The Tech.

No. 7. BOSTON, FEBRUARY 8, 1882. VOL. I.

THE TECH.

Published on alternate Wednesdays, during the school year, by the students of the Massachusetts Institute of Technology.

TERMS:

Subscription, $2.00 per year in advance.

Single copies, fifteen cents each.

Communications requested on matters of general interest.

Copies for sale by A. WILLIAMS & Co.

ALFRED MUDGE & SON, PRINTERS, 34 SCHOOL STREET, BOSTON.

WE have received a communication from one of the civils, expressing considerable dissatisfaction with the manner in which the TECH has neglected that department. The correspondent states that the civils have been mentioned but once, while the other departments have each had several columns, and that an outsider would have no means of knowing that there was such a department, whereas it is as much entitled to mention as any of the other courses.

The editor who represents both the mechanicals and the civils is himself one of the former, and is constantly receiving from them the notes which appear in the TECH; but although he has repeatedly asked the civils for matter, they have not responded, and have not seemed to take any particular interest, one way or the other. It must not be forgotten that this editor represents both departments alike, that he will be as much pleased to receive "copy" from one as from the other; and if there are more articles relating to one than to the other, the simple reason is, the mechanicals have taken more interest in the paper.

There seems to be a lack of energy in the Department of Civil Engineering as a body, such that the few who have been endeavoring to organize a society for the purpose of debate, etc., report that their efforts are fruitless; it is probable that until the civils band together and are fully awake to their own interests, the department will continue to be as poorly represented in the columns of the TECH as it is at present. Every mechanical, however, takes a personal interest in the affairs of his department; and one of the best proofs of this statement is seen in the rapid growth and immense success which have attended their society, formed as a means of self-improvement and of strengthening the party spirit. We see no cause for censuring the editor for the present state of affairs, and again repeat that such articles as shall be sent in will be recognized.

AMONG the many pleasant things that occurred on the mechanicals' trip, nothing was more pleasant than the reception of the party at the Sheffield Scientific School. When our students arrived at the school building they were met by the professors and senior class in dynamical engineering, and courteously shown round the building. The Yale students then accompanied the visitors to the Winchester Arms Company's works, and spent two hours in watching the work there. In the afternoon our party, by invitation of the "Shef." boys, enjoyed a sleigh-

ride, and were shown the college grounds, the boat-house, and the city of New Haven generally. Some hearty cheering was indulged in, and the two parties separated with the greatest good-will. We hope that the professors and students of the Sheffield Scientific School will soon find an opportunity to return the visit.

WE have just received the "Directory" of the Class of '79. It comprises the second volume of the class history, and a list of the members. We quote: —

"But beyond, above, and infinitely surpassing in importance all such minor details of station and condition, there are facts which deserve from us all considerate, deliberate, profound, and earnest thought.

"Mr. Charles Sumner Gooding, formerly of Brookline, Mass., at present professionally connected with the Holy Communion Church Institute, of Charleston, S. C., did, with premeditated design and malice aforethought, cause himself to leave the state of single blessedness, and take unto himself a fair companion for the journey in life.

"Be it said in extenuation that he did previously inform the secretary of his intention; and that, the said secretary consulting with the executive committee, it was deemed proper and correct that the brave young man should be presented by the class with some mark of their esteem. A handsome etching was therefore purchased and appropriately presented. Mr. Gooding hereby tenders his heartiest thanks to the class for its kindness.

"It was afterwards discovered that a certain well-known William S. Stearns had secretly and quietly settled down to connubial bliss in the little town of Wyoming, Ohio. The secretary being ignorant of the occurrence until long afterward, and never having officially received any information on the subject, no action was taken in the premises; but at this late day let us all wish the happy couple long life, joy, and prosperity."

Seventeen of the thirty-seven members of this class remain in Massachusetts; the others are scattered through twelve States and Territories.

Contributions.

The Evans Table.

OF this new and improved ore concentrator, Mr. William J. Evans is the patentee.

It "relates to ore-concentrating machines having a horizontally rotating table, whereon the ore is distributed by water and washed by jets of clear water." It was patented May 4, 1875. Judging from the reports of those who have been at the copper mines of Lake Superior, it is one of the best in the market, if not the best of all. It is almost entirely used at Lake Superior, and is scarcely ever seen farther west in the gold regions. Business having called Prof. Richards into the copper region, he became thoroughly acquainted with its workings; and on his return to the school he ousted the old Rittinger tables and substituted the Evans table.

There is very little published concerning this machine, so that the information herein contained is obtained partly from Prof. Richards and partly from observation. For simplicity's sake I have left out a few lines and the shading. Also the division line between the plates C and E is made parallel to the main frame. This is not so on the Institute machine.

Obviously, these plates can be placed and held at any angle by means of the rods N. There are four of these rods, but only two are shown. The pipes P and R and the trough T would have to be shifted to correspond.

The trough is inclined so that the tailings, etc., will run out and collect beneath.

The apartments for the middlings and concentrations have separate spouts.

The revolving table D is supported by the stout framework J (Fig. 1). There are twelve of these braces, which are held nineteen inches apart by cross pieces near the end. One of these braces is shown in the lower left-hand corner of Fig. 1.

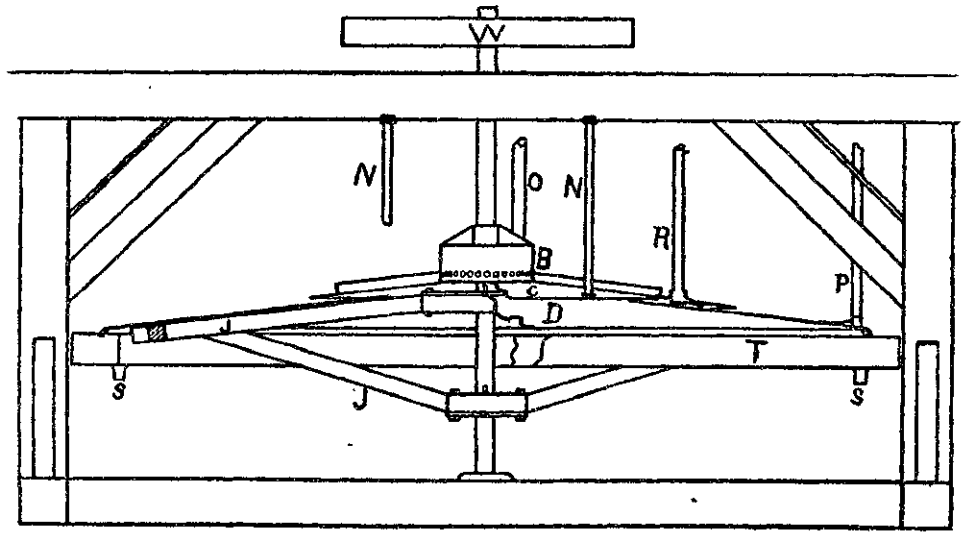
Motion is transmitted by means of the wheel W.

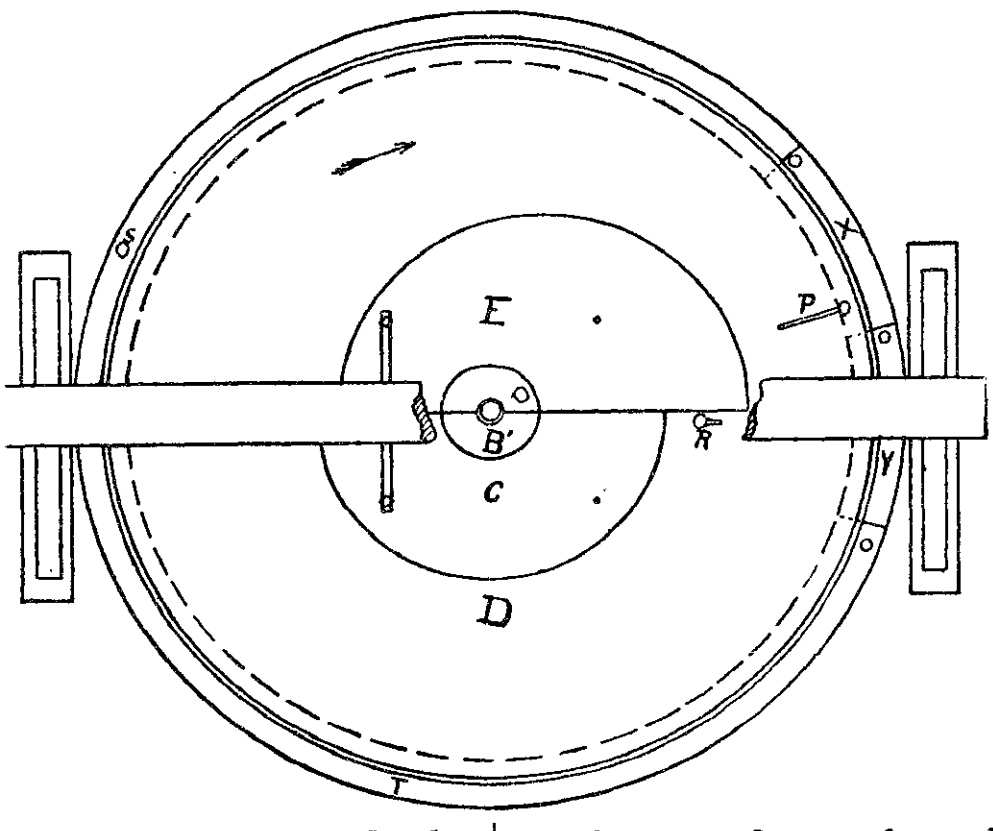
The working of the tables is as follows: —

The puddled water, or that holding the copper and sand in suspension, is run into the distributor B, which is partitioned so that this water can be kept separate from the clear water.

The puddled water, being in one side of the distributor B′ (Fig. 2), runs through the holes at its base, and is distributed equally over the stationary circular plate C, and run on the rotating table D in a thin sheet.

The table D, revolving in the direction of the arrow (Fig. 2), carries the sand with it into contact with the clear water that is distributed equally over the stationary cam-shaped plate E from the other half of the distributor.





By this means the light sand, etc., is washed off the table D into the trough T. What is here caught constitutes the tailings, which theoretically should contain no copper. The richest ore remains on the upper part of the table D, being shielded by the projection of the cam-shaped plate E, Fig. 2, from the action of the clear water.

The poorer grades of ore are, through the action of the clear water, washed about halfway down the rotating table D; then they come in contact with the diagonal perforated pipe P (Fig. 2), and are rewashed by a succession of small jets from the perforation of this pipe. The poorest ore is washed into the apartment X (Fig. 2). These constitute the "middlings."

The ore passing between the jets is carried around until it comes in contact with the strong jet of water from pipe R. This pipe, placed as it is, washes everything, the richest ore as well as that last mentioned, into the apartment Y (Fig. 2).

What is here caught is the concentrated ore.

Now, as to our work and experience. The first ore tried was the copper tailings from the Calumet and Hecla mine.

This was worked by Mr. Faunce for his thesis.

The tailings, running $4\frac{5}{10}$ per cent of copper, were stamped and washed through a thirty-mesh sieve. The water holding the copper and sand in suspension passed through a spitzlutte, and then directly to the tables. This gave a poor result, for considerable copper went into the tailings.

Starting again, the water, etc., was allowed to run through three settling pans. Obviously, the bulk would settle in the first pan. What did settle here was shovelled out and run through a trough combining the spitzkasten and spitzlutten principles. By this means the coarser of both sand and cop- was taken out. That alone which floated over the pointed noses went on the tables. This, fed at the rate of 1.2 kilos per minute, was handled very well. A difficulty was experienced, however, by the banking up of the ore and water on the sharp edge of the sheet-iron covering. This

would not only obstruct the freedom of the water flow, but also would tend to lower the richness of the middlings and concentrations by being carried beyond the apartment for the tailings. The trouble was remedied by Prof. Richards screwing on to the edge a strip of wood with its upper edge rounding. This worked much more satisfactorily. There is no doubt but that we could have fed on much more ore if this had been put on at the start.

It was our experience, then, that the crushed ore passing through a thirty-mesh sieve cannot be profitably run directly on to the tables. The coarse copper and the coarse sand alike will be rolled over and over and lost in the tailings. This loss may somewhat be due to the fact that our tables have about the same inclination, $1\frac{3}{8}$ inches per foot, and revolve at the same rate as those at the Calumet and Hecla, which are nineteen feet in diameter, while ours are but eight feet. It remains to be seen, and Prof. Richards is working in that direction, whether if a finer sieve could be substituted, it might not be done.

The crushed ore at the Calumet and Hecla is first jigged. By this means the coarse is separated from the fine, which, running 1.5 per cent of copper, is the only part of the whole that goes on to the tables. Samples were taken all around the table, and the average yield of the tailings was .45 per cent of copper. G. W. M.

Σ. M. E. Excursion.

THE establishment of the Wheelock Engine Company, in Worcester, was the first place visited. Among the peculiar features of this shop is the large use of special tools. The machine for boring the cylindrical surfaces of the guides is peculiarly ingenious, as well as the cylinder-boring machine. These are constructed in such a way as to eliminate all possible errors of workmanship. All the different parts of the engine, and their manufacture, were discussed in order. The action of the valves was explained by drawings and models. The high merit of the Wheelock engine is attested by the number of medals which have been awarded it at various exhibitions. One medal — that of the millers' exposition of 1880 — is the finest ever won by any engine, and is valued at $500. The students were kindly received, and invited to come again.

AMONG the places of interest visited was the shop of the Deane Pump Company, at Holyoke. The mechanical engineering department is already indebted to the company for one of their small pumps, which illustrates not only the principles of a direct-acting pump, but especially those of one of the best ever made. The society received the kindly attention and escort of Mr. Deane, and was convinced of the superiority of workmanship and methods of construction in the manufacture of the Deane pump. Of the pumps in process of construction, aside from those for ordinary service, were those for water supply and mining purposes. An engine of the former class was being built for Gardner, Mass., having a capacity of one and a half million gallons per day. The engine of this pump was of the compound order, with one cylinder placed directly in front of the other, the smaller being 16″ x 24″, and the larger 30″ x 24″. Of the latter class, a plunger pump attracted attention on account of its peculiar construction. A simple plunger was substituted for the ordinary piston, thus doing away with piston-packing and fitting the pump for service with gritty and dirty water. Many details of construction were of great interest, and showed the care and thought in design that give "The Deane" its good standing among other pumps. The establishment comprises a machine shop, an erecting shop, and a testing room, where every pump is tested before leaving the works. The tool-room was interesting to admirers of good order. All shop drawings are blue copies mounted on heavy card-board. Much can be learned by a visit to such works, and good use was made of the short time allowed. T. B. C.

THE mechanical engineers were much interested in the shops of the Worcester Institute, and in the methods used in conducting them. The shops are large, light, and airy, and well

fitted with tools and machinery. The machine shop contains quite a variety of lathes and planers, for both light and heavy work. Since the school was started a large number of useful articles have been made, including several stationary engines. Last year an engine of the Buckeye type was built, and a second one is in process of construction at the present time. In the wood-working shop, considerable attention is paid to cabinet work, and instruction is given both in the use of tools and wood-working machinery. The instruction is given by skilled men, who take an interest in the students and in their work. M.

WHILE the party was in Worcester, the wire works of Washburn & Moen were visited. The boys say they saw more wire than they had seen in all their lives before. We shall speak further of the wire manufacture at another time.

THE HOLYOKE MACHINE COMPANY are builders of turbine wheels, large gears, etc. A machine for cutting the teeth of large bevel gears is one of the many interesting things of their shop.

THROUGH the kindness of the Holyoke Water Power Company, the party was furnished with a large sleigh, which made the tour of the place much easier.

AT HARTFORD, the mechanicals visited the machine shop of Pratt & Whitney, and saw many nice tools, as well as a new measuring machine. The draughting room of this establishment is the finest the mechanicals have seen anywhere. The manufacture of screws, of drop forgings, and of parts of bicycles, completed the morning's work of the Hartford day. The afternoon was spent at Colt's Armory, and at the shop of the Hartford Engineering Company. At the latter place the party was received by Mr. Harris Tabor. At the former establishment, in addition to the manufacture of arms, they witnessed the manufacture of the Gatling gun, the Baxter engine, and the disk engine. Gatling guns, made by this firm, fire forty shots in four fifths of a second.

THE NEW MILL of the Willimantic Linen Company was lighted with the electric light for the inspection of the boys on the evening of their arrival. The absolute quiet of the mill at this time contrasted strongly with the noise and bustle of the next day. This mill is only one story high, and is the best possible place for studying the processes to which the cotton is subjected. The shafting is all under the floor, and is driven by three double Porter-Allen engines, making 350 turns per minute. The mill is new and has all modern conveniences, and is kept in perfect order. Other mills of the same company received their share of attention.

ON ARRIVING at South Manchester, the party was conducted to "Cheney Hall," and after some singing partook of a bountiful collation, which was given the visitors by the proprietors of the silk mills, Cheney Brothers. After dinner the party was conducted through the extensive silk mills, and had an opportunity to follow the silk from its first condition to the finished product. The silk manufacture was new to all the students, and many interesting things were seen. Mr. Frank Cheney, who has heretofore been connected with the mechanical engineers of '82, leaves the school at this time, and will soon make a trip to California. We wish him a pleasant journey and success always.

THE MECHANICALS ought to be proficient in the manufacture of instruments of warfare. Three arsenals were on the list.

MR. HARRY G. MANNING, '82, while on the recent excursion, acted as correspondent of the Boston *Journal*. His letters, giving a full account of the trip, may be found in the morning issues of Feb. 1, 2, 3, 4, and 6, over the signature of "Sagamore, Jr."

MR. C. C. HARDING, of Boston, who accompanied the party, deserves high compliment for the faithful and efficient manner in which the trip was conducted. The entire freedom from delays or disappointments was largely due to his careful management. If the mechanicals ever organize another excursion, Mr. Harding is the man to take it in charge.

The Union Games.

IN the third annual winter games of the Union Athetic Club, held Jan. 23 in the Mechanics' Building, the Institute was represented by one tug-of-war team, 600 pounds limit, one man in the 75-yard dash, and one in the pole vault. The Cadet Corps was represented by a tug-of-war team.

In the pole vaulting: Baxter, N. Y. A. C., 8 ft. 4 in.; Ethier, U. A. C., 8 ft. 2 in.; Gibbons, M. I. T. A. C., 8 ft.; Simpson, U. A. C., 7 ft 8 in. Taken all in all, this was a very poor exhibition of Boston talent in pole leaping.

The 75-yard (?) dash demonstrated the ability of Boston runners to break records. The slippery condition of the floor, which was a disgrace to a club of the Union's standing, caused Means, who represented the Institute, and who ran in the final, to slip several times, and bring up in the rear. Simpson and Strecker, both U. A. C., ran a dead heat for first place. In the run-off, Strecker beat Simpson; time, $6\frac{3}{4}$ seconds. Lucky for Myers he did n't enter this.

In the tug of war for athletic and boat-club teams, 600 pounds limit, the Jamaica Boat Club won from our team by six inches. The Jamaicas were a stout set, and it seems a great pity that our men, knowing their old adversaries, could not have calculated their weight nearer to 600 pounds than they did. However, our team won handsomely by about a foot from the U. A. C. team, and took second prize. In the military tug of war, the C. C. M. I. T. took first prize, pulling the Chelsea Rifles three inches, and beating by four inches the Boston Fusileers, who had previously beaten the Lynn Light Infantry by five inches. Baker, as was expected, anchored in fine style, and the rest of the team did well, although, in one or two instances, had the opposing teams the faintest idea what a tug of war required, our men would have been obliged to show better form.

In summing up, we must thank the officers of the games for their courtesy and promptness in calling events; and would suggest that in future they have their tracks more accurately laid out (not calling under 60 yards 75 yards, etc.), have their floors arranged so as not to subject such first-class men as Winch and Baxter to the mortification of failing at comparatively easy heights, and above all, to keep cool. G.

AT a recent meeting of the Society of Arts, Prof. Geo. L. Vose, of the Institute, gave an interesting lecture on the inspection of bridges. After noticing the more common defects of railroad and highway bridges, the speaker gave an outline of the kind of inspection we have in this country, mentioning particularly State inspection. The lecture closed with suggestions which, if acted upon, would lessen the number of defective bridges. A tabulated record of bridge accidents was exhibited, showing an alarming increase of disasters in 1881. A full report of Prof. Vose's lecture may be found in the *Transcript* of Feb. 3.

THE semi-annual exhibition of the Lowell School of Design was lately held in Room — Institute Building. The exhibition was unusually good. Among the best designs were those of Mr. Hasserick, Miss Rogers, Miss Baldwin, Mr. Fisher, Mr. Scott, Mr. Williams, and many others. Various diplomas and certificates were also exhibited. This school, under the able instruction of Mr. Charles Kastner, is deservedly prosperous. We wish our designing friends a successful second term.

WE read, in a recent issue of an esteemed contemporary, that Mr. Cyrus W. Field intends to erect in New York a sixteen-story building, and that it is to be in "the most approved style of architecture." If the New York Department of Buildings have no objection to the sixteen stories, we are sure we have none, but we would like to know to what country and period "the most approved style of architecture" belongs.

Chinamen don't rock the cradle; they make the sky rocket.

Mechanical Engineering.

QUERY. — How much mash-inery did the excursionists encounter?

The excursion — a complete success. Unanimous.

The widest belt needed at the Willimantic mill with the high-speed Porter-Allen engines was eight inches across.

Hand files made at the arsenal contained one hundred and twenty cuts to the inch. A beam engine of two hundred and fifty horse-power, cylinders 36 x 48, had been running twenty years without appreciable wear or need of repair.

At the Holyoke Machine Company's shops the interest centred in the bevel gear cutter and the powerful hydraulic presses for compressing paper sheets into compact cylinders. Under pressure of 2,000 tons the paper rollers became as solid as steel, and could be turned and polished as if metal.

The hearty thanks of all the party were given with the cheers for the Holyoke Water Power Company, who kindly placed the barge at our disposal, and gave the opportunity of visiting the new testing flume.

At the Britannia Works the Harris-Corliss engines, power presses, and metal turning received the most attention, though we noticed a number of youths much interested in the process of packing spoons. Well, she *was* pretty. We were pleasantly reminded of the paper-box making at Willimantic. Ask Sam.

An interesting operation at South Manchester was the cutting of cards for the chains of the Jacquard looms; first cut by hand, then automatically at the rate of two hundred and fifty per hour.

A Corliss with cut-off actuated by a steel spring was a novelty. Cylinder twenty-six inches, stroke five feet. Two hundred horse-power at one seventh cut-off, and two hundred and forty horse-power at one third.

Department of Architecture.

During our visit to New York week before last, we went to inspect the new Architectural Department at the School of Mines. The department is as yet not very extensive, consisting as it does of Prof. Ware and one regular student. Quite a number of the students from the other courses, however, attend the lectures on architectural history given by Prof. Ware on Mondays and Wednesdays. Owing to the limited number of students, Prof. Ware has a good deal of leisure, which he is occupying by arranging his lectures on perspective for publication. A new chapter is to be added.

The settling of the new Mills Building on the corner of Broad Street and Exchange Place in New York, which has created such an excitement, seems to be due to two causes: the poorness of the foundation bed (the present site of the building having been originally a swamp), and the too rapid advancement of the work, and consequent lack of time for the mortar in the brick piers to set properly before the superstructure was added. All the alarm was caused by the plasterers leaving the building one morning. The reason for this was merely that the elevator, which conveys them their materials, could not run while a defective casting in the cellar was being removed.

The first problem this term for the Seniors will be the one they had on examination, viz: "The Architectural Association, having become enormously wealthy, wish to erect a small yet ornamental and monumental building. It will contain a vestibule with cloak and two committee rooms, a picture and sculpture gallery, and a library. In consideration of the decorative character of the building, the city have granted the Association a site in the new park." The principal problem which presents itself is the arrangement of the combined picture and sculpture gallery so as to provide a vertical light for the paintings and a horizontal light for the statuary. The suggestion is also made that the library will be more comfortable if it is provided with alcoves.

In General.

GLAD to see you back again. — Did you get conditioned?

Have you had enough shovelling?

The Freshman Class has been divided into four divisions.

The *American Cultivator* says, — "Hop market still active."

Harvard's library is the third in size in the country.

Eighty-four is to wrestle with Todhunter's Calculus this term.

Eighty-three takes historical geology, which will prove very attractive.

A few fish-horns left; apply at the mechanicals' drawing-room.

Where is that society that the civils were going to start?

Freshee at breakfast table: "Pass her up, please." "Pass what up?" "Syrup."

At the Sheffield Scientific, they call a student taking mechanical engineering a "dynamic."

Freshman, desiring to write out a reaction; "Can you tell me the symbol for wire-gauze?"

It is said that they are going to stop the Herdics — to let the passengers get out.

We extend our hand to the tug-of-war teams which represented us at the Union sports.

If you want to find out whether a mechanical went on that excursion, take him by the left arm.

The bracing of the bridges in the building, which has been going on during vacation, has been much needed for some time past.

A number of prominent citizens of Philadelphia have petitioned the city for aid in founding a technological school. — *Boston Transcript.*

The *Harvard Herald* offers a prize of a one-cent postage stamp for the solution of our proverbs of last issue.

An addition to the curiosities of literature has been found in the expression "swimming swollen-ness of soul," not by O. W., either.

We welcome back our old friend Alexander, the former captain of Company A, who has returned to us after having tried a little practical work.

Chauncy Hall gave its fifty-fourth annual exhibition on the 9th. The programme was long and varied, and reflected much credit on both teachers and pupils.

With the new term, let us hear from those who have heretofore taken no active interest in our columns. Don't make a few do all the work.

We take pleasure in stating that Prof. Nichols is so far convalescent as to be able to in part resume his duties. He will as usual deliver the lectures in chemical philosophy.

President Walker has the Junior Class in political economy. Seniors have been invited to attend. The lectures have been very fine indeed, so far, and the course promises to be a very interesting one.

William L. How, the victim of the recent sad shooting accident at Dartmouth, was well known to a number of the Institute men, and will long be regretted by them as a sincere, earnest, and brilliant friend.

We have received a fifty-page pamphlet, entitled "Publications of the Mass. Institute of Technology, and of its Officers, Students, and Alumni." The book is compiled by Prof. Wm. Ripley Nichols, and will prove a valuable work for reference.

How is it that the authorities allow a telegram to lie four or five days in the rack without taking the trouble to notice whether a student is absent or not? A telegram generally means more than a common note.

Oscar Wilde to the students at the Boston lecture: "I see about me certain signs of an æsthetic movement. I see certain young men who are no doubt sincere; but I can assure them that they are no more than caricatures."

She was a sentimental young thing, and was describing how romantically her husband proposed to her during a horseback ride at five o'clock on a summer morning. "Yes — er — " said a callow but admiring youth: "it proves again that the early bird catches the worm."

We recently heard a clergyman, who is also quite well known as an author, describe the following series of remarkable transformations: "These waves of emotion sweep over the soul, and then roll onward into the dim future, where they are changed to light and crystallized." Crystallized light is something of a novelty in physics.

The Fairbanks testing machine, described in a former issue of the TECH, has been refitted with a lever of equal arms for the testing of floor beams. The series of experiments which the Seniors, under the direction of Prof. Lanza, intend to perform this coming term is almost the first ever made on large specimens, and should be of great importance to all.

Exchanges.

THE *Amherst Student*, in its last issue, begins a new régime in the treatment of its exchange columns, and will not continue the usual notices and short reviews of other papers. It says: "Why college papers should regularly devote a page or so to dealing out taffy that is often unmerited, or censure perhaps equally undeserved, to other members of the college press, is a matter we never thoroughly understood." And for a time at least its intention is to make "this part of our publication a sort of Foreign Department, where the chief news from other colleges shall be as systematically given as are the events of our own in the local and editorial columns." The *Student's* idea is a good one, if the sole aim in conducting an exchange column is the benefit of the general readers of the paper; but if, as is usual, this department is regarded as of special interest to those outside the immediate confines of the college, and is conducted rather as a means of communication for the college press, its omission may be found to be a serious loss.

We acknowledge that as the department is often carried on, it is little more than a series of weak laudatory notices, which could as well be written without seeing the publication. The absurdity of this course is recognized by the majority of papers, and hit at occasionally. We remember an instance in the *Herald*, something as follows: "The Yale *Record* comes to hand, this issue fully up to its own high standard: the editorials are strong, locals interesting, its witticisms pungent, and its typographical appearance pleasing. We prophesy a great future for this delightful periodical. We have not read it yet, but shall, this evening, after dinner!"

Now and then some unwary editor, thoroughly disgusted with this milk-and-water praise, launches out into a new field, and strikes right and left, regardless of justice or mercy. This, of course, is going to the other extreme, and is as much to be deplored as the taffy diet.

The true way, it seems to us, to conduct such a department is to regard it as the opportunity given the editors to express their opinions of other members of the college press fairly, and with an eye to more than mere praise or censure. It should be regarded as a sort of mutual-improvement corner, as well as a repository for the doings and humor of other colleges. No person who has had much to do with college journalism will deny that there is opportunity for vast improvement in such papers generally, and a need of all the work that could be done in such a department. This need of more work and more time is probably the secret of the mediocrity of most college papers. Students cannot give the best part of their time to writing; such work must be done at odd moments, or in the time taken from other things. We cannot speak for other institutions; but when, as in some of our own courses, the student is required to give thirty hours a week to work in the buildings, exclusive of preparation for recitations, etc., he may well be excused if he does not care to crowd in some hours' work on literary matter, merely for the pleasure of seeing it sneered at and pulled to pieces by some other worn-out individual, whose exertions have had a bad effect on him.

We are happy to welcome our friend from

College Hill, and seem to renew our long-lost youth in meeting again the old, old jokes and tales which were the delight and the marvel of our childhood's heart. In perusing, we fall into a sweet, sad revery, and our thoughts fly back to those days of long ago, when we were as free and unhampered as the breeze of morning on the mountain-side. No relentless Faculty, no dread of mechanics, no stony-hearted chief demanding copy, then disturbed the peace of our slumbers; our dreams were never haunted then, as now, by a spectral line of emaciated forms laboring under the miseries of a Physics condition, and thinking the cross which had been apportioned them very hard to bear. Ah, well! this life is a struggle, and perhaps our feelings may be toughened by the receipt of a few more numbers like this.

We quote an item from a history of Deadwood, Dakota, published in the *Black Hills Pioneer:* "The first man killed was Matt Welch. Pink Bedford did it for fun. Welch took a shot at Bedford, but only blew off his own finger." The paper is full of mining news of the region, and will be of interest to the miners.

A Freshman was noticed on Hallowe'en with a brick in each coat pocket. When asked if they were to be used as implements of warfare, he said that they were mighty good things to throw away when he wanted to run fast. — *Ex.*

The first national college for the education of ladies in France has been opened by M. Ferry in person, at Montpelier. — *Ex.*

A Cleveland preacher took for his text, "He giveth his beloved sleep"; and then he said, as he glanced around, that the way his congregation had worked itself into the affections of the Lord was amazing. — *Ex.*

One of the performers on the horizontal bar at the summer circus in Paris is a graduate of Harvard, '76. And yet there are some who still maintain that a gymnasium is not a necessary appurtenance of a well-regulated college. — *Ex.*

It is useless for physicians to argue against short-sleeved dresses. The Constitution of the United States says, "The right to bare arms shall not be infringed." — *Ex.*

After-dinner speeches are usually disappointing affairs. The first speaker begins by remarking that he is "too full for utterance," and every other speaker is crushed by the loss of his only joke. — *Ex.*

[N. B., Excursionists.]

The man who tried to explain away his chicken-stealing experience by saying that he was a member of the Humane Society, and felt it his duty to thin out the overcrowded hen-coops for the sake of giving them better ventilation, had his board paid for ninety days by an appreciative community. Nobody's talents need go to seed in this country.

Atlanta *Constitution:* "The feat of picking cotton in the morning and having a suit of clothes by night has been surpassed. 'The corn was shelled in the morning,' said an exhibitor, 'and the man was drunk before dark.'"

A book with a loose leaf should be bound over to keep the piece.

There is one town in Connecticut that has no fear of the measles. It 's Haddam.

Vassar's cuss-word is "Buy gum!"

A ballet dancer died recently, leaving a large fortune. This shows the advantage of dressing economically.

Be kind to your father; for while you were young
  Who loved you so truly as he,
When he 'd take down a cane in the study that hung,
  And fondle you over his knee?

Be kind to your sister: not many may know
  The depth of a sisterly love;
She keeps all that depth for a shaky-kneed beau
  Who fastens her ten-buttoned glove.

Be kind to your brother: wherever you are,
  The love of a brother shall be, —
He 'll convert into ashes your choicest cigar,
  And with your spare shekels make free.

— *Ex.*