also capable of operating a 1,000-ton train in emergency service, a train of the same gross weight on level tangent track continuously at sixty miles an hour, or an 800-ton train at sixty-five miles an hour.

As the weight of passenger trains is steadily increasing, and some of the more important trains now weigh over 1,000 tons, it has been deemed necessary to have locomotives for the maximum service with very great continuous capacity, ample overload and high monetary rating. The New York Central has therefore ordered six electric locomotives from the General Electric Company of the same type and general arrangement as the previous ten, but weighing 220,000 pounds, and of materially greater capacity for continuous service. They are capable of exerting practically the same

tractive effort continuously that the previous ten locomotives can for one hour.

The ten tons increase in weight in these machines is accounted for mainly by the greater amount of material in the motors, which are of larger capacity. The speed and torque characteristics have been kept practically the same, but the new locomotives are capable of hauling approximately 40 per cent. greater tonnage in continuous service. The previous ten locomotives can develop 1,460 h. p. continuously, 2,000 h. p. for one hour and as high as 5,000 h. p. for short periods. This corresponds to a tractive effort of 9,000 pounds at sixty miles an hour continuously, or 13,500 pounds at fifty-four miles per hour at the one hour rating. The six new locomotives will develop 2,000 h. p. continuously, or 2,600 h. p. for one hour. The equivalent tractive effort is 14,000 pounds, at fifty-four miles an hour continuously, or 20,000 pounds at forty-nine miles an hour at the one hour rating. They are able to haul 1,100-ton trains in continuous service between the Grand Central Terminal and Harmon, 32.6 miles, are capable of operating 1,200-ton trains in emergency service, and 1,200-ton trains on level tangent track continuously at sixty miles an hour.

In point of design and construction these locomotives will be of identically the same type as the former ten, having an articulated frame with guiding trucks at each end. The cab containing the engineer's compartment and that for the operating mechanism, is swung between the two parts of the frame on center pins. Each section is equipped with two four-wheel trucks having a driving motor mounted on each axle, all the axles, therefore, being driving axles. The eight motors, of the bipolar gearless type, are of the same general design as the motors on the previous fifty-seven locomotives built for this road, and are provided with ample forced air ventilation. They are electrically connected permanently in parallel in pairs and the pairs can be connected in three combinations—series, series-parallel and parallel. They are insulated for 1,200 volts, so that if at any future time it should be desired to operate the locomotive on this voltage, the pairs of motors can be

changed from parallel to series connections and the same speeds and control combinations obtained as on 600 volts.

These locomotives have greater capacity and higher efficiency than any other high speed electric locomotive ever constructed, while at the same time having lower total weight, weight per driving axle and dead weight than any other locomotive of similar capacity.—*Railway Age Gazette*.

THE results of experiments at the University of Wisconsin show the overshot water wheel to be a very efficient type of motor, a wheel 10 feet in diameter and 3 feet wide giving a maximum efficiency of 89 per cent. Its economical field lies in developments which range approximately between 2 and 30 second-foot drainage, with heads varying from 10 to 40 feet, corresponding to a maximum output of about 75 H. P.—*Industrial Engineering*.

JARRING OF CONCRETE AFTER PLACING.

THE idea that all discretion and care can be thrown to the winds after concrete has been placed, cannot be too severely condemned. All the care exercised in selecting good material, water and mixing, can be rendered worthless by not protecting concrete, after it is placed, from loads, until the concrete has had time to harden.

Concrete after being put in place should not be subjected to loads, jars or strain until it has thoroughly hardened, for if disturbed while setting the bond on steel will be destroyed and cracks will be formed which never close up and consequently the structure is greatly weakened.

The jarring of forms or projecting ends of reinforcing bars will weaken the bond for some distance back from the construction point. The practice of guying the hoisting tower to the forms should be discontinued, since there is always a certain amount of strain and jar caused by the swaying of the tower. The concrete plant should be laid out and the work so planned as to do away with the necessity of having to wheel concrete over that previously

placed. The extra loads coming on the forms in this way are often sufficient to cause considerable deflection in forms and consequent cracks in the concrete. The same thing is true if form lumber or other materials are placed on new concrete, even if the forms are still in place under the concrete. The fact that workmen have little trouble in keeping off of surfaces with a trowled finish while green, is sufficient evidence that they can, if properly disciplined, give ordinary concrete surfaces a chance to take final set before subjecting them to loads and shocks.—*Railway Engineering and Maintenance of Way.*

INSPECTION TRIPS FOR DRAUGHTSMEN.

THE C. M. & St. P. Ry. recently conducted an inspection trip for a picked party of its engineering draftsmen over the second track and grade revision work on the C. & C. B. division in Iowa. This work includes many large concrete structures of more than ordinary interest and the trip afforded an excellent opportunity for the designers to view the actual construction of their designs. If such trips are made comparatively often the railroad cannot help but profit by the experience gained by its employes. In order to derive the greatest benefit for all concerned these inspection tours should be made at such intervals as to keep the designers entirely familiar with the actual methods employed on the various kinds of work.

It is a fact that in many cases decidedly uneconomical designs for concrete structures are made because of ignorance on the part of the designer of the most desirable method of construction and plant layout. In railroad work, especially on second track and grade revision

work, the methods of construction have a vital influence on the design and for this reason the designer should be thoroughly acquainted with the details of construction. The organization of the engineering departments of large railroads is such as to preclude the possibility of having the designer superintend or inspect the construction of structures built from his plans. This without doubt is the best method of acquainting an engineer with the weak points of his design viewed from a construction standpoint. Since this method is impossible the nearest approach to it which can be conveniently made is the conducting of frequent inspection trips.

On such occasions many a designer finds that details which he had reason to believe were the very best are not at all suited to the conditions governing the construction and are therefore unnecessarily increasing the cost of the work. It is therefore easy to see that in general a designer with construction experience is much more valuable than the man who has done nothing but turn out plans without seeing how they were carried out in actual construction. Since it is impossible to organize an entire force of engineering draftsmen, all of whom have had this experience, it is the duty of the railroad company to educate its employes in this line so far as possible, for the mutual benefit of all concerned.—*Railway Engineering and Maintenance of Way.*

THE highest reinforced concrete building in America is said to be a grain elevator, built by J. S. Metcalf Co., Montreal, for the Harbor Commissioners of Montreal. This structure is 220 feet 9 inches high from base of rail to top of concrete of the cupola. The building is 456 feet 8 inches long by 190 feet wide, the cupola at one end being about 300 feet long.

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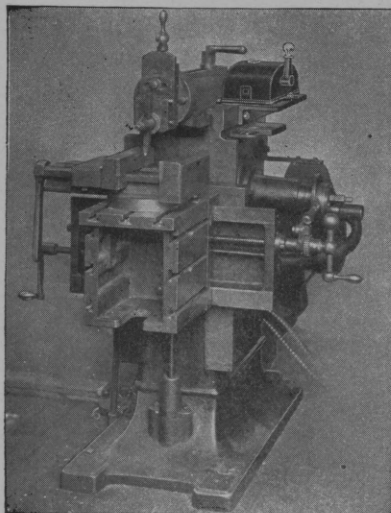
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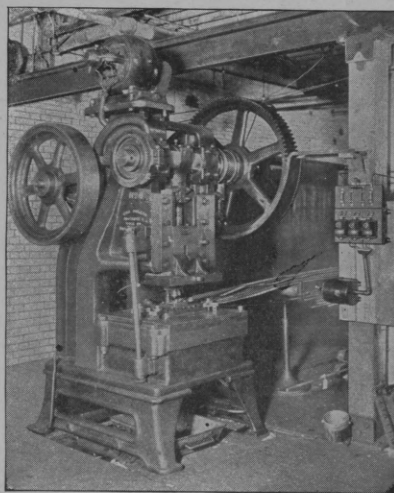
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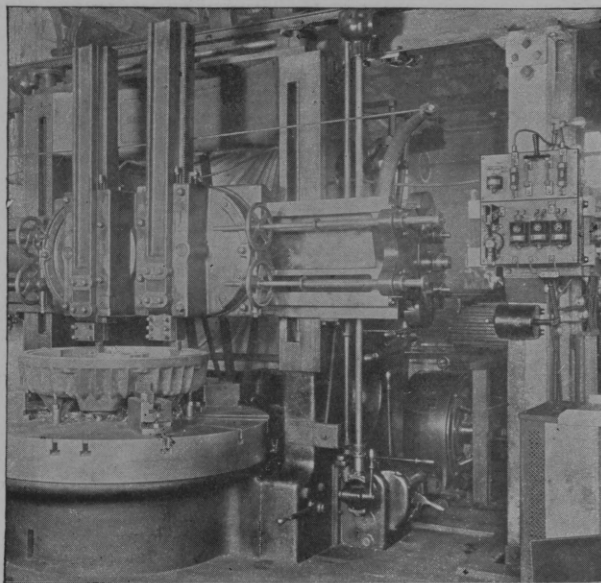
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