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The Tech.

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

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tive laboratory has proved this year to be too small to accommodate all who are entitled to a place there, and will be entirely insufficient next year when '85 comes to claim its share. Cannot room for new laboratories be obtained in the Natural History Building?

In view of the many gifts received by other colleges throughout the country, it is often asked why the bequests to the Institute are comparatively so few. The reasons for this undisputed fact are simple, though perhaps not immediately apparent. The most obvious is that the Institute is young. It has been founded barely twenty years. Most of the legators to other colleges are men who, having graduated from them, desire in disposing of their property to aid their Alma Mater; while the oldest alumnus of the Institute has hardly reached his prime, and is yet in that period of life when the acquisition of property is of more importance than its disposal. Some public gifts are doubtless made by donors who seek to keep their memory green by the establishment of some professorship or the erection of some hall. Such men would naturally—perhaps not always wisely—select an old and famous seat of learning as the recipient of their bequest. Nowhere is the dictum, "Unto him that hath, it shall be given," more exactly true than in respect to college funds; and yet the endowment is conspicuous just in proportion as the institution needs it. The few thousands and the library of John Harvard have yielded a return of honor beyond the power of any succeeding legacy. The erroneous impression that the Massachusetts Institute of Technology is a State affair has gained ground in some quarters, and may further answer the question we have discussed.
We learn that the students of the School of Drawing and Painting, at the Art Museum, are about to establish a paper. This school is an institution about which little seems to be known here, though it has been in existence six years and has one hundred and fifteen pupils. The students of our architectural department attend lectures at the Museum, and some classes of the School of Drawing and Painting attend lectures on architecture at the Institute. We shall welcome the new paper as a means of better acquaintance with our neighbor.

The Sheffield Scientific School has just come into possession of a large bequest from the late Joseph E. Sheffield. It is said that this will insure the future of the Institution and put the school on a comfortable footing. Boston University has recently been similarly blessed, and has been able to establish a large number of scholarships. We congratulate our friends on their good fortune.

We hope to present in our next issue a portrait of Prof. John D. Runkle, the second president of the Institute.

Contributions.

The Manufacture of Wire.

Considering the multitude and variety of the uses to which wire is put nowadays, an account of the process of making it, as seen by the mechanicals on their recent vacation visit to the large works of Washburn & Moen, at Worcester, may not be uninteresting. Eighteen hundred hands are employed at the factory visited, and the amount of wire turned out in a day is upwards of a hundred tons.

The first operation in making iron wire is rolling square bar iron into coarse wire. Bars from one to two inches square, and ten to fifteen feet long, are run in at one end of a reverberatory furnace and heated to a welding heat. From the other end of the furnace the bars, one after another, are drawn along through a line of a dozen or more pairs of grooved rollers, placed alternately horizontally and vertically, and kept cool by water. These rolls reduce the bar to a round wire somewhat larger than ordinary telegraph wire, which issues through a horizontal pipe, and shoots across the room in a glowing stream. A boy with a short iron rod skilfully deflects the wire from side to side, so that it lies upon the ground in a sinuous line, looking like a fiery serpent. As soon as part of a length of wire has run through, the end is picked up and attached to a revolving reel, which coils it up while still hot. The capacity of one set of rolls at Washburn & Moen’s is about thirty tons of wire per day.

If the wire is to be small enough to require several drawings, it is next annealed. The coils are placed in annealing pots, which are in circular pits in the ground, surrounded by the flame of a furnace. It is heated about eight hours, and allowed to cool slowly during the night. The wire is cleaned by dipping in vats of dilute sulphuric acid, the action of the acid being arrested by dashing a mixture of lime and water over the coils. After drying in a large oven, the wire is ready for the drawing.

This is simply pulling the wire through a smooth, tapering hole in a piece of metal called a draw plate. Small wire has to be drawn a great many times, twenty-four or more drawings being not uncommon. As each successive drawing is through a smaller hole than the preceding, the diameter of the wire is slightly reduced each time, and at the same time the tenacity and elasticity of the metal are increased. The wire has frequently to be annealed between the drawings. The draw plates are about eight inches long and two inches square, and each has several holes through it. The first drawing is through plates of chilled cast iron; but as the wire gets finer, steel is used. One might naturally expect this steel to be tempered very hard; on the contrary, it is annealed; and as the holes tend continually to wear larger, they are reduced from time to time by hammering the plate around their smaller ends, which are
then made to the right size by driving in a slender steel punch.

The coil of wire to be drawn is thrown over a reel in a tub containing a thin mixture of rye meal and water. This makes the wire slip more easily through the draw plate, and is said to keep it from rusting. The workmen stand before long benches on which are a great number of cylinders rotated by vertical shafts from below. The workman files the end of the wire to a point, puts it through a hole in the draw plate, and grasps it on the other side with a pair of pincers, which are drawn along by suitable mechanism till enough wire is pulled through to allow it to be attached to one of the revolving cylinders, which afterwards draws it through the hole continuously and coils it up.

As an example of the development of great enterprises from humble beginnings, one of the men said that the wire industry started with "a chunk of iron, a knot-hole, and a mule to haul the wire through"! Possibly this story is not wholly reliable.

Much of the wire made at Washburn & Moen's is what is called "bright finished." This finish is produced by treating the wire with a solution of sulphate of copper, and then drawing it. Tinued wire, such as mattresses are made of, is produced by leading the wire through a bath of melted tin. Before entering the metal bath, the wire is passed between pieces of felt wet with dilute muriatic acid charged with zinc, which gives a clean surface. "Galvanizing," or more properly zining, is done in a similar way, a bath of melted zinc being used. This wire is used for making barbed fence, for which there is so great a demand that a large building is devoted to its manufacture. It is made by automatic machines, at the rate of about twenty-five tons a day. Another specialty at Washburn & Moen's is the manufacture of ties for hay bales. For this purpose the wire is straightened by stretching it about four feet in one hundred and fifty by a hydraulic press.

For nicer work the wire is straightened perfectly by hammering it on long tables. In the rotary straightener, the wire is drawn through three holes ranged axially along the centre of a cylinder which revolves very rapidly. The middle hole is set a little out of line, thus causing a jerking motion, which takes the kinks out of the wire. A similar principle has been applied on a larger scale to straightening iron bars.

The 2 G.

PROBABLY out of all the four classes of the M. I. T. there are not more than a few dozen fellows who know anything whatever about the subject of this article, unless possibly that it is in existence. Before I proceed, let me advise readers not interested in mining to waste no time in reading farther. But I beg the attention of all those who are either interested in or students of mining engineering, while I attempt to gain their interest in the 2 G by the following sketch:

Last year the regular miners of the class of '83, finding themselves well and happily acquainted with each other, and desiring that their friendship should continue fast, not only at the Institute, but in after life; and realizing how pleasurable and profitable such an intimacy would be in future years, which probably would find them scattered to the four points of the compass,—these miners of '83, I say, decided that the best way of preserving their intimacy and promoting their knowledge of—and let us hope thereby the interests of—the mining profession, was to form themselves into a society. This was the origin of the 2 G. Thinking that it might add to the interest and be no detriment to the earnestness of the society, it was decided that certain parts of the formation and transactions should be kept secret. Now allow me to review what I consider the advantages of such a fellowship at the Institute.

At colleges, class feeling is marked, and no wonder: for the men from a class going into the world scatter, as a rule, to various occupations, and, generally speaking, while in college
fit themselves for no very definite business. Here at the Institute a very different state of affairs exists. Lack of class feeling is noticeable, and again no wonder; for men go to the Institute to fit themselves for a definite profession, and having chosen that profession, naturally see little of men in their own class taking courses very different in their character. For how should a chemist know much of the doings of the civil engineers, separated by almost entire difference of studies and three flights of stairs? Or, in the same connection, what reason is there to suppose that the miners, in the grime of the mining laboratory, should know much of the doings of the architects, busy with their "time-honored porch problem," or a caricature of Turner's "Slave Ship"? I think it is evident that more individual benefit would be derived by men of the same course becoming intimately acquainted than would result from intimacy between men of one class divided into half a dozen courses. Herein lies the evil which the 2 G strives to remedy; for the men of the mining course are from year to year transferred to different laboratories, and hence miners of '83 know little of those of '82, and those of '84 know less of either '83 or '84. Now, the 2 G establishes an acquaintance, perhaps an intimacy, between the miners of the various years, who, after graduating, will be called to similar pursuits and possibly neighboring localities, and keeps them posted as to the whereabouts and occupations of its various members. Would not a mining engineer needing help rather employ a man who has been trained under, and acquainted with, the same professors and systems of work as he himself has been? He knows just what he may expect from such a man, and I doubt not his loyalty to the Institute and the society would give occupation to a member of the society were opportunity to offer. How glad would a member in distant parts be to write his experience to the society, and how much benefit would be derived from such a communication by the members of the society!

I have tried to indicate the pleasure and profit to be derived by the existence of this society after the member leaves the Institute. While there, membership is none the less valuable; for besides the possible benefit to be derived from graduate members, I know only too well (and doubtless others do, too) how valuable hints from upper classmen are to a man stumbling along the work which they have done before him; and how helpful as clews for work are the examination papers of years filed carefully away for the benefit of future members, together with the papers on mining topics read before the society by its various members! Setting aside the social enjoyment of the members at their initiations, meetings, and suppers, are not these advantages derived by membership?
in the 2 G desirable and valuable? And now, if any miner not a member of the 2 G has followed me thus far in this incoherent harangue, I hope that if he be thoroughly in earnest and in sympathy with the cause, we may have the pleasure of receiving his application for membership. Any regular miner, or any special whose course is mainly devoted to mining (to be decided by the society), is eligible for membership. The officers of the 2 G are: Frank Tenney, president; H. M. Mansfield, vice-president; C. H. Tompkins, secretary; G. H. Gustin, treasurer.

**Fuel.**

**N**OT one of the least important subjects to a mechanical engineer is that of fuel. On no subject is attention more needed. Coal is king among fuels. Wood is used to some extent, especially for domestic purposes; but other important uses of wood limit its employment as fuel. Peat is used quite extensively in some few places; not largely, however, as a producer of steam.

Nothing is more common than reckless waste of coal; and although there is no immediate danger of exhausting the supply, the time will inevitably come when empty coal fields will stare our descendants in the face. It is the duty of every engineer to promote, by word, example, and invention, the economical use of this invaluable article. The needless waste of coal should be checked, the full utilization of its stored-up power sought, and the use of other sources of energy promoted, thus freeing us from absolute dependence upon coal as fuel.

Not very long ago it was the custom at the mines to burn all waste coal, and hundreds of tons were consumed in a single day. One quarter of England's yearly output is consumed for domestic purposes. A modern stove is commendable as an efficient waster of coal. Here is room for budding genius to expand. Recent experiments in gas heating are a step in the right direction.

More than one quarter of Great Britain's coal product is used for manufacturing and locomotive purposes. Theoretically, we should obtain five horse-power per pound of coal; in practice, two fifths of a horse-power is considered good. This suggests the question whether there is not some better way to utilize coal as a source of power. Was it necessary that nature should store up ten pounds of coal in order that one might be utilized?

In metallurgical work there is an opportunity for enormous saving. Red-hot foundry chimneys are not uncommon things. Our own forges show on a small scale what a small per cent of the heating power of a fire may be utilized. Theoretically, one ton of coal should heat up to the welding point thirty-six tons of iron, while in an ordinary reheating furnace it heats only about one and two thirds tons. Other examples will occur to all.

One way in which the drain on the coal fields may be lessened is by the use of peat, which occurs very largely in many parts of the world. The valley of the Charles is a large peat meadow. Peat is commonly used in Ireland and Scotland. Cut into blocks of convenient size, it is dried in the air and is ready for burning. Much machinery has been invented for improving the quality of peat; the peat may be ground up to make it homogeneous, and dried either artificially or in the atmosphere. These processes, of course, increase the cost of the product.

There is no question of the value of peat as steam fuel. Its calorific power is seventy-eight per cent of that of coal. It makes a clean, bright fire, with little ash or smoke. Several years ago the Vermont Central fired the locomotives on the northern part of their road with peat. Whether they do so now I have not been able to ascertain. The cost of manufacturing peat is the only objection to its use. But why does peat need to be manufactured? For certain purposes, as for locomotive or marine use, where space must be economized, a compact, dense fuel is necessary; but for stationary land boilers, cannot the peat be used in its natural
state? Cannot some of our New England manufacturers, with peat at their door, at least try the experiment?

More attention has been paid in England to the use of peat as steam fuel than elsewhere. A number of years, ago Prof. Jevons created quite a panic there by his calculation that Great Britain's coal supply would be exhausted in about one hundred years if its consumption increased in the ratio in which it was then increasing.

We learn from the Bulletin de la Société Chimique de Paris of January that Prof. Crafts, formerly of our Institute, gave to the Society, at its session of Dec. 9, the results of his numerous comparisons of air and mercurial thermometers from different sources. It appears that between 200° and 300° C. there is a close agreement between French thermometers of lead glass and the German thermometers made of glass containing no lead.

At the same meeting a memoir was presented by Friedel and Crafts on the preparation of triphenylmethane. While making many kilogrammes of this substance in different ways, they obtained the best yield by the reaction of 200 grammes of chloride of aluminum on a mixture of 1,000 grammes of benzine with 200 grammes of chloroform. They state that this method of producing triphenylmethane, which Schwarz has lately described as new, had been made known by them as long ago as June, 1877.

Quite a number of '83 mechanicals recently visited the State House, and inspected the Meigs system of elevated railroads, as exhibited by models there.

At the meeting of the Society of Arts on Thursday, Feb. 23, the McLeod automatic air railroad signal will be described and exhibited. Some other interesting devices will probably be shown. Members of the Institute should remember that these meetings are open to them, and will prove interesting and profitable to all who attend.

Mining and Chemistry.

FOUR of the miners of '83 and two of the chemists are now at work at assaying. The course occupies three afternoons a week for four weeks, and comprises assays of lead, silver, gold, copper, iron, tin, and antimony. The second division will commence work about the last of March.

There is a lack of room in the laboratories. The unusually large number of '84 men who are taking up mining and chemistry courses has crowded several chemists and specials of '83 into the fourth-year laboratory; while there are still eight or ten members of '84 ready to come into the quantitative laboratory, but prevented for want of desk-room.

The San Francisco Exchange is responsible for the following:

"The length of the shafts and galleries in the Comstock mines of Nevada is 250 miles. During the last twenty years just closed, 350,000,000 tons of waste rock have been hoisted, 1,750,000,000 tons of water pumped to the surface, and the net result of all this work was $325,000,000 in bullion."

There has been of late considerable controversy as to whether or not emeralds have been discovered in North Carolina, Mr. Hidden (who has given his name to the mineral hiddenite) declaring that he has made a rich "find" of emeralds in Alexander County, while the incredulous laughed at him. Mr. Hidden's specimens, which were found in the surface soil, were at first declared by experts to be no emeralds; but an expert from the New York Academy of Sciences has followed up the matter, and has discovered at various depths several large pockets of the prisms, which are declared on the best authority to be the true gem. The stones are large enough and numerous enough, but contain frequent flaws, which are likely to prove a serious drawback to the financial value of the deposit, though the scientific fact of the discovery of the emeralds remains.
**Sporting Notes.**

The boxes in the gymnasium are being repaired, and a new set of dumb-bells, new jumping pole, and jumping standards are promised.

Applications for membership in the nine are coming in, though slower than one would naturally expect from so large a body of students. There is plenty of good material in the Institute to draw from; and as our advantages for practice are comparatively good, it only remains with us to show whether we can do as well here as in foot-ball.


Why would it not be a good plan for the athletic club to make some arrangement with the Union Athletic Club by which our members could have the advantages of the track at the Boston Base Ball grounds, and also a place for running long and pole vaulting? All this in reference to our spring games.

Dorchester’s performance of 8 ft. 6 in. at the games was, correctly speaking, a running high kick, the record of which, 9 ft. 2 in., is held at Yale. The definition of hitch and kick provides that the contestant shall “spring, kick, alight, and hop twice — all on the same foot.” The record in this is 8 ft. 5 in., made at Princeton College in 1873.

The American amateur boxing championships will be decided March 11, and the English championship contests will be held April 15 in London. It is rumored that one of the probable American winners will immediately cross the Atlantic and try himself at St. James Hall, April 25. — *Spirit of the Times.*

The following inscription was discovered in a rural graveyard recently: “He loved not wisely but too Wellesley.” — *Ex.*

**In General.**

The diminution of the numbers of the Freshman Class has already begun. Pay your tuition bill. What was your breakage? A new janitor at the gym. Where are the new catalogues? Did you receive any valentines? Not another holiday for two months. Why should n’t the Institute have a boat-crew in the spring? Hardly a consistent division by rank, — that in the Freshman Class. The work of bracing up the building has been finished. The halls are now clean. Rather inconsistent: The Highland horse-car named General Grant has the sign “No Smoking” prominently displayed.

Mr. Hooker has begun his lectures on “Shades and Shadows.” The illustrations have certainly been unique.

We understand that several of the Freshman think of starting a new paper, in opposition to *The Tech.*

At the last meeting of Σ. M. E, the relative merits of the Wheelock and Harris-Corliss engines were discussed.

If ’85’s trigonometry is as well read inside as it is out, the “honor” men will be numerous.

We advise some of our contemporaries — “esteemed” understood, of course — to have their jokes vaccinated. They might possibly take.

News from ’82 is rather scarce this week, as the editor from that class has been struggling with the mumps.

The draught supposed to exist in the hoods of the First Year Laboratory is merely a draught on the imagination.

Would it not be a good plan to sand the gymnasium floor? It is almost impossible to run on it at present.
Gets matters down to a fine point — The clerk of the police court. — Bulletin. This joke will be appreciated by some of our readers.

It is because they have heard that close attention to small things makes the successful man, that the "Techs" take such good care of their mustaches.

The Journal of Commerce of Feb. 4 publishes Prof. Lanza's address before the Society of Arts, giving an account of his tests on the strength of wooden columns.

"The presence of organic matter interferes with the action of many reagents," said Prof. O——, after vainly endeavoring to pour some ferric-nitrate solution from a tightly corked bottle.

Gen. F. A. Walker, president of the Massachusetts Institute of Technology in Boston, has been appointed "university lecturer" at Harvard, on "The Resources of the United States." — Amherst Student.

Prof. Edward S. Morse has just finished a course of twelve lectures on Japan, delivered before the Lowell Institute. They were illustrated by blackboard sketches in his usual happy style.

We regret to announce the resignation of Major Pratt. By some fault in the tabular view, his military duties and some desired lectures conflicted. His successor is Mr. Winthrop Alexander.

It is hoped that the Athletic Club will hold a gentlemen's meeting in March. The interest in the club will be kept up much better by it, and there is certainly plenty of material.

By far too much time is wasted in getting accoutrements and forming company at the beginning of drill. A better arrangement for supplying accoutrements and a little animation in the sergeants would improve matters.

It was pleasant to gaze last week at the chromos in some of the down-town news stands, and feel that the sentiment attending St. Valentine's Day has lost none of its old-time delicacy.

The other day a Soph was found shifting the legs of a transit to find the cross hairs in the telescope. He assured his friends that he had indulged in nothing stronger than water.

The members of the Institute rooming at 309 Columbus Avenue have started the club system for supplying the wants of the inner man. The club has ten members, and bids fair to be a great success.

The annual supper of the Class of '77, M. I. T., was held at Young’s, Feb. 8. The following officers were elected for the ensuing year: A. L. Plimpton, president; H. H. Carter, vice-president; R. A. Hale, secretary and treasurer.

The C. E.'s are taking a new system of stereotomy based upon the practical problems arising in engineering. This department is doing very effective work this year, although in a quiet way. Prof. Vose has made many radical changes, all of which are for the better.

The mechanicals will be rejoiced to learn that Janitor John has been wrestling with a broom in the mechanical laboratory. Excavations, rivalling in extent those lately made at Assos, have brought to light something resembling the cylinder of a Harris-Corliss engine. Further developments are awaited with interest.

A chemist had been looking over a miner's notebook. Coming to a diagram of a rock drill driven by compressed air, he studied it for some time with a perplexed countenance. Finally his face lit up with the joy of having solved the problem. "Oh, yes!" said he, putting his finger upon the exhaust; "that's where the squeezed air gets out, isn't it?"

The experiments now being made on the Denver and Rio Grande Railway, between Denver and Pueblo, Col., will prove of great value to the railway interest, as they embrace a very full comparison of the three-foot and standard gauges. Thus far it has been shown that the narrow gauge is the more economical for freight traffic, but not for passenger traffic. Reports will be made in due time, showing the relative value of the two gauges for the same general traffic.
Exchanges.

Our last received technical exchanges are publications whose reputation is almost worldwide, and for us to attempt to do more than bring to the notice of our students articles and items of special interest would be regarded as presumptuous. The January number of the Textile Record, published in Philadelphia, contains much concerning the great cotton exposition at Atlanta, and the vast benefit which will accrue from it to the interests of cotton raising and manufacture. Considerable space is given to the discussion of the rapid development of the resources and wealth of the South, and the great results of the exposition in disseminating knowledge of new and better methods for continued development. The Record says: "Already we have lived a decade since the Atlanta Exposition was proposed, and almost a century in the last decade." The expenses of the exposition were about $250,000, the receipts exclusive of sale of buildings reaching nearly that figure, and the estimated number of visitors a quarter of a million.

The Railroad Gazette is generally regarded as among the first, if not at the head of all American engineering journals. It will be found of special interest to the mechanics and civils, and will be placed with other like exchanges in the mechanical drawing-room.

We have not as yet acknowledged the Nassau Lit. for January. The Lit. is edited by members of the Senior Class of Princeton College, and as its name implies, aspires to literary distinction. It is the first college literary magazine we have received, and if others are like unto it, we shall be glad to receive and read them all. Our interest especially centres in the college gossip and exchange columns, the latter headed with a somewhat ironical quotation: "The earth hath bubbles, as the water has, and these are of them." — Macbeth. The editor's reviews are tempered with mercy, however, and he bursts comparatively few of the bubbles. The Acta narrowly escapes being completely dissipated. We quote "A word of advice to story writers: Don't weave into your plot too much of refined pleasantry concerning the sayings and doings of the respected Vassar maiden. The theme is growing monotonous, you know. 'There is such a thing as being smothered with rose leaves.'" The Oberlin Review is not handled in the most tender manner, though it may possibly survive. Sympathy from its own State need not be lacking, for Ohio has just the same number of universities as France and Germany together.

The Orient professes to have received letters from different colleges on the subject of inter-collegiate rowing. We give quotations:

From Oberlin: "Impossible to come East. Two horrible cases of tobacco chewing have been found right in our midst. These will require all our attention."

Pennsylvania writes: "Have a race on the Schuylkill, pay our expenses, guarantee us a
prize, let us select our own judges, and we will consider your proposition."

"Columbia is once more desirous of exhibiting her peculiar style of manning a boat, — four men to row, and the remainder for passengers and ballast."


The Orient also prints a Traditional Tragic Drama in verse. Students and Gushing Maidens the Dramatis Personae, and the plot the old, old story of masculine indifference, and feminine trust and tenderness betrayed. The tragic end of the maidens is terrible indeed.

"Now our hearts, all scarred by mashes, 
Cut, cold steel, with cruel gashes.  
[Stab themselves.] 
Now our brains, if you can find,  
Scatter, pistol, to the wind.  
[Shoot themselves.] 
Now our spirits, poison fell,  
Take to heaven or to — Hades.  
[Drink the poison] 
Curtain falls."

A mania for Greek and Latin plays seems to pervade throughout American universities. The University of Toronto is to produce the Antigone this winter, and Ann Arbor and Syracuse are talking of Greek plays, and Yale is to produce a Latin play soon. — Ex.

Harvard, Princeton, Dartmouth, Yale, and Brown,— all in want of a pitcher. Heavy batting ought to be the order of the season. — Brunonian.

There are said to be, in round numbers, about 26,000 college students in the United States. — Ex.

Vincennes University (Ind.) is running a lottery, from which it expects to realize $20,000. It is allowed to do so under State charter. We congratulate our sister university upon this strikingly original plan of hers for advancing the cause of the "higher education" and good morals in the West. — Ex.

The report has been current among the papers that Williams students broke up an entertainment at Williamstown, and were so disorderly at one given in North Adams that the police were called in. Both of these reports are fabrications, and utterly false. — Cor. of Herald.

Horace speaks of the "soft whisperings at eventide." "Do you know what that means, sir?" asked the tutor. "No, sir," replied the trembling Freshman. "Never mind, plenty of time yet," said the kind tutor — Ex.

Adolphus had just folded his arms about her. "Why," asked she, "am I like a well-made book?" He gave it up. "Because I am bound in calf." The "binding" was hastily torn off. — Ex.

The last catalogue of Smith College for young ladies shows a rapidity of development in this institution comparable only to the growth of a city in the far West. The college was incorporated by the State, with power to grant such honors, degrees, and diplomas as are granted by any university or college in the United States. In appearance, the course of instruction does not suffer in comparison with any of the New England colleges. — Nation.

They were out sleighing. "Gussie, dear," said she, as she leaned a tender cheek on his manly checked ulster, "why are these snowflakes like your mustache?"

This pleased him, even to have it noticed. "I don't know, pet," he murmured innocently; "why are they?"

"Because they are slow coming down." He drove with both hands after this. — Lampoon.


The batter takes his stand; 
The pitcher with a leer  
Projects a curve,  
With an inward swerve,  
And takes him in the ear.  
— Athenæum, via Tuftonian.
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