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The Tech.

VOL. IV.

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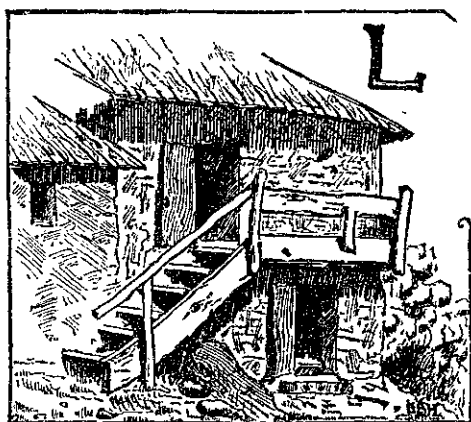
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LAST fall, when the Glee Club's Associate Membership plan was organized, part of the entertainment promised by the club was a "Social Hop," in addition to the

two concerts. Arrangements for this affair have been made, and it will take place Tuesday evening, April 14. It has not been the intention of the club to give a strictly formal dance, but to enable the associate members to pass a pleasant evening with their friends, without feeling obliged, in some instances, to absent themselves because of not being able to dance. With this idea in mind, the committee of arrangements has secured a suite of parlors at the Hotel Vendome, where the movements of those who dance will not interfere with the promenades of those who do not. The club will sing a few times during the evening, and it is expected that the "Social Hop" will be a success.

THE athletic associations of most colleges have already held their spring athletic games, and to any one who has kept familiar with the records made at these, the question must arise, "Why does not our Athletic Club apply for admission to the intercollegiate association?"

Harvard has always excelled in track athletics, but the records made in our last in-door spring games have been far superior to those made at either Yale or Princeton. Last year our '86 tug-of-war team pulled the intercollegiate champions, and at the Mott Haven game these had an easy victory over the teams from the other competing colleges. Without doubt, we could send a team to New York, next year, which would reflect credit on the Institute.

The most important question would be the financial condition of our Athletic Club, but we would be slow to believe that our students would not see it through in such a venture. Only the other day we read that Williams, with about as many students as there are in our Freshman Class, had already raised more than eight hundred dollars for its base-ball nine. Is it possible that the Institute would do less for its athletics? We think not, if the athletic associations will "go in and do something." In our opinion, the lack of financial support given to our team is due more to incredulity as to the ability of our men, than to a feeling of indifference in athletics.

MR. BENJAMIN C. LANE, '87, who has been an editor of THE TECH since the beginning of the present school year, has felt obliged to resign this position. His place has been filled by the election of Mr. Albert E. Leach, '86. Mr. Lane has been a generous contributor to the paper, and it is hoped that his interest in this respect will not end entirely with his official position.

THE idea of getting our orchestra to play for the Glee Club party, which occurs this month, seems to be well received by a number of students. The most important objections to this plan are that it is doubtful if the repertoire of the orchestra is sufficiently large, and that although most of the players do not dance, and so would feel no deprivation in not indulging in that amusement, yet four hours' steady playing is a severe tax on amateur musicians. On the other hand, certain members of the orchestra express confidence both in their musical resources and physical endurance. The students who have noted the evenness of their rendering of "Les Sourires" naturally feel inspired at the thought of whirling to the strains of fellow classmates, while undoubtedly, if the performance should be successfully carried out, it would constitute a unique and original feature, most gratifying to the Techs and creditable to their college. At all events, the matter is worthy of the consideration of the committee in charge.

WITH three more issues THE TECH closes Vol. IV. As a majority of the editors will retire at the end of the year, there will be a large number of vacancies on the board to be filled. As yet we have not received enough contributions to enable us to select the men to fill the vacant positions. The Freshman and Sophomore classes are especially invited to hand in contributions, not only of long articles, but also of "locals," "clippings," and items of college news. Local items about class and society news are especially solicited, and these will be held as the best standard to judge of a man's editorial ability.

IN another column will be found a communication in regard to the presence of wine on the tables at class dinners and similar Institute affairs. Although this is a subject which is usually considerably debated during arrangements for these affairs, the majority of Institute students seem opposed to the presence of wine at their public tables. If this opinion is held by

the greater part of any class, and is expressed in resolutions, passed by a majority of all interested members, prohibiting the use of wines on such occasions, then those resolutions should be adhered to and enforced, and no exceptions allowed to set at naught the wish of the majority, as is too often done.

SEVERAL contributions have been received by the editors, unaccompanied by the name of the writer. Care should always be taken to avoid this omission, as it is in all cases an annoyance, and may prevent the publication of an article or a drawing.

Water Supply in the Desert.

AN engineering problem of no little interest is about to be solved in connection with the construction of the railroad between Suakim and Berber. The problem is nothing more nor less than to provide an ample supply of water along a desert route from a terminal point, for the use of the workmen engaged in the construction of the railroad, and for the troops which will be needed as a guard, and also to provide for the permanent working of the road. The means which will be employed are similar to those by which petroleum is pumped from the Pennsylvania fields to the seaboard. Two four-inch pipes will be run over the entire distance (two hundred and sixty miles), on the surface of the ground, in a zigzag line, and left free to move under the influence of expansion and contraction. Every thirty miles or so will be a tank and two pumping engines, with a capacity for forcing water along at a pressure of 2,000 pounds to the square inch.

The contract for these engines has been awarded to the Worthington Pumping Engine Company of New York, who have agreed to deliver the engines in London thirty days from the time of the order. The pipes to be laid may be furnished by English firms, but there is a possibility that American works may also be called upon, owing to our facilities for making pipe of the character required to stand the enormous

pressure. The total quantity of water which will be delivered along the line will be from 130,000 to 150,000 gallons per day. As the soil of the Nubian desert is largely composed of sun-baked loam, needing only water, under its existing conditions of climate, to produce any sort of crops, it would be very easy to establish a series of oases around the pumping stations by using a portion of the water for irrigation. It seems as if, by the aid of this water line, provided by American enterprise, the end of the Soudan difficulty, so far as the movement of reinforcements is concerned, will be reached.

Physical Exercise.

AT some moment of life, a truth often reiterated in dulled ears strikes the mind with sudden force, completely upsetting many an inbred notion, and giving altered values to a man's acquirements.

Thus it is, that often an earnest student, about to leave school, when comparing his abilities to the requirements of successful competition, really appreciates, for the first time, the immense importance of physical strength and vigor. On every hand, even in his own school, he sees men who to native ability have added learning and experience, held back by physical weakness and disease, brought on by too close application to study or business; while other men, inferior in all save a sound body and the vigor that health alone can give, are able to assume higher and more exacting positions.

Then comes to him many a half-heard warning and the regretful thought that, perhaps, in his blind endeavor for mental growth and strength, he has destroyed the very means of gratifying his ambition, and he would gladly exchange some of his dearly won honors for gain in physique.

How many are there at the Institute who come up to the standard of weight, muscle, and depth of chest, which we are told young men of our age should have? To this too general deficiency of strength is largely due the lack of interest in athletic sports, and the difficulty of getting men to join in the games and to go into anything like regular training for an event. Al-

though, at the Institute, regulations of compulsory exercise which have given such good results in certain colleges would not be expedient, yet we may hope that some system may be devised by which each man may undergo a periodical physical examination, have his defects pointed out, and advice given how he may improve his health and form. We need not a gymnast, but a physician, who, though he may not be able to exhibit wonderful strength and agility, yet can give intelligent admonition to which known wisdom and experience shall add weight. When and how to exercise are not matters that a young student absorbed in his daily pursuits is apt to think about, while his health allows him to get through the tasks of the day; and it would seem appropriate that a large institution which seeks to lay the foundations of a technical education with such thoroughness as to monopolize all a student's time, should take some steps to guard against defeating its aims by injuring the health of any.

There undoubtedly have been cases here where overwork has brought about permanent harm, and if we accept the statement of an eminent physician, that eight hours per day is all the time a man ought to spend in mental work, and that if he spent six hours he could do his work better, then it must be conceded that many of the students are doing injury to their general well-being.

One feature of the instruction here which causes much of the pressure of work is that some departments apparently try to get as much time as possible from each student, assigning work as though he had nothing else to do, and where the scheme of studies calls for one hour, practically requiring two. To adjust the conflicting claims of the instructors for time, and yet to allow to the student opportunity to take necessary recreation, no one would be more suitable than an intelligent and skilled physician, who from personal observation knows the average strength and endurance of the classes, and to whom, under proper restrictions, appeal might be made from arbitrary exactions as to the amount of work to be done.

A Freshman's Lament.

"Oh call back yesterday, let time return!" — SHAKESPEARE.

Somehow I feel it growing cold,
Although the month of May is near;
The "annuals" are not far off,
When I'll be left, I greatly fear.

No more I'm like the Freshman bold,
With head erect, and sparkling eye;
Greenbacks and silver, both are gone,
But not entirely for "supply."

Then where has all my money gone?
(I lost my diary up at school.)
The Brunswick surely is to blame,
Where I get stuck for five-cent pool.

I thought next year a Soph to be,
But no such happy lot is mine;
I either from the Tech retire,
Or join the class of eighty-nine.

'T is now too late to make laments,
And wish I had not wasted time;
To others, I a warning give,
By putting my regrets in rhyme.

J. H. M.

A Peep at Pullman.

[Paper read before the Society of '87, April 3.]

THE main idea in building Pullman was to establish a town where the Pullman Palace Car Company could have their shops, and where their workingmen could reside. The idea originated with Mr. Geo. M. Pullman, the president, and was subsequently much talked of by members of the company, but was a hard one to carry through, since the site selected for the town was four years ago nothing but marshy ground. Since that time the entire city has been built.

Taking Chicago as our starting point, let us board a suburban train on the Illinois Central R. R., and begin our journey. This railroad has Lake Michigan for a boundary on the east, and is therefore very pleasant to travel over. Within the past two years, since Pullman has been recognized as a city, the railroad company has laid six tracks to Pullman, and trains run every fifteen minutes in the busy parts of the day. After a ride of about an hour, Pullman being about fifteen miles from Chicago, we arrive at our destination. Our first exclamation, on leav-

ing the car is, "How clean it is!" and indeed this is so. The streets are macadamized, and nothing is allowed to be thrown on them. There is a grass plot between the street and the sidewalk, and a low curbing separates the sidewalk and another grassplot, beyond which are the houses, set back about fifteen feet from the curbing. The houses are entirely of brick, no wooden ones being allowed, and for this reason fires are rare.

The working part of the town is on the left if we take as our starting point the neat little railroad station. We see first an artificial pond surrounded by flowers, and its banks lined with grass to the water's edge. Behind this is a long, low, two-story building, where the iron work of the cars is done. At one end of this building is the great Corliss engine, which was the mechanical heart of the Centennial Exhibition, and at the other, the offices of the company. North of this building is a smaller one, occupied by the Allen Paper Car Wheel Company. Back of these are the carpenter and paint shops, and between the two latter is the water-tower, about 250 feet in height, to the top of which water is pumped, and from which all Pullman is supplied with a good force. Behind the shops are the gas works, and about half a mile farther are the grounds of the Pullman Athletic Association and Boat Club, bordering on Lake Calumet.

At the extreme north of Pullman are some of the workingmen's houses, most of them however, being at the southern end. About a stone's throw from the railroad station, on our right, is the Hotel Florence, very pretty inside and out, where a good meal can be had. South of the hotel is the Arcade, where the druggists, dry-goods merchants, stationers etc., sell their wares, and where there is also a pleasant little restaurant. In the second story of the Arcade is the public library, of about fifteen thousand volumes, the theatre, a very tasty one indeed, holding about one thousand, and an architect's office. To the east of the Arcade is the Market, similar to the one under Faneuil Hall, where all meats, fish, and groceries can be

bought. One thing we see, or rather do not see, and that is a liquor store. With Mr. Pullman lay the decision as to whether there should be saloons or not, and he decreed *no*. The population is about 8,000, which I think will not increase much, as the shops are the only source of occupation, and these are well filled.

It yet remains to be seen whether, from a *social* standpoint, Pullman shall prove a success or no. Already the men are growing restless, because held under the rein of one man, and only time can solve the problem.

But if you wish to spend a delightful afternoon, I advise you to take a peep at Pullman.

s. s.

'Cycle Notes.

Of the large number of wheelmen who attend the Institute, many may like to be "posted up" a little with regard to some of the latest ideas and improvements in the light bicycle line, by one of their number whose long experience as a rider has always caused him to take considerable interest in such points.

I have not written full accounts of all machines, and have not pretended to criticise, preferring merely to notice the points chiefly commented on by riders in general.

To riders of light weight, and those who prefer very light machines, the "Rudge Light Roadster" will prove of interest. This machine is made very light, a fifty-inch being only thirty-eight pounds actual weight. It has already had the test of our roads, and is therefore known somewhat to riders. One improvement in this machine over last year's pattern is the abandonment of the old method of lacing the spokes, which now end at the hub and are there riveted, and made slightly larger where they pass through. This is thought to be a valuable improvement, as it does away with the old annoyance of snapping spokes at that point. Each spoke is also crossed over one spoke and under another, and soldered at the points of contact; which method, joined with the "Warwick" rim, makes a very rigid wheel. The remaining points are the same as in last year's machine.

The "American Rudge" is already well known, and is certainly a good cheap mount. The present pattern of this machine is, I believe, essentially the same as that of 1884.

The "Rudge Safety" is another edition of the "Kangaroo," but possesses a more graceful outline and some other differences, among which the gearing chain is considered important. This chain is made up of steel links with square ends, connected by short steel cylinders which revolve over the cogs, and thereby produce less friction. These little bicycles are held in considerable contempt by some riders, but it must be remembered that they supply a need not otherwise met, of furnishing a light-weight machine, which is safe, speedy, and easy running. The first quality is evident to any one who has seen the article; the last two were vindicated by their breaking all road records in 1884.

The principal wheel of Read & Sons is the "Royal Mail," which has already been tested and is well known. The spokes are laced in this machine, and cross other spokes in two places, where they are fastened with wire and soldered. The rim is the Warwick, the best hollow rim invented; the machine is also built with direct spokes. In other respects the "Royal Mail" is similar to the "Rudge."

The "Star" is made somewhat lighter this year, and has been improved by the throwing off of the jacket which covered the backbone or steering rod.

The "Victor" bicycle, made by the Overman Wheel Company, is somewhat of a departure, in several points, from other machines. The weight of this machine is not materially less than that of some other bicycles of former years; it being, I believe, about forty-two pounds for a fifty-inch. The backbone is unusually large behind the saddle. The forks are about the same as in other machines, but the handle-bar is cow-horn in shape, and is made of one hollow piece, tightly bolted to the head, thus giving a firm, detachable handle-bar. The rim is the same as the Warwick, but made of heavier iron. The tires are compressed into the rims, as in the tricycle. The spokes are laced and

fastened with wire and solder, and are tightened when they become loose by tightening the nipples at the rim. These nipples are headed at one end, bored and threaded, then being let through the rim, they screw on to the threaded spoke. The saddle is a marvel of ease, and is made of leather; its forward end is riveted to two hooks attached to a bolt running through the neck; the other end is held by a sort of cradle-spring fastened to the backbone as usual, and then making, on each side of the backbone, two circles about three inches in diameter, which bend across and meet in the middle, forming the frame of the saddle. The saddle proper, which can be taken off as quickly as one's hat, is cut with flaps at each side, which do away with the necessity for a mud guard. The cranks carry square rubber pedals, which it is claimed, by conforming to the arch of the foot, prevent it from slipping.

In regard to light machines, generally, I would say that heavy-weight riders should be careful about selecting too light machines for our rough roads. For light-weights, very light machines may do, but for most riders who cannot afford to find themselves with a poor machine, it would be well to be on the safe side, and to have a machine which may be a few pounds too heavy rather than one which would be continually breaking down; since at best, most of our light-weight machines are but experiments as yet.

G. L. P.

Communications.

(The editors do not hold themselves responsible for opinions expressed by correspondents.)

TO THE EDITOR OF THE TECH:

We are glad to hear of the unanimous stand which the class of '88 has taken against the introduction of wine at the class supper, — a matter which was discussed some time ago. Such we believe to be the proper way of treating the subject, and it is fast coming into vogue among our best colleges.

It is during the first year of a class's existence

that it establishes a reputation, and if this reputation be for good, then does it influence in greater or less degree the classes which follow. One cannot speak too strongly against the public exhibition of wine drinking as given by some of our college classes to-day. Such exhibitions go far toward lowering the standard, and in many cases exert a very demoralizing influence among the students. If a student wishes to drink, and finds that he is able to do so without immediate detriment, and has strength of will sufficient to give up such a habit, it may not seriously injure him to do so; but it is not right that he should subject others, who perhaps are not as strong as he, to a temptation which is too great for them to withstand, and which if yielded to once, may ultimately be their ruin.

In a class supper of eighty or one hundred fellows, there would be a great deal of excitement, and certainly a few would be too weak to battle a temptation which they might know in the end would prove ruinous to them. Although this might not in every case be true, yet the chances are so great, and the consequences so serious, that a class of right-minded fellows should not hesitate a moment in their decision. The presence of wine can at least do no good, and it may do great harm!

J.

Mr. Arthur T. Hadley's lectures on "Questions of Railroad Management and Policy" were commenced March 26, and continued for two weeks, making twelve lectures in all. The following are some of the principal subject heads:

1. Introduction. The class of questions treated. General characteristics of railroad business.
2. Problems arising out of the relation of railroads to those who use them.
3. Problems arising out of the relation of railroads to one another.
4. Problems arising out of the relation of railroads to investors.
5. Present tendencies of railroad management and legislation.

Noticeable Articles.

THE *Atlantic* for April has an interesting paper, by Prof. Laughlin, of Harvard College, entitled "Political Economy and the Civil War," on the recent progress made in the teaching of that most important study in American colleges. "The war," he says, "did for this country — in a different way of course — even more than the corn-law agitation did for England. It actually gave birth to new motives for study. There never was a time in our history when there was so evident a design to get light on the economic problems of the day as now. There is a new stir among the ranks of the young men at college; and the printing press sends forth an increasing stream of new books upon subjects which are constantly discussed in the daily newspapers. There is, unquestionably, a new-born, slowly-growing attention by the younger men of our land to the necessity, as well as the duty, of fitting themselves properly for the responsibilities of citizenship."

Prof. Laughlin goes on to enumerate some of the most important economic questions which are pressing for solution: "the false silver dollar, masquerading in sheep's clothing, and waiting to catch the unwary business world 'napping,' when it will suddenly assume its true depreciated character, and devour fifteen or eighteen per cent of all creditors' dues estimated at present prices"; the banking question; "the most difficult of all problems, national taxation," involving as it does the question of protection and free trade; "the barbarous and mediæval navigation laws"; "the unfortunate legal-tender decision of Judge Gray," — and many others.

There is a very instructive table showing the position of economic studies in five of our leading colleges in 1860, 1870, and 1884. Students at the Institute may well congratulate themselves on the character of the instruction on this important subject which they have the privilege of securing.

In connection with this paper it will be interesting to read another by the same writer in the *Popular Science Monthly* for April, on the character and discipline of political economy. The same number contains a sketch, with a portrait of Prof. John Trowbridge, now professor of experimental physics at Harvard College, and formerly assistant professor of physics at our Institute.

THE *North American* for April has a very instructive paper on the Agricultural Crisis in England, which will be interesting to the Second Class, in connection with the lectures on that country. It is by Mr. W. E. Bear, a well-known English authority. "The depression," he says, "that had long been prevalent in England, has culminated in a crisis of great severity. Prices of grain were low enough before harvest to render grain production unremunerative under existing conditions of farming, except on the most fertile soils, and the further fall has been the last straw which breaks the camel's back." At prices likely to rule for years to come, he calculates the

loss on English wheat-growing at £2 per acre. "When every reasonable allowance is made," he says, "the fact remains that land in Great Britain is not worth so much to farm now as it was in 1852." Yet England has some of the most skilful farmers in the world. The cause of this state of things is, of course, that antiquated relic of mediævalism, the system of hand holding, which enables a body of landlords, not too large to be comfortably seated in Boston Music Hall, to monopolize nearly the whole of the island.

Of a return to the protective system as a remedy for this state of things, Mr. Bear speaks thus: "It is a great waste of time and energy which might be devoted to useful purposes to carry on a hopeless agitation for a return to protection, especially in relation to farm produce. It is not at all likely that the people of this country will ever consent to revise the policy of free trade, which has brought them such unexampled prosperity; and they certainly never will so far revise it as to allow of taxes on the principal articles of their food. To a great extent the agitation is being fostered by scheming politicians for party purposes; but now that the great masses of bread consumers have been enfranchised, there is not the slightest prospect of success for the trickery."

"With respect to remedies that may be termed practical," he says, "there is hope in the increase of dairy farming, stock breeding, meat production, fruit growing and poultry keeping: [England imports annually 800,000,000 of eggs]; but all new departures, involving free enterprise and the expenditure of capital, are checked by the want of security for capital, and by the absurd restrictions the landlords impose upon cropping and sale of produce." The only remedy, therefore, is a change in the landed system; and it is obvious what an advantage is possessed by France, where the mediæval system has been abolished, and by our country where it never existed. "The best advice," he says, "that can be given to the American people is to avoid the landlord-and-tenant system as they would shrink from a pestilence."

W. P. A.

THE first edition of the April *Century* consists of the extraordinary number of 225,000 copies. The most important article is Admiral Porter's paper on "The opening of the Lower Mississippi," which he speaks of as "the most important event of the war of the rebellion, with the exception of the fall of Richmond." Geo. W. Cable, in a brief article, gives a graphic description, from personal observation, of "New Orleans before the Capture." The fiction of the number includes instalments of "The Rise of Silas Lapham," and "The Bostonians." Also a humorous story by Col. R. M. Johnston, entitled "The Mediations of Mr. Archie Kittrell," illustrated by Kemble. The poetry of the number is contributed by Mrs. Helen Jackson, Mrs. Louise Chandler Moulton, Margaret Vandegrift, Frank D. Sherman, and others.

List of Publications, M. I. T.

CLASS OF '79. Annual Catalogue of the Class of '79, M. I. T. Pph. 12mo, pp. 14. [1885.]

CROSBY, W. O. ('76). On the chasm called "Purgatory" in Sutton, Mass. *Proc. Bost. Soc. Nat. Hist.*, XXII. (1883), 434-436.

——— Origin and Relations of Continents and Ocean Basins. *Id.*, XXII. (1883), 443-485.

——— On the Relations of the Conglomerate and Slate in the Boston Basin. *Id.*, XXIII. (1884), 7-27.

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The College World.

HARVARD. — The third winter athletic meeting was held in the gymnasium on Saturday March 28. In the running high jump Fogg Clark and Atkinson all cleared 5 ft. 8 $\frac{3}{4}$ in. Fogg broke the record of 9 ft. 2 in. in the running high kick by three quarters of an inch; he also broke the hitch and kick record of 8 ft. 6 in. by a kick of 8 ft. 11 in. '88 won the tug of war. Fogg, Clark, and Atkinson are members of the Mott Haven team. — During the past year the university library was increased by 12,360 volumes.

COLUMBIA. — No student of the third or fourth classes in the School of Mines is to be allowed to go on, unless he attains an average of seventy-five per cent in all his studies. — Good prospect for base-ball this year. — The crews now run nearly every day, instead of three times a week as formerly. — More money than the amount already subscribed is needed for the support of '88's crew.

ELSEWHERE. — Prof. Phelps of the Yale Law School has been appointed minister to England. — Seven men are at present in training for the Wesleyan crew. — Hon. Eugene Schuyler has presented to Cornell University library a collection of 500 valuable volumes, consisting mainly of the authorities used by him in the writing of his "Life of Peter the Great." — The University of Pennsylvania will have a ball nine in the field this season. — The catalogue of Berlin University for the present winter semester bears the names of five thousand and six regular students. — Oxford defeated Cambridge in the annual boat race. — The testing of eyes their strength and range, will hereafter be a part of the regular statistics taken by the department of hygiene at Amherst. — The Brown

Freshmen showed a very commendable spirit at their class meeting last week by voting unanimously to raise a base-ball tax of three dollars per capita. — Two thousand five hundred volumes, containing works and history of the Puritans, were lately purchased in London for the Princeton Seminary Library.

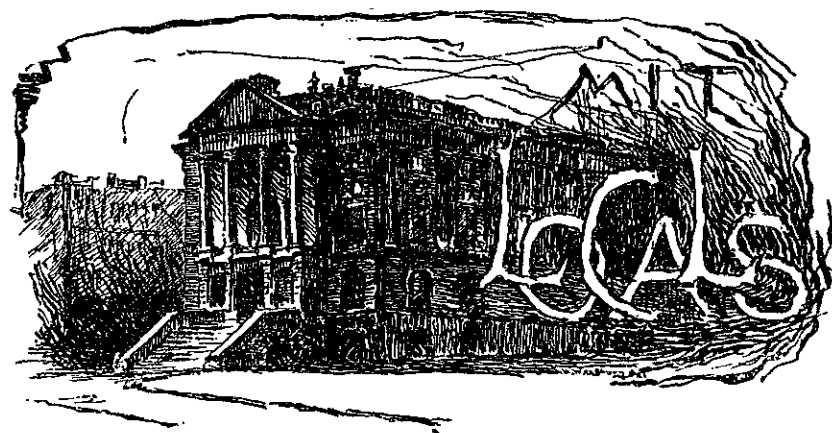
EXCHANGES. — The Williams *Argo* has published a farewell number, and is to be succeeded by the Williams *Literary Monthly*. — The *Stevens Indicator* shows a marked improvement in the current volume, and has become a paper after THE TECH'S own heart. — The *Polytechnic* is a new exchange published by the students of the Rensselaer Polytechnic Institute, at Troy, N. Y. The three leading technical schools in the country are all now represented in the college press. — The literary supplements of the Harvard *Crimson* are a great success.

Sigma Chi Dinner.

THE $\alpha\theta$ chapter of ΣX held on March 21 a dinner commemorative of the third anniversary of its formation. In addition to the seventeen active members, Bros. Schmidt and McPherson, now at Harvard, and Bro. Bodwell, an alumnus of the chapter, enjoyed the good things prepared at Young's. Under the sway of Bro. Currier as toast-master, the evening passed rapidly and to the satisfaction of all concerned. The following toasts were responded to with wit and wisdom: —

<i>Alpha Theta</i>	. . .	F. W. Putnam.
<i>The Fraternity</i>	. . .	Bro. Schmidt.
<i>The Alumni</i>	. . .	Bro. Bodwell.
'85	. . . . .	Heywood Cochran.
<i>Harvard Sigs</i>	. . .	Bro. McPherson.
'86	. . . . .	Theodore Stebbins.
'87	. . . . .	F. P. Gulliver.
'88	. . . . .	Maurice Du Pont.
<i>The Goat</i>	. . . . .	J. S. G. B. Ray.
<i>The Ladies</i>	. . .	Guy Kirkham.

The pleasures of the evening stood well the morning's reflections, and all present look back upon the occasion as the most pleasant of the school year.



Annuals in five weeks.

Our students enjoyed a holiday on Fast day.

The Assay laboratory boasts a new drinking fountain.

H. Ward Leonard, '84, is now located at Circleville, Ohio.

Papyrographs are still in full bloom in the Assay laboratory.

Motto of office-seekers generally: "Reform will keep, — but it will not keep us."

A chapter of Theta Chi has been instituted among members of the Sophomore class.

The Freshman class dinner will take place on the evening of April 16, at Young's Hotel.

President Walker is an attendant at Mr. Hadley's lectures on Railroad Management and Policy.

Nearly a score of Techs attended a dance given last week by the Senior class of the Girls' High School.

A regular meeting of the 2 G was held Wednesday, April 1, at Young's Hotel, at which several new members were elected.

Optics being temporarily eclipsed, the second-year physicists are now magnetized by *declination, inclination, and explanation*.

The second division of third-year chemists has begun work in the laboratory of industrial chemistry, the first having finished.

The Beta Beta chapter of the Alpha Tau Omega Fraternity has been recently established at the Institute under the most favorable auspices, Mr. C. W. Baker, a member of the High Council, being present, and conducting the initiation exercises in person.

About a score of persons, mostly members of '87, accompanied Prof. Crosby in his visit Fast day to the carboniferous and lime formations near Smithfield, R. I.

In the recent '88 flag raising, several large holes were cut in the banner. A Freshman explained "that they were for the wind to blow through, so that the flag would hang straight."

Since the platinum supply for the laboratories is exhausted it would seem that either Faculty or students might obtain a regular Institute discount at the Prang or some other supply company.

How many of our professors remember the rule to dismiss their classes five minutes before the hour? Some of them are particularly lax about this, often causing students to be late to the following lecture in consequence.

The principal "April fool" of the season was that perpetrated by certain Sophs on the Freshmen. An '88 class meeting was called by the former, and if all such summonses were as well attended to, fewer class meetings would have to adjourn for lack of a quorum.

The requirements for admission to the School of Industrial Science have been altered, so that one intending to take a special course in chemistry must pass the entire entrance examination. After entrance, French and German are required studies, and physics is recommended.

We are obliged to call attention to the hard treatment which our binders and exchanges receive in the reading-room. These are placed there for the use of subscribers, through the kindness of THE TECH, but are not intended to be mutilated or destroyed. We trust, however, that it has been due only to thoughtlessness, and that we shall not be obliged to speak of this again.

At a meeting of the class of '85, held Friday afternoon, the permanent committee and officers for the Seniors' Farewell were elected, as follows: Committee of Arrangements, Messrs. Richards (chairman), Williams, Fry, Pratt, and Homer; Poet, C. Stanley Robinson; Historian, Fred H. Newell; Prophet, R. H. Pierce; Chorister, E. B. Homer.

Any one not an associate member of the Gle Club, wishing to attend the hop Tuesday evening, as well as the remaining concert, can do so by applying to the officers of the club to become an associate member for the rest of the year.

It is becoming the style in the most fashionable colleges to turn down the upper left-hand corner of an examination paper, in order to signify that the answers thereon have been made *en personne*; i. e., without the assistance of horse or other friend.

The orchestra contributed to the entertainment of the visitors at the last B. Y. M. C. reception to the extent of two gavottes and waltz. Hardly half a dozen Techs were present among the audience, which, considering the large number who are members of the association, speaks badly for the general interest in our musicians.

At a short business meeting, the 28th ult., to dispose of a small surplus of funds remaining from the class supper, the class of '87 voted to purchase a gavel and Cushing's Manual for the chair. The rest of the funds were voted to the Foot-Ball Association, and a collection was taken up for the same worthy object, after which the class voted to furnish the prize drill flags for '88, the expense being defrayed by subscription.

A small and select circle of members attended the last regular monthly meeting of the Society of '87, on the 3d inst., and, after the usual luncheon, listened to well-written papers by Messrs. Colburn and Sturges, the subjects being "The Character of Mahomet" and "A Peep at Pullman," the latter paper, owing to the absence of Mr. Sturges, being read by Mr. Sears. A few lively selections for the flute were played by Messrs. Lynch, Richardson and Bullard, and some humorous readings by Messrs. Todd and Draper, from Mark Twain and *Life*, were much enjoyed. As an offset to the '87 cup, a bachelor's outfit has been prepared by the committee, for the society bachelor. After having been voted to Mr. Todd, the package was opened by him and found to contain a "spud-masher," rolling-pin, kneading board, wash-tub, scrubbing-board, wringer and clothes-horse, all suitably inscribed.

It is reported that a flag inscribed "'88" was hung up on the wire running between the roofs of Rogers and the B. Y. M. C. A. buildings some night week before last. Also that it was promptly disposed of by a delegation from '87, who have a mania that way, but who propose to atone for the enormity at the Freshmen's prize drill.

The Institute was honored last week by a visit from Capt Bedford Pim, Royal Navy, F. R. G. S., etc. He had only time to glance through some of the rooms in the lower part of the Old Building, but was interested in what he saw. Capt. Pim is the man who brought the British Scientists over here last fall, and is trying now to get the American Association to hold a meeting in London. He has been to Central America, Utah, Montana, and Colorado, and is now having published a book about the cattle country.

Base-Ball Notes.

Mr. Douglas has resigned his position as manager of the B. B. Association, and Mr. Currier has been elected in his stead. Mr. Currier has for three years managed the nine of the Northwestern University, in Illinois.

It has been suggested that the Athletic Club, Base-Ball Association, and Tennis and Lacrosse Clubs combine, and lease the Union grounds for the next two months. This would be a more favorable opening for tennis and lacrosse than they have ever before had at the Institute.

Candidates for the nine showed great interest in the games played on the Union grounds on Fast day, when, in spite of unfavorable weather, enough men were present to form four nines. A number played so well as to warrant the formation of a good nine, which will be much better than any that the Institute has yet put into the field. The material is undoubtedly very fine, and practice is all that is necessary for success; but this can only be acquired by a sound financial condition, so that grounds can be hired. All men interested in athletics at the Institute should subscribe freely. The old excuse, that base-ball cannot succeed here, has now no ground.



Spring.

You may talk of the signs of the weather,
Of the coming days you may sing,
But sitting down on a red-hot stove
Is the sign of an early spring.

Mountaineer.

"Lady-in-waiting" — an old maid. — *Life.*

TOO BAD.

Maggie, to her step-father, who is very popular with the children: "I wish you had been here when our other papa was alive! You would have liked each other so much." — *Life.*

Professor (to student reciting on trusses): "What is the live load on a roof?"

Voice in back of room: "Cats."

Stevens Indicator.

Professor (reading): "Enter Mephisto!"
(*Turning to Mr. C., who has just come in:*)
"Good morning." (*General collapse.*)

Columbia Spectator.

Inquisitive offspring to fond father: "Papa, what is the meaning of 'Tra-la-la,' in the song I am learning?" *Fond father, perplexed for a moment, but recovering:* "It means, my child, the same as 'fol-de-rol-lol' in the other song you have already learned." *Offspring silent, but not edified.— Ex.*

Young Gadsby: "Say, Wagstaff, I've got a big joke on you, old boy. You're so fond of hoaxing other fellows, somebody has hoaxed you finely this time. You thought there was a real mermaid on board one of the Cunard steamers, and I've taken a whole day and been on every steamer in port, and asked about it, and, ha! ha! there ain't any mermaid on any of 'em!"

Columbia Spectator.



This is the Senior Ball.



This is the Senior, stern and staid,
Who danced at the Senior Ball.



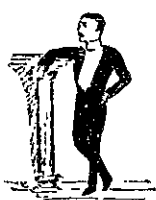
This is the bright and gushing maid,
Who wached the Senior, stern and staid,
Who danced at the Senior Ball.



This is the Freshman, promising blade,
Whose foe is the Soph, a dupe by trade,
Smaller than the Junior whose plans were laid
To flirt with the bright and gushing maid,
Who wached the Senior, stern and staid,
Who danced at the Senior Ball.



This is the Dress-coat, newly made,
That clothed the Freshman, promising blade,
Whose foe is the Soph, a dupe by trade,
Smaller than the Junior whose plans were laid
To flirt with the bright and gushing maid,
Who wached the Senior, stern and staid,
Who danced at the Senior Ball.



This is the Junior whose plans were laid,
To flirt with the bright and gushing maid,
Who wached the Senior, stern and staid,
Who danced at the Senior Ball.



This is the Wall-flower, left in the shade,
Who yearned for the Dress-coat, newly made,
That clothed the Freshman, promising blade,
Whose foe is the Soph, a dupe by trade, laid
Smaller than the Junior whose plans were
To flirt with the bright and gushing maid,
Who wached the Senior, stern and staid,
Who danced at the Senior Ball.



This is the Soph, a dupe by trade,
Smaller than the Junior whose plans were laid
To flirt with the bright and gushing maid
Who wached the Senior, stern and staid
Who danced at the Senior Ball.



This is the Orchestra, that sweetly played,
To the disgust of the Wall-flower, left in the shade,
Who yearned for the Dress-coat, newly made,
That clothed the Freshman, promising blade,
Whose foe is the Soph, a dupe by trade,
Smaller than the Junior whose plans were laid,
To flirt with the bright and gushing maid,
Who wached the Senior, stern and staid,
Who danced at the Senior Ball.

Lady (to small boy, to whom she has given a sixpence to console him for the loss of one he has dropped): "Why do you still cry, little boy? There is nothing to cry about now." Boy: "Why, a-cause if I had n't dropped the other sixpence, I should have had a shilling now." (Sobs bitterly.) — Fudy.

A Freshman who lives in the suburbs v heard making this tempting, but very naught proposition to a classmate: "Now, Bob, y come in town with me to-night, and have so fun; I'll spend the fifty cents Uncle Geoi gave me Christmas, and we'll have a regular te — we won't get home till eleven o'clock."

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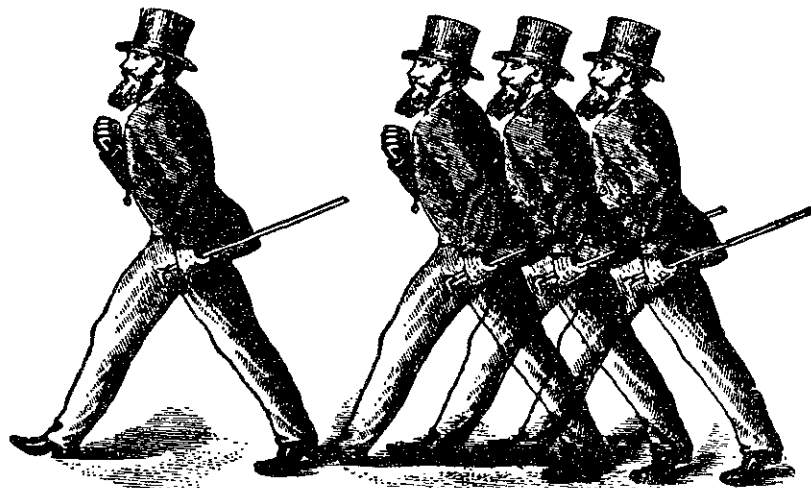
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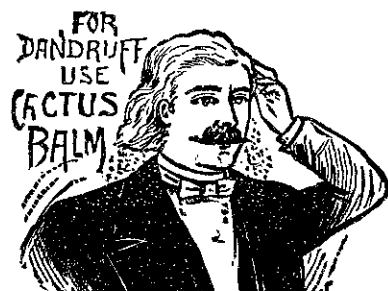
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"Lend Me a Dollar" is presented this week at the Bijou Theatre for the first time in this city. Mr. William Carroll makes his debüt here as a star, in this musical comedy written for him by John Harrison.

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Besides the above distinctly professional courses, the Institute offers scientific courses of a less technical character, designed to give students a preparation for business callings. A four years' course in biology, chemistry, and physics has been established, as preparatory to the professional study of medicine.

Modern languages are taught so far as is needed for the ready and accurate reading of scientific works and periodicals, and may be further pursued as a means of general training.

The constitutional and political history of England and the United States, political economy, and international law are taught, in a measure, to the students of all regular courses.

Applicants for admission to the Institute are examined in English grammar, geography, French, arithmetic, algebra, and geometry. A fuller statement of the requirements for admission will be found in the catalogue, which will be sent without charge on application.

A clear admission paper from any college of recognized character will be accepted as evidence of preparation, in place of an examination.

Graduates of colleges conferring degrees are presumed to have the necessary qualifications for entering the third-year class in any of the regular courses of the Institute, and will be so admitted provisionally, on the presentation of their diplomas.

The feature of instruction which has been most largely developed in the school is laboratory training shop-work and field practice, to supplement, to illustrate, and to emphasize the instruction of the recitation and lecture room.

Surveying instruments are provided for field work in civil and topographical engineering. Extensive shops have been fitted up for the use of both hand and machine tools; and a laboratory of steam engineering has been established as a part of the instruction in mechanical engineering. Several steam boilers and steam engines of various types are available for experiments and tests. The department of mining engineering and metallurgy has the use of laboratories in which the milling and smelting of lead, copper, silver, and other ores, in economic quantities, are regularly performed by the students themselves. The classes in architecture supplement the work of the drawing and designing rooms by the examination of structures completed or in course of erection, and by practical experiment in the laboratory of applied mechanics, testing the strength of materials and working out problems in construction. The Kidder Chemical Laboratories, just completed, contain desks for four hundred and twenty-six students, and afford the best modern facilities for the study of general, analytical, and organic chemistry. The Rogers Physical Laboratory has been greatly extended in every department during the past year, especially in respect to facilities for instruction and research in electrical science.

On the successful completion of any one of the four-year courses of the Institute, a degree of bachelor of science will be conferred. The Institute is also empowered to confer the degree of doctor of science. Special students are allowed to enter special divisions of any of the courses, on giving evidence that they are prepared to pursue with advantage the studies selected.

The Institute of Technology, as a recipient of a portion of the United States grant to colleges of agriculture and the mechanic arts, gives instruction in military tactics.

The fee for tuition of students taking the full course is \$200 a year. Besides this, \$25 or \$30 are needed for books and instruments. There are no separate laboratory fees. Only payment of articles broken is required.

Attached to the Institute are also two special schools: viz., the "School of Mechanic Arts," and the "Lowell School of Industrial Design." The former gives a training in the use of tools, together with elementary mathematics and drawing. English, French, and geography are also taught in this school. The fees for tuition are \$150 a year. The Lowell School teaches the making of designs for prints, carpets, wall-papers, laces, gingham, and other woven goods. A weaving department with a variety of looms is connected with this school. No charge for instruction is made.

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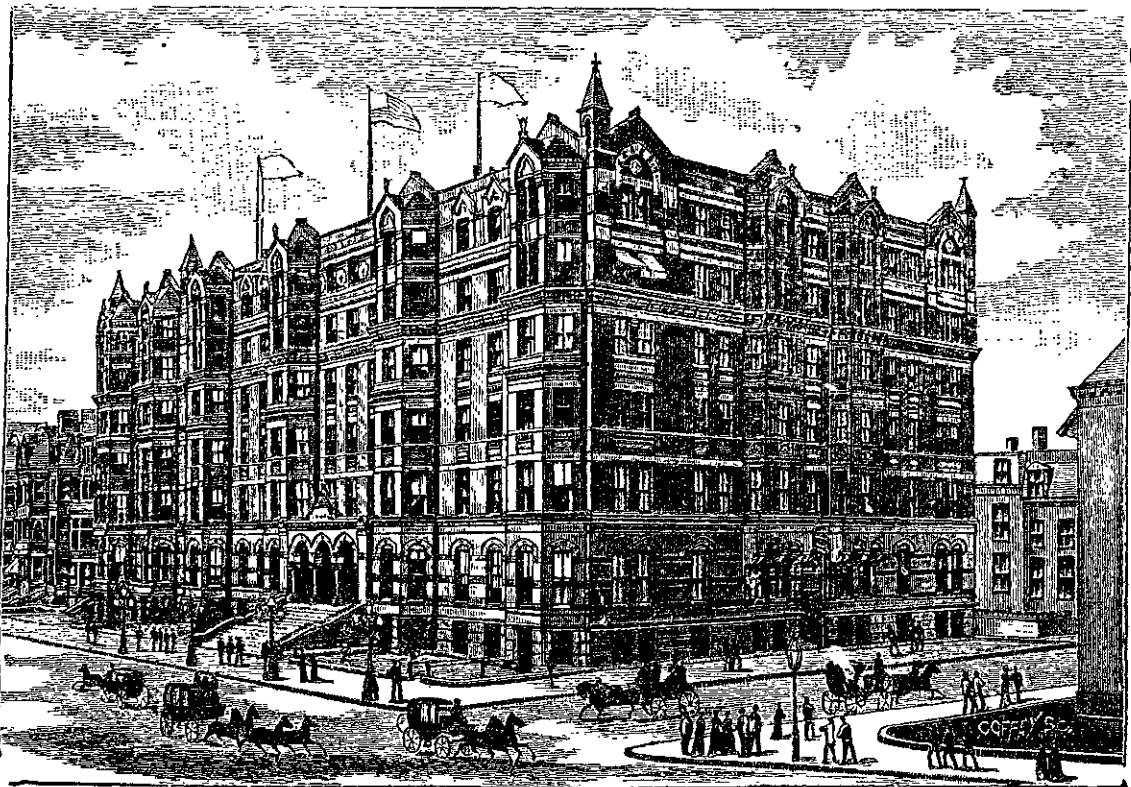
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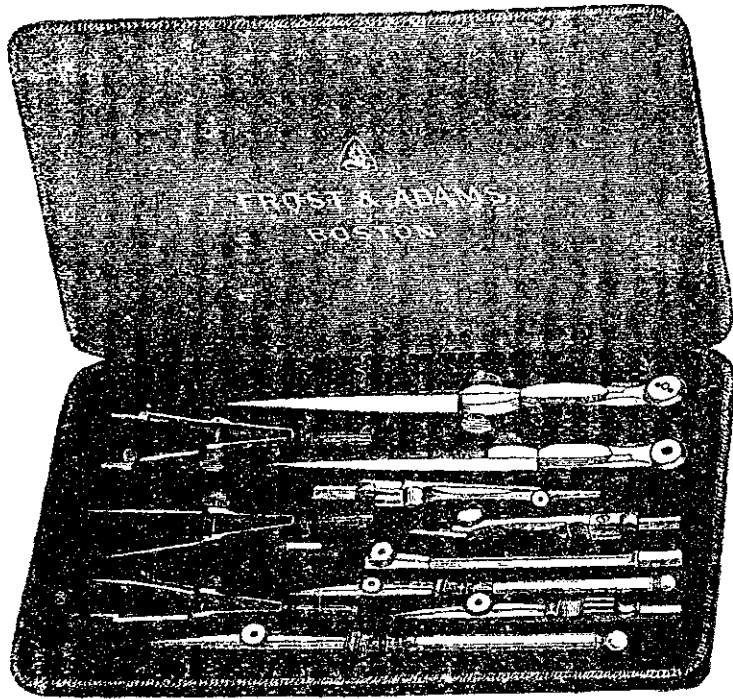
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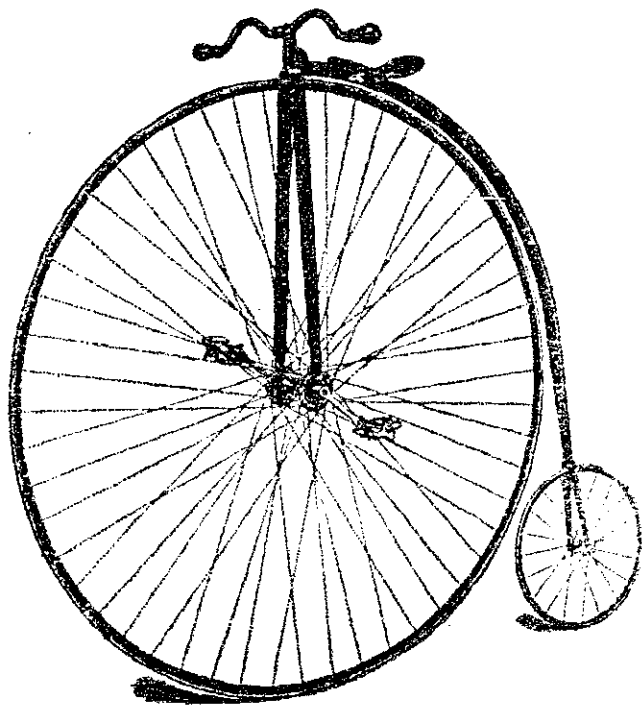
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