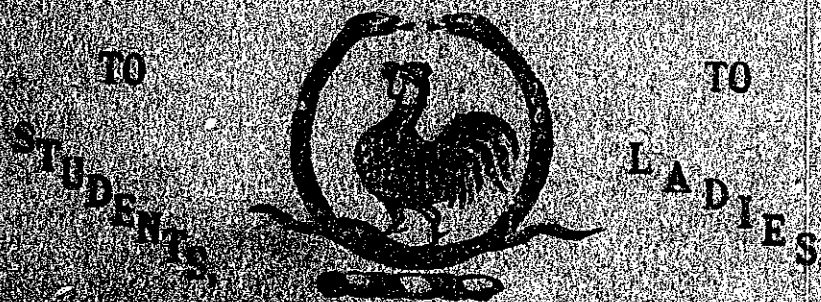


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The Tech.

VOL. II.

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

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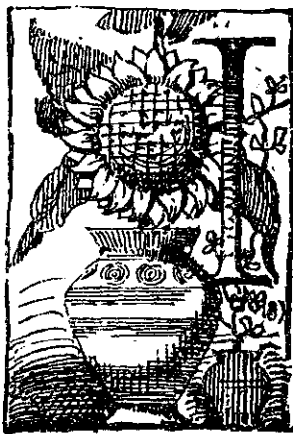
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IN this issue we give an account of the proposed excursion of the $\Sigma. M. E.$ Society to Philadelphia and vicinity. It will be remembered that a similar excursion was carried out very successfully last year, visits being made to many prominent manufactories and mills in Western Massachusetts and Connecticut.

These excursions, as a means of practical instruction for our students, are not to be despised, and the advantages gained by visiting these places in a body, and oftentimes at the special invitation of the proprietors, are very apparent. We hope this opportunity will be improved by every member of the society able to go.

ONE of the great questions at the present seems to be, — are we to have a Freshman ball this year? An account of the previous affairs of this kind has already been given, but may be again stated.

Previous to 1879 it was customary for the entering classes to give, in connection with the drill, afternoon dances in the gymnasium. In 1879 the entering class decided to establish a more formal affair, and a dance was given in the evening; the gymnasium being tastily decorated and the affair a decided success. The next year, '84, wishing, perhaps, to outdo its predecessors, gave a very successful ball in Odd Fellows' Hall, and '85 following the example of '84 gave a similar entertainment with like success.

This year for the first time there seems to be an opposition, or at least an indifference, to the custom. Now is '86, with a class twice as large as '85, and consequently more capable of bearing the expense, to do away with this pleasant feature of our college life? A committee has been appointed which is canvassing the class to ascertain the amount of money which can be raised. This committee has worked hard and has succeeded fairly well, though the results are not what should be expected. Let '86 brace up, and let every member have his name on the subscription paper if only for a small sum. Every little helps, and a class pride, if no other motive, should induce every member to do what he can to make the '86 ball an occasion to be remembered.

IN looking over our exchanges, we are struck by the contrast between the appearance of the English journals and those published on this side of the Atlantic. The American periodical is printed on good paper, with well-executed illustrations, and comes neatly folded, with the leaves cut and trimmed to size, and sewed together. Not so its "esteemed English contemporary"; the latter is usually received rolled in a tight wad, which no amount of pressing can flatten out, and to open which is vexation of spirit. The leaves have all to be cut, or, if noth-

ing is at hand for the purpose, torn open, and then the whole affair falls to pieces, and distributes itself over the velvet carpet of the sanctum, at which juncture the exchange editor is tempted to pitch it into the waste-basket. If he has sufficient patience to gather up and rearrange the ragged and crumpled ruin, he may be rewarded by some interesting reading matter; but the illustrations are generally wretched, and the paper, as a whole, is far from being a thing of beauty.

Why the British publisher prefers to place mental food before his readers in so unattractive a form, we cannot conceive, unless it be due to Johnny Bull's natural dislike to imitate Brother Jonathan in anything. There is one other possible explanation that occurs to us, which is that if the Englishman's reading matter were served up in the style of our best American journals, he might have nothing at which to grumble, and would thus be deprived of what is held to be one of his dearest privileges.

Our Indians.

AS the field of labor of many of our students will be beyond the Mississippi, it may be of interest to them to learn something of a race of people which they will there meet,—the Indians. We say "will meet," for contrary to the impression generally held that the Indian race is dying out, it is in fact increasing in spite of war and famine.

There are 260,000 Indians within our borders at the present day, exclusive of Alaska. Of these probably 150,000 are wild, that is, live in wigwams, wear blankets, paint their faces, and adhere to a pagan form of worship; such are the Navajoes of New Mexico, numbering 11,000, the Blackfeet of Montana, numbering 7,000, and perhaps 20,000 Sioux of Dakota. By classing these tribes as "wild" we do not mean that they are necessarily hostile. Not far from 60,000 are civilized, speak English, dress as the white dress, have well-cultivated farms, and have established schools and churches in their midst. Such are the so-called "Five

Civilized Tribes of the Indian Territory," the Creeks, Cherokees, Choctaws, Chickasaws, and Seminoles, who not only have a government similar to our State government, but maintain one hundred and seventy-five schools and two asylums.

The remaining 50,000 are semicivilized, among whom the small farms, poorly cultivated, show that the owners find it hard to leave the old modes of getting a living—fishing and hunting—for the less romantic and, to them, very distasteful work of tilling the soil. Instead of saving out seed in the fall for the next spring's planting, this one fourth farmer and three fourths hunter uses it all, and depends on the agency farmer to start him in the spring.

The various reservations, on which the greater number of the Indians are gathered, embrace an area equal to twice that of New Mexico, one eighth of which is reported tillable. If equally divided, every family of five Indians would have about three hundred and fifty acres of cultivable land.

They actually cultivated, during the year 1881, half a million acres.*

Besides the reservations which are recognized as belonging to the Indians, the United States government has purchased lands once occupied by them, and has come under obligations to give annuities to certain tribes. The present liability of the government, under treaty engagement, exceeds \$15,800,000. Twenty tribes are said to be self-supporting.

Two radically different views have prevailed in this country from the outset in regard to the treatment of the Indians,—the one represented by the word "civilization," and the other by the word "extermination." In regard to the latter, little need be said.

It is believed that the death of each Indian, killed by our army, has involved an average expense of a million dollars and the death of one or more white men.†

* Report of Rev. John O. Means, D. D., Oct. 3, 1882.

† "Council Fire," May, 1878, taken from *American Missionary*.

The problem now is, What is the best way to civilize the Indian and make him a citizen? The friends of the Indian race are recognizing the fact that the most speedy solution of this problem is in the education of the Indian youth from different tribes in schools, where, for a number of years, they will be wholly removed from tribal influence.

The lead in this work has been taken by the Hampton Institute, Hampton, Va., and the Indian Training School, Carlisle, Pa., the latter institution having gathered together, during the past year, two hundred and ninety-five Indian boys and girls, from twenty-four different tribes, speaking as many different languages. At Hampton the number is ninety, but includes several students who are well advanced.

Mr. Teller, Secretary of the Interior, says upon this point, "I recognize the usefulness of those schools, but I insist that they are entirely inadequate, as any number of them would be, to accomplish what is desired. The Hampton and Carlisle schools no more meet the exigency than Yale and Harvard supply education to the youth of the whole United States. There are 50,000 Indian children. We must furnish means for their education. Hampton and Carlisle will do for the training of teachers; but we must get the schools, which are to educate the masses of Indian children, out nearer to the tribes."

As yet, the means for carrying on this work have been insufficient, the general appropriation of the government for Indian education for 1881 being but \$85,000, although this was increased to \$500,000 by private giving. This year, thanks to Senator Hoar, the government appropriation is \$500,000, which will probably be doubled by those who are interested in the peace and development of our great West and the welfare of a weaker race. B.

The third year Civils were assured that the questions at the examination in Hydraulics would be made very plain. Would that there was the same certainty with regard to the answers!

The Exhaust Injector.

SINCE the invention of the injector by the late Henri Giffard in 1858, many experiments have been made to improve its construction and economical working. The injector has justly been called a theoretically perfect feed apparatus, because all the heat not converted into work is returned to the boiler with the feed-water. If, however, the injector can be made to utilize the heat thrown away by the steam-engine, catch it as it is about to escape, and return it again to the boiler, its work as a feed-pump is not only performed gratis, but is accompanied by an absolute gain in heat energy. This is now practically accomplished by the exhaust steam injector, a European invention which is being introduced into this country by W. Heuermann, 40 John Street, New York. Its construction involves no new principle, and differs from that of other injectors chiefly in matters of proportion. Forcing water into a steam-boiler by means of exhaust steam, without increasing the back pressure on the engine, seems a paradox; but in some trials made at the works of William Sellers & Co., Philadelphia, this was done; and the curious fact was noticed, that the injector acted as a jet condenser, and actually reduced the pressure in the exhaust pipe, producing a vacuum of from one half an inch to four inches, which, of course, increased the efficiency of the engine. On account of this action of the injector, it will be found especially useful where exhaust pipes are not large enough to convey away the exhaust steam, a fault of frequent occurrence. It used to be supposed that the pulsations of the exhaust from a steam-engine would break the stream of the injector and render such use of it impracticable; but though these pulsations appeared upon the gauge attached to the injector, they did not seem to affect its practical working. In the trials alluded to, the injector forced water against a pressure of about 70 lbs., heating it at the same time to 170°. When the boiler pressure reached 98 lbs., the stream broke, but started again automatically when the pressure was reduced. These injectors will not

draw water, but work positively under a head of one foot. They have been applied to hoisting and winding engines, where they start and stop with the engine. This style of injector, with the addition of a small jet of live steam to help the exhaust, is used upon locomotives in Europe, with very satisfactory results. On one English railroad a saving of ten per cent in coal is claimed for this injector over the usual apparatus.

G.

Σ. M. E. Excursion.

THE second annual excursion of the Σ. M. E. Society has been arranged for the mid-winter vacation. The complete success of the excursion of last year, and the very kind reception given to the excursionists at each place visited, have given an increased interest to the project for this year, and the coming excursion promises to be fully as enjoyable as the first.

A committee appointed by the society, consisting of Prof. Whitaker, Messrs. Gale, Rotch, and Dewson, have had general charge of arrangements, and the schedule given is that made out by them. The latter is still open to revision at a meeting of the society, but will in the main be followed.

It was at first intended to include a visit to Altoona, Penn., and the Pennsylvania Railroad locomotive and car shops established there, which are perhaps the finest in the country; but, on account of the great distance and time required for the journey, the plan has been given up, and the time will be devoted to other interesting establishments at Chester, Penn., and New York.

The excursion will probably be in charge of Raymond's Excursion Bureau, whose careful arrangements contributed in no small degree to the success of the excursion of the preceding year.

THE SCHEDULE.

Leave Boston by the Norwich Line, at 6 or 6.30 P. M., on Monday, Jan. 22, for Philadelphia. Arrive at Philadelphia about noon on

Tuesday. Quarters will probably be at the Girard House.

Tuesday afternoon, visit The Southwark Foundry (Porter-Allen Engine Works).

Wednesday forenoon, visit Wm. Sellers & Sons, manufacturers of machine tools, shafting, etc.

Wednesday afternoon, visit John Roach's ship-yard at Chester, leaving Philadelphia by the 1.32 P. M. train, and arriving in Chester at 2.12 P. M. Leave Chester at 5.48 (possibly 6.36, preferably 5.48).

Thursday morning, visit the Baldwin Locomotive Works.

Thursday afternoon, visit I. P. Morris & Co.'s Iron Works. Manufacturers of pumping engines, sugar machinery, ice machinery, steam and gas pipe fittings, etc. Supper at Philadelphia.

Thursday evening, leave Philadelphia for New York at 6.45 (Philadelphia time), or 6.50 (New York time), arrive at New York at 9.22 (New York time).

For Friday and Saturday, in New York and vicinity, the arrangements are not yet completed. Among the many places which it would repay the excursionists to visit, are mentioned Edison's Laboratory, at Menlo Park, N. J.; The Stevens Institute of Technology, at Hoboken, N. J.; The Electric Light Company's Works, at Newark; The Edison Station, in New York; The Station of the Steam Supply Company, etc.

Leave New York for Boston on Saturday, in season to arrive in Boston at about 6 P. M. on Saturday.

About twenty members of the society will probably go on the excursion, and they may expect a very pleasant reception at each of the places named. The managers of the Porter-Allen Engine Company have especially expressed the pleasure it will give them to receive the students, and extend to them every opportunity for examination of the company's work and methods.

Prof. Whitaker rejoices in the possession of a type-writer.

Athletics.

THE fourth annual games of the Union Athletic Club will take place Feb. 5 in the large hall of the Olympian Skating Rink. The M. I. T. A. C., which has often taken an active part in the games, will this year be but poorly represented, our men having had but little or no practice during the winter months.

A feather weight tug-of-war team consisting of Jordan, capt.; Deshon, anchor; Wolfe, and Magoun, has however entered, as also T. C. du Pont, '84, for the high kick. The tug-of-war team is composed of men comparatively new to the business, and although one of them has already made his mark as an athlete, we would hardly venture a prediction regarding their success. They will certainly have the best wishes of the Institute with them.

The schedule of games to be contested is as follows: Tug-of-war teams, 500 pounds; tug-of-war teams, 600 pounds; running high kick; pole vault; running high jump; one-mile walk (handicap); one-mile run (handicap), and others. Entries may be made before Jan. 31 to H. G. Pratt, Secretary M. I. T. A. C.

The first winter meeting of the M. I. T. Athletic Club will be held in the gymnasium, probably on Saturday afternoon, Feb. 17. The games will include those usually given at the winter meetings, and the managers hope to add contests in sparring and wrestling. A meeting of the executive committee will shortly be called to arrange the preliminaries, and the results will be posted on the bulletin boards. It is to be hoped that a considerable amount of interest will be shown in the first meeting of the year, and that it may be made as successful as those of the winter and spring of last year.

The Yales are already arranging base-ball games with professional clubs, preparatory to the inter-collegiate struggle.

The prospects of a good nine at Harvard next season are very encouraging. Allen, '86, formerly of the Beacons, has returned, and will

probably alternate with Crocker in the catcher's position.

At the recent meeting of the Yale graduate supervisory committee, it was decided to appoint no committee to confer with Harvard concerning the differences about the arrangements of the annual eight-oared race until Yale's challenge should be accepted.

Noticeable Articles.

Fortnightly, December. — "The Liberal Party in Germany," by Baron George von Bunsen. The writer is the son of the distinguished Chevalier Bunsen, the friend of Niebuhr and Arnold, who was for so many years Prussian Minister at the Court of St. James. A writer in the *Pall Mall Gazette* complains bitterly that it is only "a united attempt at palliating some of the ugliest elements of the present Cæsarism in Germany." However this may be, it is an interesting glimpse of the internal politics of the empire. "Workingmen and War," by Thomas Burt, M. P. Mr. Burt, one of the most respected members of the British Parliament, is neither Baron nor Chevalier, but a self-educated workman, who, not many years ago, was wielding a pick at the bottom of a British coal mine. This is a thoughtful paper on the political character and probable future action of the newly enfranchised English working-class. "A Lesson in Democracy," by J. A. Froude. A lecture written with Mr. Froude's accustomed vigor of style. These three papers deserve careful reading by all who are interested, or who want to be interested, in the study of modern politics.

Nineteenth Century, December. — "The Fallacy of Materialism." Students of physical science, who are not afraid of metaphysics, — if they are, they will never become good students of physical science, — had better read and ponder this article. It contains some odd misprints, — Hagel for Hegel, — and one which succeeds in entirely misrepresenting the opinion of an able writer. In the extract from Prof. Flint, the words, "the great sham of spiritualistic or idealistic thought," should be "the great wave."

The anonymous novel, "No New Thing," which has been running some time in the *Cornhill*, and has been copied thence into the *Living Age*, is a capital story written in capital English. From internal evidence, the present writer guesses it to be by Norris, author of "Heaps of Money" and "Matrimony," which are also good stories.

W. P. A.

THE OLD STORY. — Bridegroom's motto (very free translation). — Veni! vidi!! vici!!! I've been! and gone!! and done it!!! — *Detroit Free Press*.

Department Notes.

THE following may be useful to some of the students regarding the amount of sulphur permissible in Bessemer ores. In charcoal blooms as much as 0.035 per cent of sulphur is enough to produce cracks in bar iron rolled from them. In puddled iron a somewhat larger percentage is permissible. In Bessemer steel the injurious effects of sulphur increase with the diminution of carbon, and the *red shortness* is greatly increased by an increase of sulphur from 0.01 to 0.15 per cent. Sulphur, however, is not as injurious in pig iron as phosphorus, because a larger proportion of the sulphur passes off in smelting, while all the phosphorus goes into the iron.

The last day that the chemical laboratory was open most of the time was spent in recovering pieces of apparatus that had been borrowed during the term.

Mr. Richards succeeded, after using up four large crucibles, in producing two small pigs of pure copper from the products of his run.

Mr. Willcut finished his cupelling last week and realized several pounds of pure silver.

Mr. Hardon's gold ore has arrived, and he has begun to sample it.

Engineering students will be interested by an article on "The Treatment and Use of Steel," in the *Railroad Gazette* of Dec. 29.

Those of our readers interested in machine drawing are advised to examine some specimens of excellent working drawings, published in the *American Machinist* of Jan. 13, which will repay a careful study. An article on the "Province of the Draughtsman" may be found in the same paper.

The engine of the new iron steamer for the Fall River line is nearly ready for steam. Engineers can form some idea of the size of it from the fact that the strap on the crank end of the connecting rod weighs two tons!—*Mechanical Engineer*.

A basement floor or sidewalk can be made very easily in the following way: Spread out the iron chips, gathered from the machines in a shop, in layers over the floor or walk, and sprinkle common salt liberally between each layer. The salt unites the chips into a hard mass (developing considerable heat as the process goes on). The sidewalk along David W. Pond's machine shop, in Worcester, Mass., was made in this way. It is about six inches deep and very firm.—*American Machinist*.

Van Nostrand's for January contains the usual number of valuable contributions, among them an interesting paper on the subject of "Water Gas," by Prof. C. v. Marx; "The Microscopical Structure of Iron and Steel," by Dr. H. C. Sorby; "Deep-Sea Sounding," by Lieut.-Com. Jewell, U. S. N.; "Silt Movement by the Mississippi," by Robt. E. McMath; "Water Jet Propellers," by W. H. White; and other articles of interest to the engineer and architect.

The agent of a Massachusetts cotton mill, when about to make a personal examination of some matters relative to the water power, put on his rubber leggins, when the treasurer made his appearance, and was escorted through the mills. After standing under a large belt for a few minutes, the agent touched the treasurer's shoulder, and gave him an electric shock which nearly overturned the man of money. The rubber boots, and the man inside of them, formed a large Leyden jar, whose discharge was very severe, especially to a person expecting nothing of the kind.—*Electrician*.

A few years ago there were a number of well-known engineers, with offices in New York City, whose services could be secured, for a short or long time, for tests and other work belonging to the profession. Since then a change has taken place, and most of the well-known engineers are regularly connected with certain establishments. Facts go to show that an engineering office business, as a rule, does not adequately pay even those most skilled in the profession. There are, of course, exceptions to

any rule. Beginners often find great difficulty in establishing an office business.—*American Machinist*.

The Electrician begins its second volume with a new cover, which adds much to its previous neat appearance. Its contents are always fresh and interesting, which, combined with its reasonable price, places it at the head of popular electrical journals, a position where its enterprising managers evidently intend to keep it. The December number contains a good description of "The Electric Lighting System of the Fuller Electrical Company," and in the January number an account of a "New Telephonic Apparatus" is worthy of special mention.

The *Electrical Review* of Dec. 23 is an unusually entertaining number. It contains the conclusion of an article "On the Application of Electromotive Power to Maritime Purposes," the first part of which appeared in the preceding number; an account, by J. B. Henck, Jr., of the system practised in the physical laboratory of the Massachusetts Institute of Technology; and the first part of an exceedingly interesting paper read at the August meeting of the American Association for the Advancement of Science, by Alexander Graham Bell, upon his "Electrical Experiments to determine the Location of the Bullet in the Body of the late President Garfield," which is to be continued.

Our electrical engineers will be interested in the description of "Gordon's Dynamo-Electric Machine" in the *Scientific American* of January 6. The machine there illustrated weighs eighteen tons, and can, with sufficient power, light 6,000 swan lamps. Instead of an armature revolving between fixed magnets, in this machine there are thirty-two field magnets arranged around the circumference of an iron disk, which revolves between the sides of a cast-iron frame, to which are attached one hundred and twenty-eight fixed coils of insulated wire which supply the current to the lamps. Two Burgin machines act as exciters for the field magnets. There is no commutator, the machine being of the alternating current type. The coils may be

coupled up in almost any way desired. When all are connected for quantity, a machine of very low resistance is obtained, which is of special advantage in all systems of incandescent lighting.

A new material in the arts has just been put on the market, which, for useful qualities in the trade, has no superior. It is called *Terra Cotta Lumber*, which is somewhat confusing, by the way, to those who have never seen it. In color it varies from a light buff to a fiery salmon; in appearance it is similar to a slice of bread, that is, its cellular structure is similar; in weight it is about the same as cinder of the same bulk; in characteristics, however, it is totally unlike any other substance known. It is exceedingly refractory to fire, and resists more intense heat than fire-brick, while in addition it is quite tractable to edge tools; it admits of driving nails in it, and can be handled by artificers precisely as wood is. It can be used in the place of it for buildings, or it can be put up for bridge-walls of boilers and smelting furnaces. The Babcock & Wilcox Co. are using it for lining the doors of their boiler furnaces. This really wonderful material is entirely neutral as regards fire and water, neither having any destructive effect upon it.

What is more remarkable is the fact that the material from which terra cotta lumber is made is a waste substance, two of them, in fact,—the top layer of fire-clay beds and saw-dust — *Mechanical Engineer*.

The following abstract of a paper, by T. J. Larkin, on the subject of Telephonic Communication in Japan, is taken from the *Electrical Review*. The use of telephonic communication for police purposes had never been considered in England, but in Japan it was carried into effect with great success. In one of the principal cities, containing 300,000 inhabitants, the police force had, at first, great difficulty in keeping order; consequently, in 1878, a telegraphic system with nine offices was introduced, worked by Morse printers. The wire used was of No. 11 gauge. On the invention of the telephone, the

latter instrument was substituted for the printers, and with great success, as the intermittence in the work, with the ordinary instruments, was much disliked by the operators, who were continually resigning their situations, causing great inconvenience. The Bell telephones were the instruments employed, and were worked by the police staff without difficulty. The first were purchased, but afterwards they were manufactured locally with perfect success. Four telephones on one circuit were employed in some cases, the stations being called up by so many strokes on a bell. One of the lines was eight miles long, and ran on poles with other working wires: although the inductive disturbance was very strong it did not prevent proper working. Experiments were subsequently tried on fifty-seven miles of railway, with seventeen stations, with every success, and it was finally decided to adopt the telephones for block as well as ordinary signalling. Several instances were given of the value of telephonic communication as compared with the ordinary telegraph system. By means of shackles, placed on the poles at every mile, it would be possible, in case of a railway accident, for the guard to connect up a hand telephone and communicate with the nearest station.

Book Notice.

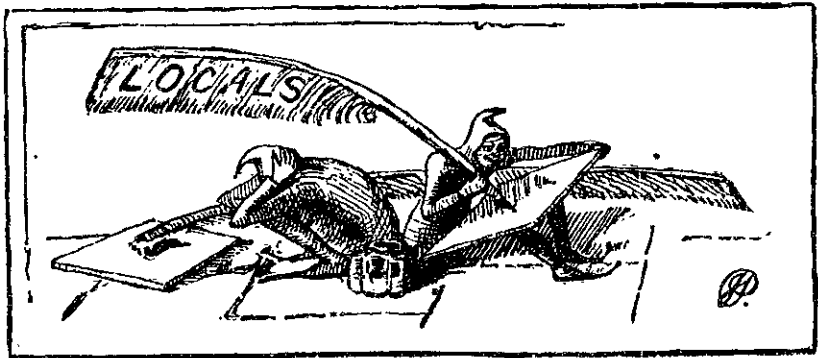
POLITICAL HISTORY OF RECENT TIMES. 1816-1875. By Wm. Mueller, Professor at Tubingen. Translated by the Rev. John P. Peters, Ph. D. New York: Harper Brothers. Svo. pp. 696.

This book, now in its first edition, is an excellent hand-book for use in schools, in that it is not a mere compilation of facts, but is a complete and interesting narrative of the political events which have occurred in the last seventy years. It is written in a bright and vigorous style, and engages the attention of the reader from the first page to the last.

The translator has abridged somewhat the space allotted to Germany, while omitting entirely the references to the United States and making a few changes in regard to the minor European states.

There are six periods into which the book is divided, each one covering some especial feature of political history; and although the nations are taken up separately in these periods, they are so treated that the relations to each other may be clearly seen.

Prof. Mueller takes up the side of political liberty strongly, and believes that a slow but steady advance toward the political equality of the people is taking place.



MR. JOHNSON, '82, was at the Institute last Tuesday.

Long faces are now in order.

The semi-annuals are upon us.

Who says good-bye to "Old Fossil"?

Heard anything about the excursion?

Mr. S—h, '84, was seen at the Institute the other day.

Von Furbach printed the first almanac, as *Fur-bach* as 1460.

'86 has quite a curiosity in the shape of a near-sighted Bartlett *pair*.

Another assistant is promised for the Mechanical Engineering Department.

The report that du Pont is to purchase a new hat is now said to be unfounded.

The *G. S. T.* will hold a special meeting on the evening following the last examination.

An architect wishes to know how to correct the inclination of the New South Church spire. Try "Anti-Lean."

A lady once remarked that she suffered from cold feet. "So do I," said a gentleman, "but they are not my own."

The Silver and Gay dynamometer; which has been loaned to the Mechanical Engineering Department, has been removed.

A lady, about to make ceremonious calls, sends her footman for her cards. Later.— "Pat, how many cards have you left?" *Pat*. "The ace of hearts and the ten of spades, mum." (Lady faints.)

Scene, recitation-room, Wellesley College, class in Latin. *Professor (who is a Harvard graduate, and consequently bashful)*.— Miss A, will you decline the pronoun *hic*? *Miss A*.— *Hic, hæc, hoc, hug-us, hug-us, hug-us*. (Exit professor amid great excitement.)

M——, who is taking a course in Topography at the Institute, has planted his forest, and is now engaged in reclaiming a tract of swamp land.

During the examination in Mechanics, the other day, quite an excitement reigned for a few moments following Mr. B——'s semi-annual sneeze.

The Seniors, who had been looking forward with extreme pleasure to an examination by Prof. Ordway, were sadly disappointed on Monday morning by the indefinite postponement of the same.

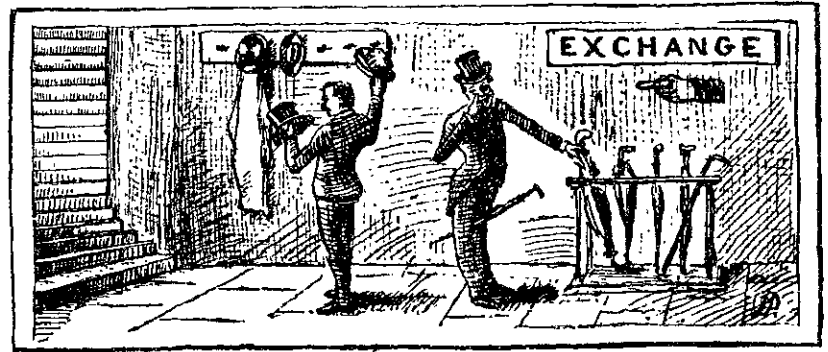
Does n't it seem strange that the members of a society like the Sigma Chi should each have a price list of whiskeys sent them? If we had heard this regarding the "Gazelles," such surprise would not have been created.

One of the Senior Civils left a drawing of a river upon his desk one evening, and during the night some water on the roof took it for an actual river and flowed down into it. Perhaps our before-named Hydraulician of '84 made the necessary river improvements the next day.

The fourth-year laboratory is once more at rest. About a week ago, while our A .A.'s doleful notes were resounding throughout the third and fourth year laboratories, the professor stepped in and remarked that the Mining Laboratory fiend was let loose. He said that he had heard the beast on several occasions, but had never happened to see it before.

We hear that one of the Faculty has the right idea regarding the amount of study that should be done by the students. He thinks that if we have got to "grind" ourselves to death, the lot for the new building should be used as a graveyard. As work on the foundation is now going on, we should judge the lot might be made to answer both purposes for no short period of time.

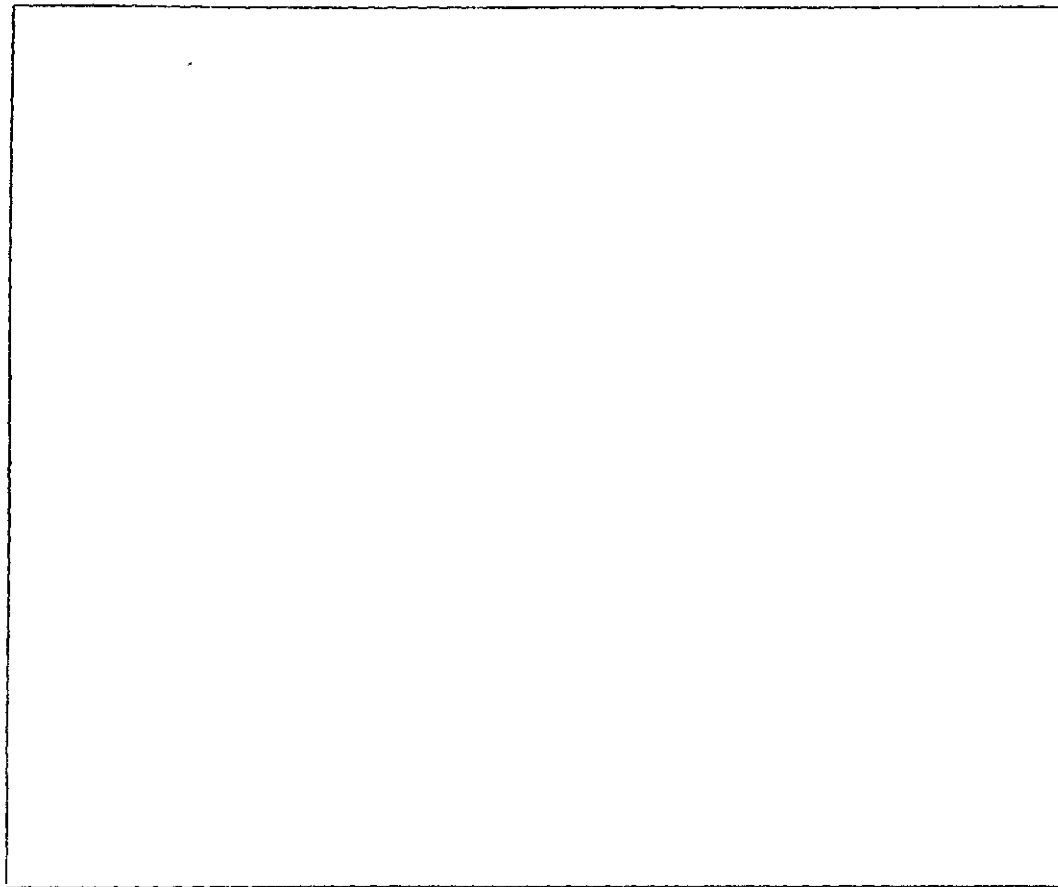
PROGRESS OF THE FRESHMAN — The first letter sent home by a gushing Freshman: "Pater, caniha veso memore stamps sentto me? Ego spentthe last cent. Tuus studios heres Johannes." — *Concordiensis*.



THE holiday vacations, which most of our sister colleges have enjoyed and we have envied, have caused the usual bulky pile of exchanges upon our table to assume quite slim proportions. From the *University Magazine* we learn that during the holidays the Intercollegiate Press Association took on an organized existence. Twenty-seven delegates, representing fourteen papers and ten colleges, met in one of the halls of Columbia College to decide upon a constitution and otherwise effect the organization. As finally signed by nine of the fourteen papers present, the constitution provides for a board of reference, which shall only admit to the association papers which have in the judgment of the board reached a certain degree of excellence. The editorial board of each paper in the association is to contain a corresponding secretary to supply the other papers represented with information regarding his own college. The initiation fee is \$10, annual dues, \$5. The papers whose delegates signed the constitution are *Acta Columbiana*, *Athenæum*, *Argonaut*, *Chronicle*, *Amherst Student*, *Brunonian*, *Argo*, *University Magazine*, and *Harvard Herald*.

Considerable time was devoted to the discussion of the aim and improvement of college journalism, and according to the *Magazine* many valuable results were reached. It is to be hoped that these results may soon be published, that we may elevate ourselves, for, alas! the college papers are "all down but nine."

The annual report of the president of Harvard University has been presented to the board of overseers, and is published in condensed form in the *Harvard Herald*. The



A BIRD'S-EYE VIEW OF M. I. T. FIRE APPARATUS.

("TECH" OFFICE FIRE ESCAPE IN LOWER LEFT-HAND CORNER.)

tendency of the university is seen from the report to be toward the complete adoption of the elective system. With the increase in the number of good preparatory schools, the requirements for admission to the university will be raised until they will probably include most if not all of what is at present the required work of the Freshman year. During the year a standing committee of three of the Faculty has been appointed to oversee and regulate college athletics. A motion in the board of overseers that prayers should be voluntary was lost by a large majority. The report shows the university to be in a very flourishing condition. The chemical laboratory and Agassiz Museum have been particularly active; the department of veterinary medicine established, and the elegant building for the Law School begun. A new physical laboratory, and another large building to cost \$250,000, are soon to be erected. The need of the university is for unrestricted funds, which may be applied to general running expenses.

NO college in the country has a shorter Christmas recess than the University. — *University Magazine.*

How about the M. I. T. — One day.

How many swallows make a lark? — *Ex.*

The port of New York — Logwood. — *Ex.*

TRIOLETS.

What He said:

This kiss upon your fan I press —

Ah! Sainte Nitouche, you don't refuse it?

And may it from its soft recess —

This kiss upon your fan I press —

Be blown to you, a shy caress,

By this white down, when'er you use it.

This kiss upon your fan I press —

Ah, Sainte Nitouche, you *don't* refuse it?

What She thought:

To kiss a fan!

What a poky poet!

The stupid man,

To kiss a fan,

When he knows that he — can —

Or ought to know it.

To kiss a fan!

What a poky poet!

Century.

THE TECH.

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EXCELLENCE is
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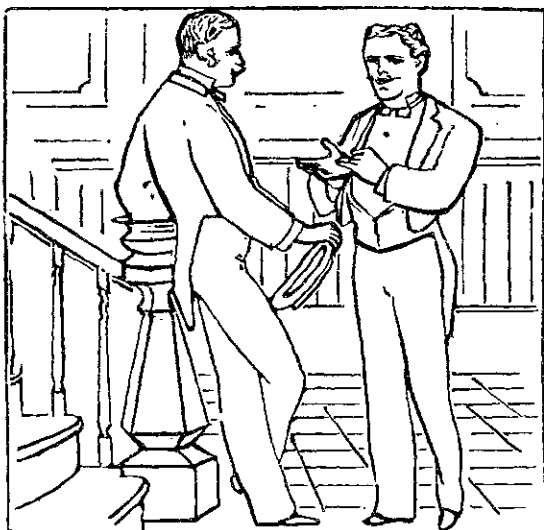


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14 School Street, Boston.

*Mr. Andrews, translating
Virgil.*—“Three times I strove
to cast my arms about her neck,
and’—that’s as far as I got,
Professor.” “Well, Mr. An-
drews, I think that was quite
far enough.” — *Ex.*



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\$5.50 AT OAK HALL. DRESS SUITS MADE
TO ORDER. FIFTY DRESS COATS KEPT
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EVERYTHING OF BEST QUALITY IS SOLD
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"Glass — Mr. Glass." "Oh! no!" "But it is." "Impossible, it can't be."

"And why not, pray?" "Because, sir, glass is a non-conductor."

Deafening applause from the scientific passengers.

—

The following from a London paper may be classed among the curiosities of advertising: "To judges and solicitors. Grand bull-terrier dog. He will kill a man if told. Trial allowed." — *Exc.*

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DEALERS IN

Hats, Caps,

—AND—

FURS.

Also, a Large Assortment of Silk Umbrellas and Walking Canes.

533 Washington St. 533

Next Door to Boston Theatre.

—1882.—

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UNEXCELLED IN STYLE, QUALITY AND FIT.

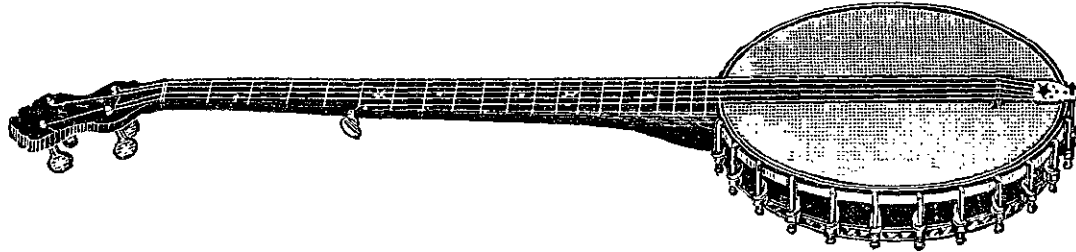
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371 Washington Street, corner Bromfield,

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Embodying all of the latest original improvements, be sure and examine our make. We are the only teachers of the banjo in Boston who make their own instruments, and are original in every department. Send for Illustrated Price List.

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 Physicians' Prescriptions a Specialty.

The Independent Party, — the servant girl. — *Puck*.
 A theatrical dead-head, — Yorick's skull. — *Ex*.
 Four of last year's Base Ball Nine are to be retained. — *Harvard Advocate*.
 The total number of persons connected with the University is 1613. — *Crimson*.
 '84 had a hard examination in German last Friday.
 We hope we shall not be accused of exaggeration when we say that we have received 1883 calendars. — *Commercial Bulletin*.

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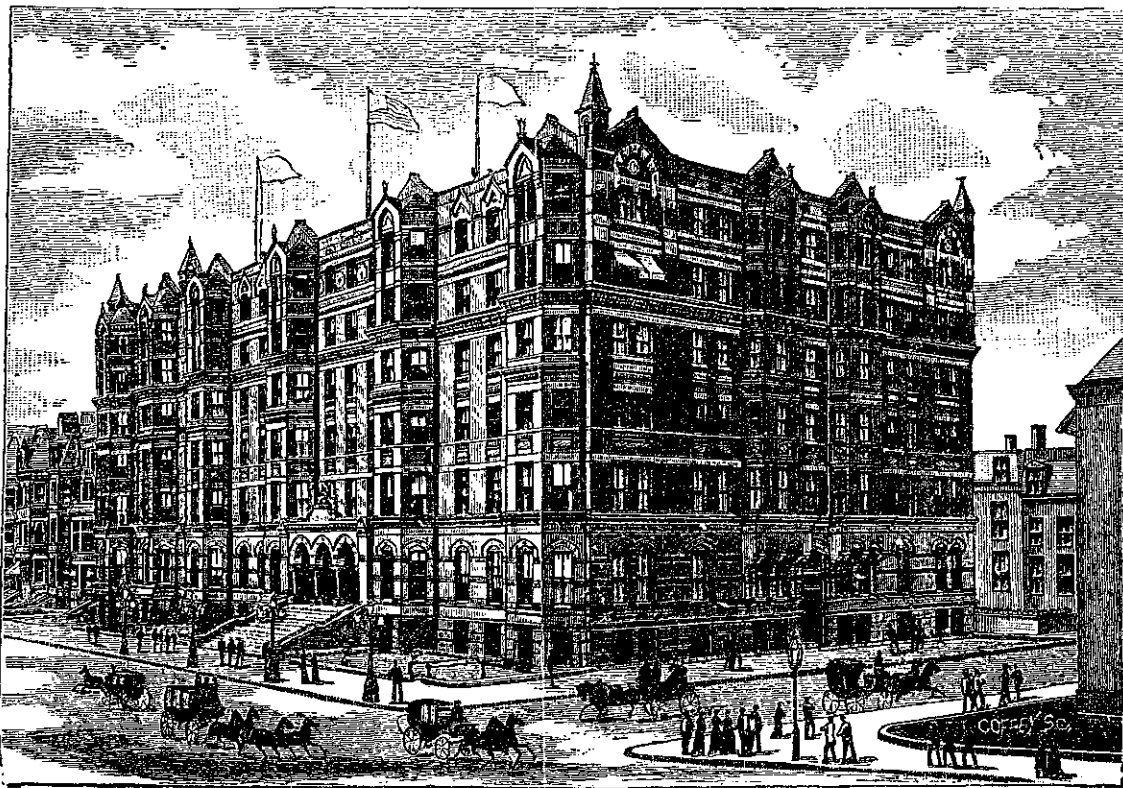
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