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Ralph Huntington

The Tech.

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THE question of the profitable-ness of our present graduation day is now under discussion among the members of '83. A number of the class express themselves as decidedly opposed to the present method, while the majority of the class appear indifferent, or speak but lukewarmly in favor of the day. We are of the opinion that the exercises as at present carried on give but little either of pleasure or of profit to the Senior Class or the school at large.

The exercises are severely simple, and for the day, which should be remembered by the graduate as the climax of his four years' course, it must be adjudged rather irksome and disappointing. The address by the president is the only interesting feature of the occasion. The reading of extracts from the graduates' theses can scarcely be considered of general interest, as these papers usually treat of subjects which, if not intricate, are in nearly all cases of such technical bearing and expression as to be, we

think, dry and uninteresting to the greater part of the audience, if not — although this is scarcely a compliment — beyond their comprehension. If this occasion is to be used by those in power as an opportunity for the Institute to show off the wisdom of its graduates in a series of uncomprehended abstracts, well and good: we shall have nothing to say; but if the idea of the day is, as we think it should be, to make for the graduating class, after their four years of mental and manual discipline, an occasion to which they may look back with pleasure, and which their friends would enjoy at the time and remember afterwards, why can it not be so arranged that the exercises may appear less like the "exhibition" of a private school and more a day of pleasure to all concerned? We do not by any means advocate a "Class day" or expensive "Commencement," after the college fashion, but, by the admission of music and, perhaps, singing, with some little floral decoration, and exercises of a less irksome nature, it seems to us the graduation day of our Institute would be looked forward to by the Senior, not as a necessary evil to be endured, but as a day to be enjoyed and remembered as marking the close of a very pleasant and very active period of his existence, and, as well, the end of all his school life.

IN this number we give a portrait of Mr. Ralph Huntington and a short sketch of his life. It will be remembered that at the beginning of the year it was proposed to publish a series of sketches of the lives of the benefactors of the Institute, each to be accompanied by a portrait. One such sketch was given in the second number of this volume, the subject being Dr. William J. Walker. For various reasons the editors have been unable to carry

out the design of a complete series, and not until the present issue does the second sketch appear. The third portrait, that of Dr. Jacob Bigelow, will appear in the next issue, with a short account of his life and connection with the Institute.

THERE are but a few weeks of the term remaining, and the work of the present board of editors is nearly finished. We think it is fully time that the new board of directors should be chosen by the classes and the editors for next year appointed. The elections should take place before the examinations begin, and that will require class meetings for this purpose by the middle of next week at the latest. It has been customary to hold a mass meeting to consider the results of the year and make any necessary arrangements for the coming year. This meeting may, however, at this time be considered unnecessary, as the paper appears to be on a firm basis, with best prospects of continued success for the third volume.

WITH '83 five of the present editorial board will go out, and it will become necessary for the new board of directors to appoint at least five new men. Some of these should be appointed from the present Sophomore and Freshmen classes, who are each represented on the present board by but one editor. These classes are large, and it would seem that they ought to contain many men who could fill the vacant positions with credit to themselves and the paper. We judge, however, rather from what might reasonably be expected than from any proof of inherent talent which '85 or '86 has given us during the year. But we cling to the belief that there must be a good deal of modestly hidden ability under the big hats of our young friends, and we sincerely hope that the new board will be more successful in condensing said ability into a readable form than the present board has been.

Mr. Ralph Huntington.

MR. RALPH HUNTINGTON, whose portrait accompanies this sketch, was born in Worthington, Mass., in the year 1784. He began business in Boston about the year 1807 as a clerk in the Northampton Bank, and shortly after opened an exchange office on State Street, soon taking his place among the first of Boston exchangers and bankers.

He was one of the original members of the Water Power Company by whom the Mill Dam was constructed, and he was among the first to foresee the future value for building purposes of the great area of tide-water flats then known as the Back Bay. He took an active part in the "Tripartite Treaty," so called; and the reader may be interested in a short account of this treaty and its results.

About the year 1822, the Mill Dam, now Beacon Street, was constructed by a party of Boston capitalists, with the intention of taking advantage of the rise and fall of the tides for water-power purposes. The great development of water power on the rivers of the State soon rendered this privilege comparatively valueless. The State owned the fee of several hundred acres of the flats over which the Water Power Company had the right of flowing water. A proposition to fill in the flats and make land for building purposes led to a compromise by which each party should become owner of one half of the new lands. The city of Boston, the third party interested in the treaty, held the right of drainage into the Back Bay, and to adjust its claim the city was given the right to all lands required for streets, schools, and public buildings on the newly made area.

The State received some millions of dollars from the sales of its portion of the lands, and this amount was appropriated for educational purposes by vote of the Legislature. Certain portions of the land were, however, reserved by the State, and these portions include the square on which the Institute and National History Buildings now stand, the square on which the new building of the Harvard Medical School

is being erected, and the land near Dartmouth Street, on which the new City Public Library is soon to be built.

It will be seen that the largest factor in the means which the State has at its disposal for purposes of education has been derived in the main from the foresight and sagacity of Mr. Ralph Huntington and his associates in the work of planning and completing the enterprise of filling in the unhealthy flats, and thereby laying the foundations of the finest portion of our present city.

About the time that the filling of the Back Bay began, Mr. Huntington's attention was called to the proposed establishment of a collocation of educational institutions on the new lands. He was quick to see the advantage which would be derived by the Water Power Company from the founding of such institutions, through the enhanced value of the neighboring real estate owned by the company and the State.

For these reasons at first he actively entered into the enterprise of establishing an Institute of Technology, which was then just being brought into public notice; but soon his interest in the Institute itself became paramount to other considerations. This interest was so pronounced that he was made a member of the board of government of the incipient organization.

His interest in the Institute was also manifested by the generous provision in his will for a bequest of twenty thousand dollars, afterward increased to fifty thousand. Very early in the history of the institution he expressed an earnest wish for the immediate erection of permanent buildings, and, finding a great need for ready money in the corporation, he discounted the bequest in his will at six per cent per annum, thereby providing immediate funds; and to this liberal provision we owe in good part the present building and the beautiful hall which bears his name.

A further evidence of the public spirit which animated Mr. Huntington was the provision in his will for a residual fund of over two hundred

thousand dollars to establish an orphan asylum which should bear his name. It has appeared to his executors that the kind of institution which Mr. Huntington had in mind when he made his will is not called for at present, and would indeed be rather superfluous; they have however expressed the desire of turning the income from the bequest into the Institute of Technology, for the education of orphans, if the matter can be legally done. If this arrangement be completed, another reason will be added for a grateful recognition of the generosity displayed by Mr. Huntington, and his active interest in the institution, which, by his liberal donations, together with equally liberal gifts from others, has been enabled to bestow the many benefits enjoyed by the students who receive instruction within its walls.

Mr. Huntington also left legacies to the Old Men's Home and the Boston Mercantile Library. His death took place on May 30, 1866, after a very painful illness.

An Architectural Excursion.

IN the last number of THE TECH it was chronicled that the architects, under the supervision of Mr. Ross Turner, made a very pleasant excursion to North Easton on the 14th inst.; and it is the object of the present article to give a more detailed account of the affair.

The train left the Old Colony Depot, at 8.15 A. M., and bets were freely offered with the odds of ten to one that the V. L. member would not arrive in time, although he had promised faithfully to be on hand.

Just as the train was moving out of the depot he was observed to rush frantically out of the waiting-room, and to jump on board. He sank exhausted into a seat, and when he had fully recovered he was heard to murmur "Well, this is a cosmopolitan life. Bob, bring me another steak and omelette."

The young man from Dedham was nowhere to be seen, but the firm was well represented by his partner, who was kind enough to furnish sandwiches for the crowd.

As we were going to inspect some of Rich-

ardson's buildings, of course "Dicky Bird" was present, and kept the company in a roar of laughter with his puns and stories, which he had heard when "I was at Richardson's office last summer." All told, we were fourteen; and a jollier party never set out on a sketching tour.

"Bound Off" the scout had brought his camera; but, strange to say, he preferred the wet p(a)late to the dry process, especially while developing on the way home. The car was extremely hot and close, so much so, that, as morning air was cool and refreshing, several preferred riding on the platform, thus getting a more extended view of the rocks and rye fields through which we passed.

On our arrival at North Easton we put ourselves under the guidance of "Dicky Bird," who of course knew more about such "way stations" than we did, and immediately started off for the library. Here we were informed by the white-haired librarian that, it being a public library, no visitors were allowed; but, nothing daunted, we wended our way towards the Ames Memorial Hall, now followed by a score or so of hoodoos.

"Dicky" was despatched for the janitor, and meanwhile we posed for a photograph on the hall steps; but just at the critical moment we were charged by the hoodoos, and so the picture was spoilt. Soon the janitor appeared and took us over the building, the main hall of which is used for dramatic entertainments, and for dances, etc. On the floor above is a smaller room, used by the Freemasons; but we did not make a long stay here, for the janitor seemed afraid that the students would rag the insignia which were scattered around.

Out of doors once more, we began sketching, some in color, others in pencil. This of course attracted more spectators; and even the editor of the village paper interviewed us, and actually enticed one poor innocent into walking three miles to see "The finest view in Ameriky, and which as I showed Hunt the artist when he come on here to paint."

The sketches finished, we passed through the

town to the Ames gate lodge, which certainly is very picturesque and original in design; but the contrast of the large, light-colored, weather-beaten stones which compose the body of the house, with the bright tile roof, is a little too marked in color; but in time the stones will be covered with moss and vines, and enhance the effect. Under the archway of the lodge we all posed, and our photographer succeeded in getting a very good negative, the proofs of which have already appeared.

After making a few hasty sketches of the lodge and surroundings, the party divided, the majority leaving for home on the noon train, while some few enthusiasts stayed to make more elaborate sketches.

On the way back, the weary hour was somewhat enlivened by an attempt of one of the party to sell some of the sketches to passengers; but, even with the price at twenty-five cents apiece, no one seemed willing to invest.

When the train left North Easton it was cold and chilly, but for some reason it seemed to grow warmer as we approached Boston, and with this increase in warmth, our spirits rose, and when we bade each other good-by in the depot, each one went home thinking that few days had been spent in a pleasanter manner than the one in which "he went sketching at North Easton."

The Minstrels.

THE theatrical world of the Hub has not lacked astonishing attractions during the present season. Many and varied have been the performances which have called forth the thunders of applause in our finest theatres. The renowned Howard, the elegant and inexpensive Boylston, the palatial Windsor, and the fragrant National, have each and all been nightly crowded with immense and most fashionable audiences, whose admiring plaudits have awakened the echoes and electrified the performers.

We have had minstrels, Mammoth minstrels, Mastodon minstrels, Gigantean minstrels; we have had dances, songs, sketches, varieties,

olios, with such agglomerations of talent that space and time fail us for description.

There have also been performances of no mean order at the minor theatres. We have had Italian opera, Italian drama, and Italian oratorio; we have had likewise opera, drama, and oratorio, in our mother tongue; and we have understood that the Bostonian stage has been dignified by the enactment of French opera, — though we were unable to attend.

This long succession of notable events was finally concluded on Tuesday evening, May 1, by a grand climacteric performance by renowned artists from all countries of the known world, and from Salem. Our reportorial pen is unequal to the task of doing justice to this occasion. To those who attended, all comment will be superfluous; to those who did not attend, a full account of the wonders and witticisms would be but a rankling aggravation, and we forbear.

The enthusiasm of the audience was overpowering, the floral tributes were most beautiful, the orchestra was in its best wind, and the scenic effects were gorgeous. A startling naturalness attended the action of the Marquis Guillaume upon his encore, after his almost superhuman exertions in his corporeal convolutions of an obfuscating nature. After bathing his heated forehead in the limpid stream that meandered about the country in the background, he advanced with characteristic grace and elegance to the very front of the stage, and gave evidence of his physical exhaustion by wiping the perspiration from his ebonite brow, and dashing the drops upon the floor with a report like that of a pistol.

The opening olio was a marvel. The jokes were new, well told, and not tedious; though some were possibly a little too long drawn out. The songs and dances were greatly relished, and bouquets in profusion were presented to the actors. Mr. Homer's bass song deserves special mention.

The interlude, Bounce & Go, describing the misfortunes of Herr Leinhardt, was ludicrous in the extreme, due to the capital characteriza-

tion of the actors. Mr. Harding being especially enjoyed.

The zither solo by Mr. Richardson was loudly encored, and the banjo duet by Messrs. Perkins and Kingsbury was well received by the audience, which was satisfied only by a second appearance of these gentlemen.

Messrs. Riley and O'Brien as mimetic artists were recalled to give a representation of the first attempts of two clog dancers on the stage.

The most interesting performance of the evening was the exhibition of Mr. Spaulding's marvellous dexterity with the bones. The gentleman was received with applause, which redoubled when the last click had ceased, and the enthusiastic audience could only be quieted by a second and third performance by the "Boney Billie."

The final sketch, "Old Ephs Return," with Messrs. Tenny, Harding, and Richards in the major parts, was a good bit of character acting and was warmly applauded as the curtain fell in the midst of the "General Walk-around."

The complete success of the whole entertainment was apparent as the audience rose to depart, and many were the congratulations and laudatory remarks upon the artists: "Did n't know Charley had so much in him!" "Well, William did wind those legs about in good shape!" "Jack was good, was n't he?" "Capital!" "Pretty good, that of Ten's about 'his girl,' rather interested some of the young ladies on the front seats!" "Good joke of Ike's!" "Little heavy on Len, was n't it?" and so on, until the street was reached, and the company broke up into groups of twos who continued to discuss the relative merits of the amateurs until the doorstep was reached and the head of paterfamilias appeared at the upper window to see that the good-night parting was discreet.

A clean score. First party, — "Madame, permit me to introduce my friend, who is not nearly the fool he looks." Second do., — "That is where my friend differs from me, madame." —
Exc.

Description of a Novel Steam Yacht.

L YING in the screw dock on the East River at the foot of Market Street, New York, is the mastless steam yacht "Meteor," with a V-shaped hull and a dome deck. Her designer and builder, Mr. A. Perry Bliven, has secured from the United States and European governments fifteen patents upon the peculiarities of her construction. The curved prow, the edges of the phosphor-bronze stern-post, and the propeller blades are sharpened almost literally to a knife-edge. Her external features above the water line can be briefly summed up in the word "curves." Excepting the wheel-house, smoke-stacks, and ventilators on deck, nothing shows above the rail. The pilot house is a dome, the smoke-stacks, ranged fore and aft, are surrounded, protected, and strengthened by an oval plate-iron fender, and the hatches are arches. The only things that waves could sweep would be, perhaps, the boats from the davits.

The yacht is supplied with the Ward steam generator. The boiler is practically non-explosive; has been tested in its component parts to 2,050 pounds, and, as a whole, to 1,000 pounds hydrostatic pressure. Its grate surface is ninety-six feet; heating surface, 3,680 square feet, and it contains 7,850 linear feet of tubing; and its power of generating steam is claimed to be four times as great as any boiler known occupying the same space. The condenser is one specially made by Lighthall, and contains 13,000 feet of nickel-plated tubing. The engines are recently patented, and are double-compounded with four cylinders, made of phosphor-bronze. The high-pressure cylinders measure $9\frac{1}{2} \times 20\frac{1}{4}$ inches, and the low-pressure, $20 \times 20\frac{1}{4}$ inches, with annular pistons of steel.

There are two piston rods on the high-pressure and four on the low-pressure cylinders; six connecting rods and four steel cranks, — the latter set at quarters, so that the pistons are never on a centre. The four-bladed screw is of phosphor-bronze, $10\frac{1}{2}$ feet in diameter, and the same in pitch. The blades are separately slipped on

the shaft and held in place by cups, permitting, in case of breakage of one or two blades, the re-setting of the remainder in balance, as a three or two bladed screw; 550 pounds of steam is estimated to give 2,600 horse-power, and 300 revolutions of the screw per minute.

The "Meteor" is the property of the American Quick Transit Company of Boston. The company has purchased a tract of land at Bay Ridge, and will prepare to build steamers as soon as the "Meteor" is proved a success. The coming steamship, according to Mr. Bliven's belief, will measure 468 feet in length by 72 feet beam and 56 feet depth of hold, and have a gross tonnage of 4,000. She will carry six hundred first-class passengers, 2,000 in the steerage, and five hundred tons of mail and express matter, will make twenty-four round trips from America to England yearly, and a single trip in five days. For safety she will have eight cross bulkheads, and one fore and aft on the line of every deck. These steamships will be supplied with compound screws, which will project, when in service, from either side of the vessel just forward of the stern-post. The double misfortune of breaking a shaft and having the rudder and rudder post carried away by the detachment of the main screw will not even hinder Mr. Bliven's mastless ships from going triumphantly on their way. In such an event the auxiliary screws will be pushed out, and water-tight shutters, covering them, and hinged to the stern-post, will form a double rudder. Separate engines will be used to operate the screws, and the time required to apply the power and connect the shutters with the regular steering gear will be but a few minutes. She will be strictly a Yankee ship, built of American materials. — *Manufacturers' Gazette*.

Imagination is fired when Florence, "the beautiful city by the Arno," is mentioned; but when one arrives there, and finds the Arno looking very much like a big drain, one is willing to return to common scents. — *Com. Bulletin*.

Athletics.

IS our Lacrosse team, like our Tennis Club, to be one of the things of the past? We sincerely hope not; but its action, or rather inaction, of late clearly indicates that such a state of affairs will soon exist, if it does not already. It was through no fault of the Tennis Club that it had to retire. The sets were purchased, the courts laid out, the men took hold of the work with interest, and everything promised a brilliant future when the preparation for the erection of the new building destroyed their grounds and completely checked further work. The Lacrosse Association, on the other hand, has no other excuse for its inactivity than laziness and lack of interest on the part of the officers representing the association.

The team formed in the latter part of last autumn, with no practice in the gymnasium during the winter, and especially with our early intermission, could not expect to put a first-class team into the field this spring; but with practice and close regard to its opportunities, there is no reason why in a year or two the Institute should not stand well to the fore in the coming favorite game of the college world. Harvard's team started under even less favorable circumstances than ours. There was very little interest taken by the students in the game. The team had to pay its own expenses, and they had no regular team with which to play, having to depend for practice upon their own men, while the Institute has had encouragement from the Union Lacrosse Club, both as regards coaching and practice, and could undoubtedly arrange for a series of practice games with them. Harvard, by its perseverance, now holds the intercollegiate championship, and, by their victory over the New York team last year, the Oehlrich cup. Moreover, the team this year has no lack of candidates, and finds ready support among the men. Why, then, need the Institute, with her more than average opportunities, fail to support a representative Lacrosse team?

Of the recent Oxford-Cambridge athletic sports at Lillie Bridge, Eng., an exchange says: "The programme contains nine games, two of which, the three-mile run and throwing the hammer, we cannot compare with the intercollegiate games. The other seven events, compared with the intercollegiate records since the formation of that organization in 1876, show the following results: in 1876 all the English records were better than ours; in 1877 the Englishmen excelled us in six events and tied us in one; in 1878, '79, and '80 they surpassed us in everything; in 1881 they held six records, and we held one; and in 1882 four of their records were better than ours, while three of ours were better than theirs. Of the best college records at these events they hold six and tie us for the seventh. Discouraging as these statistics appear at first sight, we must not forget that they are at least a dozen years ahead of us in athletic sports. Our standard is constantly improving, while the English standard remains about the same. None of the best American college records at these seven games date back further than 1879; two were made in 1882, three in 1881, one in 1880, and one in 1879, while the English college records are considerably older. One was made in 1865, one in 1871, two in 1874, one in 1876, one in 1879, and one in 1880. In view of these facts, it is evident that we are rapidly catching up with the Englishmen; and should the present interest in athletic sports continue for a few years, there is apparently no reason why we should not soon equal our transatlantic cousins. Thus it will be seen that we have every reason to feel encouraged to continue as we have begun."

The Harvard-Princeton Lacrosse game is to be played on Jarvis Field, May 12.

H. Fowler, of Princeton, has broken the best American college record in pole vaulting, having recently cleared 9 ft. 8 $\frac{3}{4}$ in.

Song of the Salvation Army: —

If you can't get in at the golden gate,
Get over the garden wall.

Ex.

Department Notes.

THE work in the mining laboratory has had a boom during the past week. There was much more work to be done than was realized, so that the fourth-year miners are obliged to spend most of their time there at the expense of their chemical work.

Mr. Gustin ran his iron ore about two weeks ago, and, although not as satisfactory as might have been wished, was much in advance of anything that has previously been done at the Institute in this line, as quite a large quantity of pig-iron was produced of good quality. The difficulty arose from the fact that the ore and the flux were not sufficiently mixed, causing the formation of a large "sow" of wrought iron, which choked up the bottom of the furnace.

The new electric machine and lights, lately presented to the Institute, form a very useful addition to the mining laboratory. Besides lighting the two laboratories for night work, it enables the students to try many electrolytical experiments that would otherwise be impossible.

Mr. Leonard has been experimenting upon an electrical method for the separation of tellurium from copper, where the former exists in very small quantities, but is, however, very detrimental to the copper.

The copper refining furnace has been torn to pieces, and a new bed put in, so that Mr. Stebbins may refine the matter obtained from his blast furnace run.

Mr. Tompkins has been finishing up some of the products of his zinc blend, viz., the amalgamation and chlorination of the gold and silver.

Mr. Tenney is trying experiments upon the separation of copper by electrolysis.

Mr. Hardon has just finished his work upon the gold ore.

It has become apparent that the National Exposition of Railroad Appliances will be largely attended by all classes of people. As the educating influence of the exposition cannot fail to be very great, all students interested in

railroading should take special pains to be present.

It is the intention of a corporation in New York, to whom has been granted all underground Broadway, to have a tunnel under the whole length of way through which a steam railroad shall pass.

Seven thousand laborers are now at work on the Panama Canal. The preparatory work is all finished, and the work of dredging, digging, and blasting has begun in earnest.

The highest bridge in the world is that of Garabut, France. Near the middle of the central arch the distance from the bed of the river to the rail is 413 feet.

The first street railway in the world was run in New Orleans in 1845.

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CROSS, CHARLES R. ('70). — Note on Complementary Colors. *Nature*, XXVII. (1882), 150.

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— Mt. Orford. *Id.*, III., 182.

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— Lines of Weakness in Cylinders. *Id.* I., 106. [Abstract.]

ROTCH, A. L. ('84). — Fast Trains in Europe and America. *Van Nostrand's Eng. Mag.*, May, 1883.

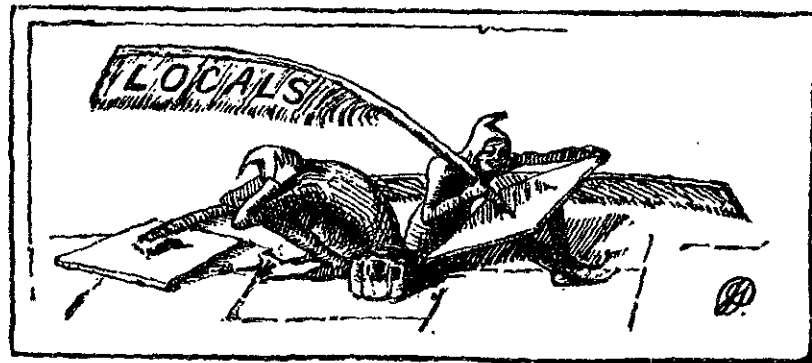
VOSE, GEORGE L. (Prof.) — Railway Accidents in 1882. *Science*, I. (1883), 167.

Book Notice.

Traité des Desinfectants et de la Desinfection, par E. Vallin. 8vo, pp. 797. Paris, 1883.

Through the kindness of Prof. Ordway we have been enabled to review this valuable addition to the literature of disinfection. It treats of its subject broadly, the author giving to the word *desinfection* a much wider meaning than it commonly receives, and the whole is written in the clear and interesting style characteristic of French scientific works. In the first portion of the book the various disinfectants and anti-septic agents are taken up, their relative value in general and special cases are considered, and several tables, containing the results of the experiments of Pasteur, Koch, and others upon the vitality of spores and germs, are discussed.

The second part treats of the practical application of the conclusions reached in the first, and is the most valuable portion of the work. In this part, methods for disinfecting and improving the sanitary condition of private houses, public buildings, hospitals, morgues, cemeteries, battle-fields, etc., are taken up in considerable detail, the descriptions being in many cases accompanied by drawings of apparatus. The scope of the treatise and the importance of the subject become especially apparent in part two, and recommend the volume to the attention of the general scientific reader as well as to the student of sanitary engineering.



THE *Herald* accuses the *Γ. Σ. Υ.* Society of affectation in the use of Greek letters in its name. We would remind the *Herald* that the founders of the society as well as a large percentage of its members are Greek scholars.

Did you go to the minstrels?

The senior architects had a group photograph taken by one of the students last week.

The Miners of '84 spent a very pleasant evening with Prof. and Mrs. R. H. Richards April 9.

Gold has been spending a few weeks in Maine, recuperating from a severe attack of the measles.

The civils are much gratified to learn that Mr. Swain has decided to retain, for some time at least, his position as instructor in civil engineering.

A bill sent to the Institute with some chemicals, recently, had the following on the bottom: "This is strong ammonia, if you want it weaker, add water."

Mr. Peter Schwamb, of the class of '78, has been appointed Instructor in Mechanical Engineering at the Institute. He will assume his duties at the beginning of the next term.

Mr. Foran, '83, has successfully completed an extensive boiler and engine test at the station of the N. E. Weston Electric Light Co., the results of which will form the subject of his graduation thesis.

By an unfortunate oversight, the name of Mr. Fry did not appear upon the list of those who responded to toasts at '85's class supper. We particularly regret the omission, as in both matter and delivery Mr. Fry's reply to "The Mechanicals" was one of the best efforts of the evening.

Persons travelling on the snow in the Alps need take no lunch for morning excursions; there is usually a crust to sustain them.

Some time since one of the third-year Civils was heard to ask the professor if the men should use the level in the profile work soon to be done.

Mr. Smith, manager of the M. I. T. Lacrosse Club, thinks he will be obliged to resign his position, not having so much time to give to the affairs of the club, as he, this term, is taking a number of studies outside of his special branch.

Besides the great attention Mr. C., '84, is giving to the study of hydraulic engineering, he is constantly at work on his valuable invention which is soon to be patented. With so much to do it is hard for him to get the requisite amount of sleep.

The Senior Ball Committee for '83 is as follows: F. L. Smith, '84; T. W. Robinson, '84; C. B. Appleton, '84; C. R. Richards, '85; Redington Fiske, '85; J. P. Harding, '85; Chas. Wood, '86; A. T. Chase, '86; and C. F. Richardson, '86. The date has been fixed for Friday evening, May 4.

After a long delay, the fourth-year Mechanicals were allowed to begin work in the machine shop. There is a general feeling that more time than it is possible to give during the last six weeks of the course could be profitably devoted to this branch of the shop instruction, which is of great practical importance to the mechanical engineer.

C. C. M. I. T.

THE annual prize drill of the Cadets will be held in the large hall of the Charitable Mechanics Building, on Saturday, May 12, at 2 P. M. Dancing will follow the drill. In addition to the customary individual prizes, given by the officers, there will probably be a company prize, given by the class of '85. A committee has been appointed, and is at work making arrangements. The large hall offers good facilities for drill and dancing, and a very pleasant time is anticipated.



COLUMBIA College is to-day in an interesting and critical position. It thinks the time has come when, instead of being merely a metropolitan college, it should be expanded into the ideal, long-talked-of American University. Columbia bases her claim to this pre-eminence upon the undoubted advantages offered by New York in the way of museums, libraries, courts, and factories; and her trustees modestly ask for four million dollars to enable them to carry out their plans. Should this amount be forthcoming, they will at once endeavor to raise the college to the rank of a European university, and to offer not only what is generally understood as a "liberal education," but also that profounder instruction in special directions which it is the object of the true university to afford. It may be doubted, however, whether their efforts would be entirely successful, even if the money were at hand. The student who goes abroad for an education has in a sense all Europe for a teacher, and is developed quite as much by his surroundings as by his instruction in some special line. At best, Columbia would merely become a rival of the Johns Hopkins, which is the nearest approach to a European university that we are likely to have in America for some time to come.

The Harvard Athletic Committee will probably succeed in having Holmes Field transformed into athletic grounds worthy of the college. The plans of the committee provide for a quarter-mile track, foot and base ball grounds, and a grand stand, with dressing-rooms, baths, etc., and seating 1,500 persons. The total expense of the alterations will be between fifteen and sixteen thousand dollars. The college has advanced three thousand dollars, the students to find the remainder.

The Memorial Hall trouble has come up again, and much dissatisfaction has been expressed with the management. The difficulty has received a partial solution by the election of a new steward.

The number of colleges about to erect new laboratories is quite large. Harvard breaks the ground for a new physical laboratory very soon. Yale is to have a fine new chemical laboratory; as are also Lehigh and Johns Hopkins Universities. Work on the new building for the Institute laboratories is going forward rapidly.

We cannot do better than refer those students who wish a concise and trustworthy epitome of college news to the Harvard *Crimson*. More can often be learned from it than from many of the papers coming directly from the colleges concerned.

We have noticed a curious fact in connection with the Dartmouth. We tried the big electromagnet, which is warranted to lift two hundred and fifty pounds on it, the other day, but the magnet could n't raise it even an inch from the floor; and yet that poor postman only gets about seven hundred dollars a year.

The exchange editor of the *Acta Columbiana* very cleverly, but hardly, we think, conclusively, endeavors to show the falsity of the position which THE TECH, the *Crimson*, and many other papers have taken with reference to what has been the prevailing style of the *Acta's* literary matter.

The last number of the *Vassar Miscellany* discusses the "Transional Man."

The Yale *Record* predicts a "boom" of enthusiasm for athletics in the college.

The Bowdoin nine will make a trip through Massachusetts about the first of May.

The Columbia Spectator Publishing Company has declared a dividend of ten per cent.

The annual publications, the "Columbiad" and "Miner," have appeared at Columbia.

The resignation of Dr. McCosh, as president of Princeton College, goes into effect at the end of this academic year.



A SENIOR (reciting psychology outside):
"The nullification of the apparent dualism of things can be prognosticated by the sentient susceptibilities appertaining to the convergent lines of evident damfoolishness." — *Orient*.

The trustees of Cornell University have authorized the establishment of a course in electrical engineering, and are to open new physical and chemical laboratories in September. — *'Varsity*.

Dr. Sargeant says a man is shorter at night than in the morning. This is hardly an axiom, as it depends entirely upon who treats. — *Lehigh Burr*.

THE WAIL OF THE JUNIORS.

The substance and material
Of planets, stars, ethereal,
Rotations, too sidereal,
Perplex the wearied mind.
Refractions, eccentricity,
The colors, ellipticity,
Are not with great simplicity
Nor perfect ease defined.

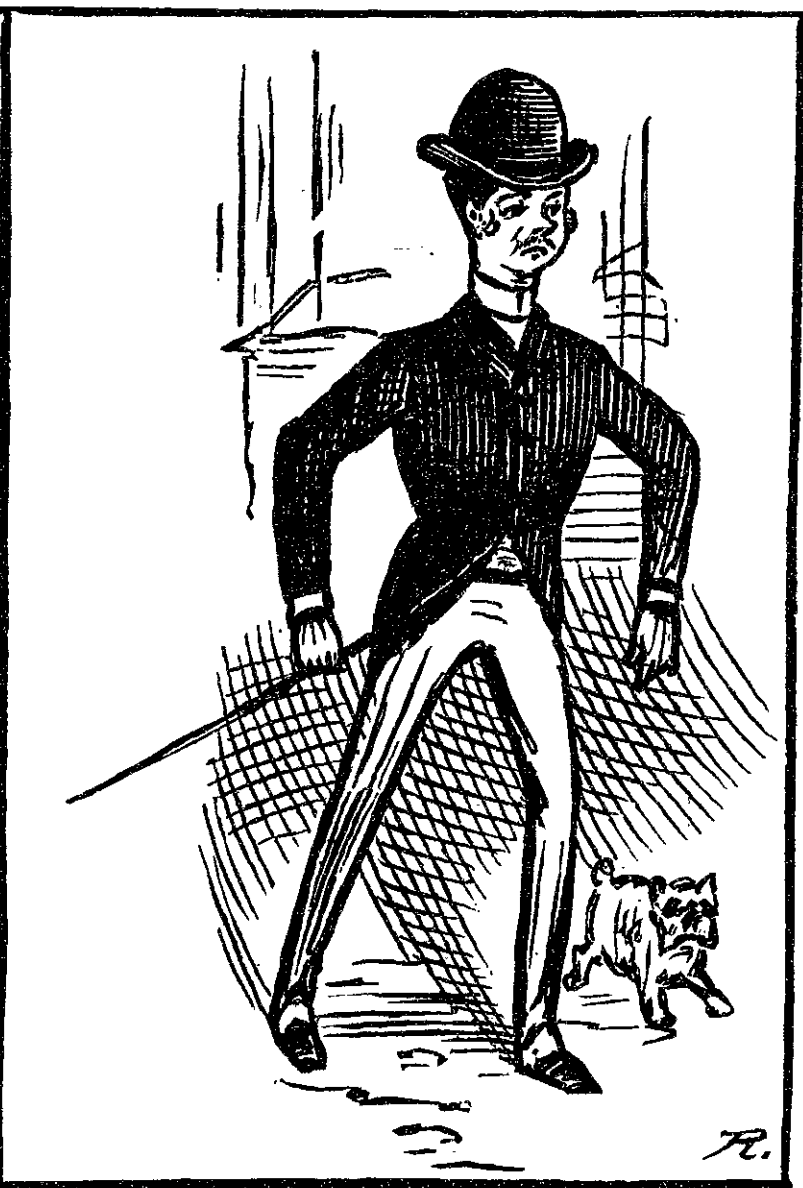
The study of hygrometers,
Of tangent galvanometers,
Quadrantal electrometers,
Poles, magnets, Leyden jars,
Potential electroscopes,
Voltaic piles and spectroscopes,
Conductors, rheometrosopes,
The Junior's pleasure mars.

His life is rendered hideous;
He thinks the world perfidious;
Thoughts gloomy, dark, insidious,
Course through his maddened brain.
A rash and wild proclivity,
The day of his nativity,
To curse and burst captivity,
He scarcely can restrain.

Yale Record.



THE CAUSE.



THE EFFECT.

Five of the Harvard nine are on the sick list.
There is one great composer left — morphine.
— *Ex.*

Knickerbockers are becoming quite common
at Yale.

Cupidity. — Marrying for love and money
both. — *Ex.*

Yale proposes to enter a tug-of-war team at
the Intercollegiate Games.

"Love," says an exchange, "is thinking that
you and your girl can be an eternal picnic to
each other."

The University crew of this year will be the
strongest crew we have ever put upon the
water. — *Columbia Spectator.*

When a young lady says "Dude drop in," the
youth addressed wishes she was more particular
about her accent. — *Com. Bulletin.*

In the past eleven years Yale has graduated
nine hundred and forty-five free-traders and
three hundred and forty-one protectionists. —
Argonaut.

SYMPATHY. — Professor Dignitatis (meeting
Toddlekins somewhat full), — "Mr. Toddle-
kins, is it possible, sir? This really makes my
heart ache."

Toddlekins (compassionately), — "'Shat so,
P'fessor? 'Pon m' soul, sir, 'fraid that's very
bad sign. Only makesch my head ache. Try
Poll'narish, sir." — *Chaff.*

Mr. Van S. reciting. Prof., — "No, Mr. V.,
you don't understand me. I want an example
of a perfect gas." Mr. V., — "Well, Professor,
that's what I am giving you." The same gen-
tleman said Boyle's law was the law of boiling.
— *Targum.*

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Little Jack Horner sat in the corner
Eating concentrated lye;
His mother came in, — he had emptied
the tin, —
They will meet in the sweet by-
and-by.

— *Ex.*

The average age at which students enter American colleges is seventeen; a century ago it was fourteen. — *Ex.*

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A girl worked the motto, "I need thee every hour," and presented it to him. He says he can't help it: it takes him two hours to milk the cows and feed the pigs; and business must be attended to. —

Ex.

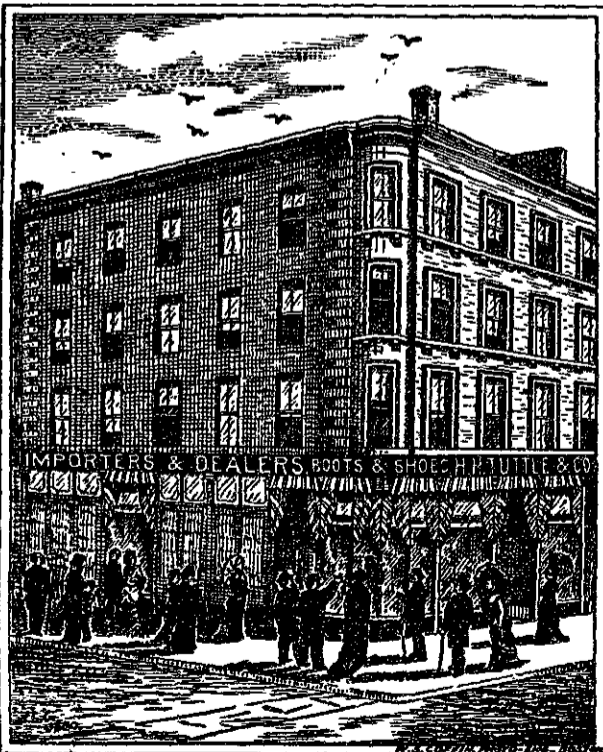
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Besides the above distinctly professional courses, the Institute offers scientific courses of a less technical character, designed to give students a preparation for business callings through the medium of a scientific training.

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

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

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

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

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

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

Surveying instruments are provided for field work in civil and topographical engineering. Shops fitted up for the use of both hand and machine tools and a laboratory of steam engineering have been established as a part of the instruction in mechanical engineering. The department of mining engineering and metallurgy has the use of laboratories in which the milling and smelting of lead, copper, silver, and other ores, in economic quantities, are regularly performed by the students themselves. The classes in architecture supplement the work of the drawing and designing rooms by the examination of structures completed or in course of erection, and by practical experiment in the laboratory of applied mechanics, testing the strength of materials and working out problems in construction. Extensive laboratories are provided for students in chemistry and in natural history, as well as laboratories in physics and applied mechanics, for the use alike of special students in these departments and of the students of the several regular courses.

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