



# OPPI.

Vol. VI.

Monday, December 15, 1890.

No. 7.

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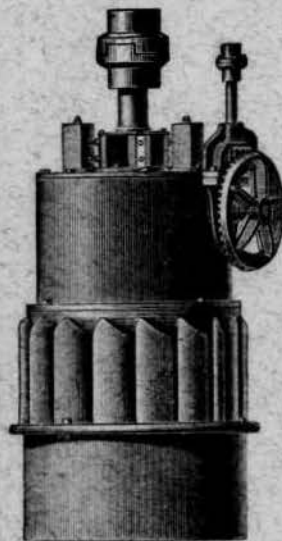
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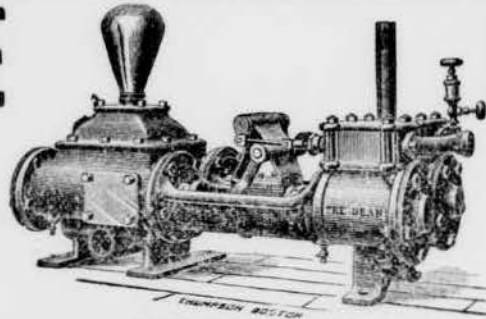
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# THE W P I

Vol. VI.

WORCESTER, DECEMBER 15, 1890.

No. 7.

## THE W P I.

Published on the 15th of each Month, during the School Year, and devoted to the interests of the Worcester Polytechnic Institute.

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CHAS. HAMILTON, PRINTER, 311 MAIN ST., WORCESTER, MASS.

Readers of the W P I will doubtless find many occasions for keen regret that Mr. O'Regan has deemed it necessary to withdraw from the chief-editorship of this paper, before his appointed time. Such as it is, the W P I has come to be regarded as a necessary fixture of the school, and it is only fair to say that if communications and newspaper comments are a criterion, Mr. O'Regan has a right to retire well satisfied with his productions. The management of a college paper is a somewhat thankless task,—sometimes even an expensive luxury for the editors, depending more or less on the intrinsic energy of the business manager and the good faith of the subscribers. Hence it is hardly to be wondered at, if an editor find the burden more than he cares longer to support.

The selection of the present management is rather a necessity of the situation,

than a happy issue out of the difficulty. The indulgence of our readers is therefore asked for a season, until the completion of this volume, four months hence, places the paper in worthier hands.

The Seniors, as a rule, have been showing a disposition to get their thesis work well in hand that is highly commendable. It has been an almost universal rule that the last weeks of the year have been crowded with an amount of work all out of proportion to the time left in which to accomplish it. The result has been that the men have been caught in an undignified scramble, trying to square up accounts before the term should close. This year the regular drawing plates, in nearly every case, were finished before Thanksgiving, and the thesis work is well under way. With such an excellent start, there is no reason why the Senior class, unfortunate as it has undoubtedly been throughout its course, should not look upon the fast approaching end with a measure of equanimity.

On the other hand there are rumors of divers conditions, contracted by these same Seniors at sundry times during the course, that are still uncanceled. Some of the men, too, who have assumed the conditions, seem to view them with little concern,—much less, in fact, than their friends do for them.

There was probably never a time in the history of the school when class feeling was so utterly wanting. A man may perhaps be pardoned a lack of spirit in a school where demonstrations of any kind are rigorously squelched, but when a man reaches his Senior year, he ought to muster up enough pride in his class to prevent, if possible, any further break in its ranks. If his class is not thought worthy of his effort, he is still under obligations to himself, if he has an iota of personal pride, to cancel his debts to the school as soon as possible. There is some hope for a man who is not himself indifferent to his success, but a man who neither cares personally nor considers what his friends think of his conduct, has no right to claim the sympathies of his fellows when misfortune comes.

It is fair to suppose that a man who enters school for the Senior year, does so with the intention of graduating. In that case, even if a man has lost all personal pride in the matter, a grain of common sense ought to teach him the utter folly of adding an extra burden, in the way of Junior and Middler requirements, to the work of the final term. We are free to admit (with a possible lack of diplomacy,) that it is only a sense of our own frailty and insecurity, that prevents us from speaking with more vigor on this point.

“About this time of the year,”—as the weather fiend would say, readers of college papers must expect to be fed another sort of diet from that which is possible in the spring or early fall. It is “in the spring that the young editor’s fancy lightly turns,” etc. After a season of

coldest winter, accompanied by a bare, cheerless room and an iceberg for a bed-fellow, the college editor thaws himself out in the sunshine and begins scratching round for news.

It is very easy to pull out a “newsy” paper in the spring. Everyone feeling fresh and chummy like, all the athletes running about in the condition of the above mentioned room, even the instructors greeting one with a smile, just as if they wanted one to believe that a man might be a professor and enjoy life at the same time, then is the witching hour for the editor-in-chief to do himself exceeding proud. The other editors, too, catch the fever—copy rolls in by the ream, and the manager of the paper has actually to chain his associates to the floor.

Then comes the long vacation. Mr. Editor returns to school chuck full of ideas,—yachting trips, summer hotels, summer girls; all help to add, for a season, a little poetry to the big doses of mathematics, German, and physics, from Ganot and other sources not less nauseating, that are sure to follow. A new class enters the school, foot-ball cripples help to swell the news columns, and ye editor destroys another ton or more of unavailable copy.

But this sort of thing is too good to live. It dies young. After the foot-ball men have all been killed, school work piled up so high that one cannot recognize the professors on top, then it is that the editor gets down in the mouth, so to speak (a little *over* the mouth, too, because he hasn’t time to shave). In place of bread he gets a stone; a bare galley of stale clippings in place of

original copy. By December, he wants to do as did the man who tried cod fishing from an anchored boat in a rolling sea, throw up his job, but generally he doesn't. He more commonly draws on his imagination, tells a few lies, perhaps, that will entice contradictory communications for the next issue, or else invents some such absurdity as this, which may be inflated to an unlimited extent. The editor cannot *make* the news; he merely prints it, and he can scarcely be expected to publish news that doesn't exist. Hence our readers are warned that, during these winter months, they will undoubtedly run up against sundry articles that do not owe their existence to their value as news items. Which one of four courses shall we follow, Mr. Subscriber? Shall we print more clippings, invent news, reduce the size of the paper, or ask the Faculty to contribute? We know *now* which one of these four courses you do *not* want; the choice of the other three remains with you.

---

The Boynton Hall Library room is not a very inviting place; yet it has become a general assembly room for students who have come up a little before recitation hours, and a study room for those who bring their dinners or come into the city on early trains. Its intended use for reading purposes is almost entirely forgotten. And why? Simply because there is next to nothing there to read. Anyone who wishes to consult a book will take it to his room. But there ought to be some of the leading papers and magazines for the use of students. We believe that the entire equipment of the

reading-room in this line consists of four scientific papers and the *Nationalist*; these are all well used, especially the *Scientific American*.

Students in a practical institution of this kind ought to be posted on what is going on in the world *now*, but not much information can be gained by a perusal of the July 31 issue of the "Paxton Paste-Pot," a sample copy of which the publishers may have kindly forwarded for our inspection. Such occasional wanderers to the reading room are at present carefully piled up on the first table. Would it not be of great benefit to every student if the library were supplied with the Worcester daily papers and one or two *other* leading journals, as, for instance the *Boston Herald* and the *New York Tribune*? And, if the money could be derived from some source, would it not pay to have *Public Opinion*, *Harper's Weekly*, *Frank Leslie's*, or any other of the numerous publications which enable a Nineteenth Century person to keep up with the times? We do not presume to name the particular papers it would be advisable to take, but merely suggest these to make clear our point. Probably every student will agree with us on this subject. A very good time from which to date subscriptions would be Jan. 1, 1891.

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A complete account of the determination of chromium in chrome-iron which was made by Dr. Kinnicutt and G. W. Patterson, '88, has been published in the last number of the *Zeitschrift für Analytische Chemie*, a German chemical journal, published at Wiesbaden.

## COURSES OF READING.

It has occurred to me that it would not be amiss for the W P I to publish in its columns a classified list of standard books, the most of which ought to be read either wholly or in part by every intelligent young man before he is thirty years of age. As regards some of these there may be room for difference of opinion,—a few might give place to better ones that escape the memory at this writing,—but to most the assent of competent judges would be quite unanimous. It may be added that in the department of history there is the greatest difficulty of selection, partly because of the numerous volumes that have been written, and partly, because, as in the case of our own country, none of the treatises, excepting the mere abridgments intended for textbooks, satisfactorily cover the whole period of national life.

As a rule it is wise to read a brief outline of history first and then follow with the more circumstantial account, and sometimes there should be even more gradual approach to the works of voluminous authors, especially those who write minutely of periods, or epochs. For example, in pursuing the study of English history, begin with Dickens' Child's History, or Thompson's in Freeman's course; read next, Green's Short History of the English People, then Knight, and later, Hume, Macaulay, Froude and Hallam, if time and interest permit.

In some cases the volumes are suggested because they have special interest and value for those who are inclined to engineering or other scientific pursuits. Such are Smiles' Life of George Stephenson, the earliest locomotive engineer, Parton's Life of Benjamin Franklin, and the Life of Ericsson. The following are some of the best books in the department of

## HISTORY :

The Bible.  
Fisher's Universal History.

[Josephus' History of the Jews.]  
Milman's History of the Jews.  
[Rollin's Ancient History.]  
[Philip Smith's History of the World.]  
Myers' Eastern Nations.  
[Wilkinson's Ancient Egyptians.]  
Layard's Discoveries in Nineveh and Babylon.  
Mahaffy's Greek Life and Thought.  
[Grote's or Curtius' History of Greece.]  
Leighton's History of Rome.  
[Mommsen's, Merivale's Histories of Rome.]  
Hodgkins' Italy and her Invaders.  
Cox and Sankey's Epochs of Ancient History.  
[Sismond's History of the Italian Republics.]  
Taylor's, Lewis' and Müller's Histories of Germany.  
Guizot's Popular History of France.  
Green's Short History of the English People.  
Knight's History of England.  
[Turner's History of England and the Anglo-Saxons.]  
[Hume's and Macaulay's Histories of England.]  
[Froude's History of Queen Elizabeth and her times.]  
Morris' Epochs of Modern History.  
Motley's Dutch Republic, and United Netherlands.  
Prescott's Conquest of Mexico, and of Peru.  
Johnston's History of the U. S.  
Bancroft's History of the United States, — to 1789.  
McMasters' History of the United States, 1789 to the Civil War. (Not yet completed.)  
American Commonwealth Series.

## BIOGRAPHY.

Irving's Life of Washington.  
Irving's Life of Columbus.  
[Abbott's, J. S. C., Life of Napoleon.]  
[Scott's, W., Life of Napoleon.]  
Smiles' Life of George Stephenson.  
Parton's Life of Benjamin Franklin.  
[Irving's Ferdinand and Isabella.]  
[Hugh Miller's Schools and Schoolmasters.]  
Dixon's John Howard and the Prison World of Europe.  
Lewes' Story of Gæthe's Life.



Smiles' Self-help.  
 Smiles' Lives of the Engineers.  
 Carlyle's Life of Cromwell.  
 Alger's, or Boutwell's Life of A. Lincoln.  
 American Statesman Series.  
 Church's Life of John Ericsson.  
 Bolton's, Mrs. S. K., Poor Boys who became Famous.

## TRAVELS.

Bayard Taylor's Cyclopædia of Travel.  
 [Schoolcraft's Indians and Indian Tribes.]  
 Nordhoff's California.  
 Sir John Franklin's Discoveries.  
 Kane's Arctic Explorations.  
 Irving's Astoria.  
 Thoreau's Maine Woods.  
 Stephens' Central America.  
 Fletcher's Brazil and the Brazilians.  
 Bayard Taylor's Views Afoot, and Northern Europe.  
 Andersen's Pictures of Travels in Sweden.  
 Du Chaillu's Land of the Midnight Sun.  
 Pfeiffer's Iceland.  
 Tyndall's Hours of Exercise in the Alps.  
 Hilliard's Six Months in Italy.  
 Howell's Venetian Life.  
 Livingstone's Travels in Africa.  
 Stanley's Across the Dark Continent and In Darkest Africa.

## FICTION.

Cooper's Spy, and The Last of the Mohicans.  
 Mrs. Stowe's Uncle Tom's Cabin.  
 Hawthorne's House of the Seven Gables, and The Scarlet Letter.  
 Holmes' Autocrat of the Breakfast Table, Professor at the Breakfast Table and Over the Tea-cups.  
 Ramona, by Helen Hunt.  
 Ben-Hur, by Gen. Lew. Wallace.  
 Irving's Knickerbocker's History of New York.  
 Jane Eyre, by C. Brontë.  
 Adam Bede, by Geo. Eliot.  
 Chas. Kingsley's Hypatia and Westward Ho.  
 John Halifax, by Mrs. Craik.  
 Victor Hugo's Les Miserables.  
 Goldsmith's Vicar of Wakefield.  
 Scott's Ivanhoe, Kenilworth and Woodstock.  
 Dickens' David Copperfield, Oliver Twist, and Christmas Carols.  
 Thackeray's Henry Esmond and Vanity Fair.

Tom Brown's School Days at Rugby.  
 Eber's Ouida.  
 Ruffini's Doctor Antonio.  
 Howell's Rise of Silas Lapham.  
 Bulwer-Lytton's Last Days of Pompeii.

## POETRY AND MISCELLANEOUS.

Poems of Shakespere, Milton, Wordsworth, Moore, Coleridge, Tennyson, Mrs. Browning, Bryant, Longfellow, Whittier and Lowell.  
 Bunyan's Pilgrim's Progress.  
 Addison's Spectator.  
 Charles Lamb's Essays of Elia.  
 [De Quincey's Essays.]  
 Dr. J. G. Holland's Letters to Young People.  
 Ike Marvel's Reveries of a Bachelor.  
 Blackie's Self-Culture.  
 John Brown's Spare Hours.  
 P. G. Hamerton's Intellectual Life.  
 Samuels' Birds of New England.  
 Packard's Our Common Insects.  
 Young's Elements of Astronomy.

In the above list, brackets enclose those books which would hardly be read thoroughly, but which are valuable for reference. The list does not embrace works which would naturally be suggested by the professors of the Institute in their different departments. It might not be amiss to insert in the W P I lists of such books, which I am sure the members of the Faculty would be glad to furnish on application. Such lists would be helpful to both students and graduates. From time to time new books are published which entirely supersede old ones, and every year or two, at least, a supplementary list should be made.

I desire to acknowledge my indebtedness to Dr. Smith, and Prof. Cutler, for very helpful suggestions in the revision of the above lists.

HOMER T. FULLER.

## BOOKS OF REFERENCE IN POLITICAL ECONOMY.

## GENERAL TREATISES.

Adam Smith. Wealth of Nations.  
 David Ricardo. Principles of Political \*Economy and Taxation.  
 John Stuart Mill. Principles of Political Economy.

J. E. Cairnes.

(a) The Character and Logical Method of Political Economy.

(b) Some Leading Principles of Political Economy Newly Expounded.

Wilhelm Roscher. Principles of Political Economy.

Marshall. Economics of Industry.

Ely. Introduction to Political Economy.

H. C. Carey. Principles of Social Science.

John K. Ingram. History of Political Economy.

Lalor's Cyclopædia of Political Science.

Arnold Toynbee. Industrial Revolution.

J. B. Clark. Philosophy of Wealth.

Helen Campbell. Prisoners of Poverty.

Hodder. Life and Work of the Seventh Earl of Shaftesbury.

Hubley. Railroad Transportation: Its History and its Laws.

Adams, C. F. Railroads: Their Origin and Problems.

Wells. Recent Economic Movements.

Walker. Wages.

Howell. Conflicts of Capital and Labor.

#### *Periodicals.*

Political Science Quarterly.

Quarterly Journal of Economics.

American Economic Association's publications.

Bradstreet's Reports.

Annals of American Academy of Political Science.

#### SPECIAL TREATISES.

##### *Money.*

Stanley Jevons. Money and the Mechanism of Exchange.

F. A. Walker.

(a) Money.

(b) Money, Trade and Industry.

Laughlin. History of Bimetallism in the United States.

Overstone. Tracts on Metallic and Paper Currency.

Nicholson. Money and Money Problems.

##### *Banks and Banking.*

John Jay Knox. Report as Comptroller of the Treasury of the United States; Finance Reports for 1875-76.

J. S. Gilbert. History, Principles and Practice of Banking.

Bagehot. Lombard Street.

J. T. Morse. Banks and Banking.

Bonamy Price. Currency and Banking.

##### *Rent.*

Henry George.

(a) Progress and Poverty.

(b) Social Problems.

Walker. Land and its Rent.

J. B. Clark. Capital and its Earnings.

Ricardo. Principles of Political Economy and Taxation.

S. W. Patten. Premises of Political Economy.

H. E. Carey. Principles of Political Economy.

##### *Tariff.*

R. E. Thompson. Protection to Home Industry.

F. W. Taussig. Tariff History in the United States.

Henry George. Protection and Free Trade.

W. G. Sumner. Protection in the United States.

Fawcett. Free Trade and Protection.

Bastiat. Sophisms of Protection.

Byles. Sophisms of Free Trade.

List. National System of Political Economy.

Taussig. Protection to Young Industries.

##### *Socialism.*

Bellamy. Looking Backward.

R. T. Ely. French and German Socialism.

Kirkup. Inquiry into Socialism.

Rae. Contemporary Socialism.

Laveleye. Socialism of To-day.

Gronlund. Coöperative Commonwealth.

Marx. Capital.

##### *Anarchism.*

Proudhon. What is Property.

Prince Krapotkine. Articles in the *Nineteenth Century*, February and August, 1887, April and October, 1888.

Article on "Socialism" in *Encyclopædia Britannica*.

H. C. Adams. (*Forum*, September, 1886.) "Shall We Muzzle the Anarchist."

[The above list of books is published apart from the one in the article preceding, because the books recommended would be sought in connection with the study of political science, rather than for general reading. The editors of the W P I are gratified at the response which has met the suggestion published in our last issue, and are correspondingly indebted to the members of the Faculty who assisted in compiling the article. Ed.]

### IN BEHALF OF JOHN HURLEY.

EDITOR OF THE W P I:

It is seldom that a laboring man serves so long and so faithfully in one place and in one capacity as John Hurley has served at this Institute.

Twenty-three years ago the Institute opened its doors to students for the first time, and John, then a middle-aged man, began his duties here as janitor. No student has ever graduated who will not remember John Hurley as a true friend of the boys and as a man who gained the respect of everyone. Whatever pertains to John Hurley's welfare is of interest to W. P. I. alumni and undergraduates.

In his capacity as janitor he served to the best of his ability until about a year ago, when his labors, by order of those in authority, were confined to the shop, and a new man was given the care of the buildings. This was all very well and caused no complaint or comment. John was now a man well advanced in life and could doubtless accomplish more at the bench or as a helper in the shop, than he could where he was required to climb three flights of stairs several times a day, and do a thousand-and-one small jobs where a younger man could work to better advantage.

In his new position he is laboring as faithfully as ever, and is considered by the machinists as a good helper.

Until a few months ago John had received forty dollars a month or about a dollar and a half per day, and it has never been denied that he earned all that he was paid. In fact, it is very probable that he has earned considerably more than he ever received. Two months ago he was informed that thereafter he was to receive but a dollar and a quarter per day for the same service.

John is not a man of means. He has a family to support and should receive what

he deserves, and most especially at the hands of those whom he has served for so many years. I do not advocate charity in connection with the subject of wages. Having been at this school for so long a time, John is no doubt worth more here than he would be with any other concern, and his advanced years would seriously stand in the way of his obtaining a more remunerative position elsewhere. To take advantage of these facts does not seem quite in harmony with the highest ideas of justice and human kindness. The sentiment at the school is that John has been done an injustice. Perhaps I am entirely in the wrong, and if I were asked what I know about the management of a shop, I would be obliged to throw up the sponge without a word. I do know, however, that John appears to deserve more kindly consideration than he receives at present, and it is simply with the end in view of expressing this opinion, that I have written you.

JUSTICE.

### THE WASHINGTON BRANCH OF THE ALUMNI ASSOCIATION.

Report of the Last Semi-Annual Meeting of the "Branch."

Some time between Saturday and Sunday, Nov. 29-30, the old Tech yell roused the sleepy policeman on the Pennsylvania Ave. beat, near Thirteenth St., Washington, D. C. The policeman was at the other end of his beat at the time and only the echoes reached him. The yell proceeded from nine trained throats, and though long intervals had elapsed since last they had compassed that yell, the excellent training offset the deficient practice, and none of the pristine snap and strength was lacking.

Some of the energy of the cheer had been imbibed and assimilated around a banquet-table in a private dining-room in Hotel Johnson, where the transformers of that energy had gathered to celebrate and enjoy the second semi-annual meeting of the

Branch Association, which calls the Tech Alumni Association father. The first meeting was held last May, and it was then voted to meet semi-annually, and, by bringing together all in this vicinity whose attendance at the annual meeting in Worcester is uncertain, to co-operate with the main Association, as far as possible, in whatever it should undertake. The promoting and keeping alive fraternal relations among the alumni in and near the Capital is no less an object of this Association.

The members sat down together at nine o'clock, Saturday evening, with President H. W. Carter, '86, at the head of the table. The delicacies embraced in a modest menu were floated to their destination and amid the fragrance of bouquets and azure wreaths, impromptu toasts, suggested by the President, were responded to. Songs—solos, duets, and choruses, both straight and mixed, were rendered. The Profs. were all located—and sympathy was expressed for them—"Way down," &c.

It was voted that any ex-student of the Tech, not an alumnus, could upon application become an honorary member of the "Branch." The following were present,—H. W. Carter, '86, President; I. L. Fish, J. F. MacNab, E. H. Fairbanks and J. A. Chamberlain, Sec'y and Treas'r, all of '87; P. W. Southgate, '89, Vice President; A. I. Gardner, '89; C. H. Faulkner, '90, and W. N. Weston, formerly of '87. H. V. Baldwin, '89, and H. P. Wires, '90, were unable to be present and sent their regrets. The next meeting will probably be held next May.

### CAP AND GOWN.

"Crank" would like to hear Ninety-One's opinion of the Latest Craze.

TO THE EDITOR OF THE W P I:—

Curiosity has led me to request a little space in your paper in which to ask for the sense of the class of '91 on a matter that

would no doubt cause simply a laugh were it broached at a class meeting. At any rate, I haven't the nerve to spring anything of the kind on them without sending out a "feeler," for fear that it might be taken for a huge joke. It is on the question of adopting the cap and gown for a graduation costume.

The idea was suggested by the notice given in the last W P I of Harvard's favorable action on this question, and since then I have noticed that controversies have taken place in many colleges on the same subject.

An account of one of the most spirited contests comes from the Woman's Medical College in Philadelphia, where for weeks the all-absorbing topic has been this university costume. Every available argument, for and against it, was presented. Photographs of pretty girls dressed in the "rig" were met half way by those of spinsters whose lack of pristine charms were not to be offset by the cap and gown. At the final discussion, the opposition had nearly quashed the movement by declaring the costume "too mannish," besides belonging exclusively to universities, when the tide was turned by the appearance of two of the prettiest girls in the college, capped and gowned, and making a picture well calculated to convert their unbelieving classmates. On taking a vote it was found that caps and gowns had won the day.

Now, our own class of '91 is pretty enterprising, and it would be interesting to know how they would take to caps and gowns. Of course, to rush in some good looking fellow arrayed in this manner would not have the effect it did in the above mentioned case, but the thought of what the effect would be on the commencement exercises might influence some of them to favor it.

It would at least distinguish '91 a little from other classes and from the '91's of other institutions that would be graduated at about the same time. It would at the same

time lend novelty and dignity to the exercises and would help stimulate public interest in the class and in the school.

If the class should think favorably of the idea, the most striking graduation that ever took place in Worcester will be that of the class of '91 of the W. P. I.

CRANK.

### THE SHOP.

On glancing into the shop, one can scarcely believe it is a school or part of a school, so busy and business like is everything. And well it may be busy, judging from the way the orders are being filled. On every kind of work the rush is the same. The drill grinders, of all kinds and sizes, are in increasing demand; a large order has just been shipped to New York, and every day machines are sent to, and orders received from, the Norton Emery Wheel Company.

A cablegram was received some days since from Mr. Phillips, the London agent, for twelve grinders, and two large orders were filled for firms in that country only a short time since.

The drawing stands are also in good demand. A shipment of thirty-six was made the first of the month to the Peabody Normal College, Nashville, Tenn. At the present time a lot of forty-five is in the works for the public schools of Los Angeles, Cal. Beside these, six microscope stands for a firm in New York are being built.

In the elevator department there is the same rush. Three for the city of Providence are now almost completed. The shafts for two of these, one in the Merchants' Bank Building and the other for the Masonic Hall, are being drilled through solid rock.

Orders for elevators for Waterbury, Conn., and Woonsocket, R. I., have been taken.

A three-ton hydraulic crane and two grasshopper cranes were ordered not long since.

The testing machine in the Mechanical Engineering Room at the Laboratory is to have an addition in the shape of a recording apparatus. This is under construction in the shop.

In the wood room, beside the regular elevator and drawing-stand work, one of the oak roller-top desks that the present Juniors left incomplete, is being finished, and is to be sent to the Y. W. C. A. rooms.

A short time since Mr. Newcomb, Superintendent of the Deane Steam Pump Company, of Holyoke, was going through the shop. It so happened that the boiler was being filled when he entered the boiler room. He watched the old pump a moment, then passed on. A few days later a new pump arrived, which, after some delay, was set up. The stone upon which the pump rests was a gift of Blanchard, '93.

The shop has been the recipient of another gift during the last month—a lot of wrenches from the Coes' Wrench Company.

Mr. Badger and Mr. Staples have both been out on account of sickness, but are now back again.

### WHO IS RESPONSIBLE?

In a very loud voice we proclaim that the Middlers, who have hitherto been somewhat averse to expressing themselves for publication, are with us at last. A written communication would, of course, be too precious for a beginning, and realizing this, one of the Middlers recently confided to a W P I editor a grievance from which his classmates, and, in fact, many members of the other classes, are suffering.

It arises from the trouble found in obtaining entrance to the Mechanical Library during certain hours of the day, and these hours are the ones when most of the students are at leisure.

From the time of the first exercise in the morning until half-past four in the afternoon, very few find a spare hour in which

to look over mechanical journals or books of reference with which to supplement their school work. Thus it is evident that the hour following the afternoon recitations should, above all others, be the "open hour" for this library. But those who hold keys to this room seem to think differently, for day after day students who have made their way thither have found the door locked against them.

As an explanation it is stated that the assistants in the mechanical department keep their drawing boards in this room, and as a safeguard against any injury that might be done the drawings, they take precaution to lock the door every evening when they are ready to leave.

This may or may not be the reason for keeping students out during this hour, and, in fact, it matters but little, for it is hard to conceive of any good reason for maintaining a library which is closed during its only hour of usefulness to a majority of the students. If the library is for the students, it should be governed by such rules as would place it at their disposal when they can use it.

#### AN UNFOUNDED RUMOR.

EDITOR OF THE W P I:

I would like room in your paper, to express my opinion of a man who wantonly starts a rumor that will inevitably be repeated and enlarged to the serious injury of its victim. I can easily see how, in a school like ours, a groundless rumor may develop into a dangerous article in a short time. If such a report were only considered a moment, before being repeated, no one who has any consideration for his fellows would allow it to go beyond him. But such is seldom done. Probably the man who starts the story, does it with precisely the same sense of humor as that which induces a man to cry "fire" in a crowded hall—except that the former's heartlessness

has not reached the state of perfection that belongs to the fire fiend.

During the evening of the recent Harvard-Yale game, there was, of course, something of a jollification at the Union Depot in this city when the western train came in, carrying the admirers of the victorious college. After the manner of college men in general, and perhaps Harvard men in particular, the victory was celebrated in right royal fashion, and when the train reached Worcester, many of the boys had acquired a state of harmless idiocy. In this condition they seem to have afforded amusement to certain individuals—some of them among our own students,—who crowded the depot.

On the following morning, a member of this school was surprised to learn that he had returned from Springfield the night before "drunk as a lord," and had been assisted home by two of his friends. All that day he was met with repetitions of the same story, and everyone seemed to believe it, much to his chagrin. Now it is a fact that the victim of the rumor was not in Springfield that day, nor was he at the Station, even, and in any case is not in the habit of calling on his friends to protect him from the police.

The rumor was traced to its foundation, and was found to have been built upon an impression in the mind of its starter, that he saw a man being "unloaded" from a car, and although too far away to see distinctly, thought he recognized a school-fellow.

This was deemed a sufficient excuse to make the man the subject of a "good joke," and a vicious story, totally false, was the result. If the joke was at all funny, I am free to confess that the point of it has not yet penetrated my skull.

JUNIOR.

No flag yet, though a subscription paper is in existence on which is pledged enough to purchase a good one.

## NINETY-THREE'S FOREIGN DELEGATION.

**The Juniors' Wants Satisfied—They Have the Earth.**

In looking up the mother countries of the members of the class of '93, one finds the globe pretty well represented. Counting Pixley, who was born in the region of Zululand, the Junior class contains natives of North America, South America, Europe, Asia and Africa. However, we believe Pixley is eligible to the office of President of the United States, as his parents were missionaries from America. The readers of the W P I may be interested to know something of the gentlemen who have come from such distant lands to obtain their education at the Worcester Tech.

Howard A. Coombs is an Englishman, who was born in Switzerland. Thus he is an accident similar to '93's African. His parents resided a few years among the Alps, and then returned to England. Coombs' father is a retired Congregational minister, who is very fond of travel, and the two, several years since, made a trip across America to the Pacific; so that this is Coombs' second visit to the United States. He would prefer to return to England after graduating at the Tech, but may possibly stay here, where the opportunities for mechanical engineers are much better than on the other side of the Atlantic.

Henrique B. Da Cruz was born in the Empire of Brazil, and hopes to see his country as a republic in a few years. He has thus far only heard of the United States of Brazil. Although the father of Da Cruz was a planter, our fellow-student wished to come to the United States and learn mechanical engineering. He first entered Cornell, but finally decided to come to the W. P. I., where he intends to graduate as a mechanical and electrical engineer. Da Cruz is well prepared for travelling, since

he speaks Portuguese, Spanish, Italian, English and French, and is now studying German. He will return to his native land when his education is finished.

Gumpai Kuwada is a native of Japan. His father is a distinguished surgeon, noted for his long military service, and deeply interested in the education of his family. One son was sent to Germany to study medicine, and the other was sent to America. Kuwada has been in the United States for six years, his residence having been in Northampton before he came to the Tech. He has three sisters, all of whom are in Japan, and he assures us they are "all pretty ones." He will return home when he leaves the W. P. I., and will be a mechanical engineer.

Adolph Osterman was born and brought up in that part of Russia known as the "German Provinces." He studied and read about America, and the more he learned of this free country, the more he inwardly rebelled at the tyranny of Russian Absolutism. At last he left home and friends and came to the United States to get an education; to a country where he could learn the truth before it had been varnished and rubbed down by a set of governmental censors. Osterman has, of course, some regard for his native country, but this feeling is confined to sympathy for the oppressed people. He hopes to revisit Russia, but will never settle down under the Czar's tyranny.

Richard C. Cleveland is a native of Canada. His home is in Danville, Province of Quebec, where his father is engaged in the manufacture of leather belting. Cleveland is pursuing the course in mechanical engineering. Politically, he would be a Republican if he were one of Uncle Sam's citizens. Being a loyal subject of Queen Vic, he is opposed to Canadian free trade and annexation to the United States. "Cleve" is popular with members of '93, and now occupies the position of president of the class.

### THE NEW PICTURES.

When we first entered the chapel last September we saw that there had been a change in something. After a moment of study we discovered that our surprise was caused by a rearrangement of the pictures that so beautifully grace our walls. The addition of two others was also noticed—one of Ichabod Washburn and the other of D. Waldo Lincoln.

Mr. Washburn was the founder of the Washburn Shops, and beside that, has contributed largely to the school funds. His original idea of a trade school was combined with Mr. Boynton's plan for a general scientific school in the organization of the school which now exists. Mr. Washburn is well known as one of the founders of the Washburn & Moen Wire Works. His portrait, painted by Billings of Boston, is a gift of Mr. P. L. Moen. It hangs just at the right of the desk on the platform.

We are again indebted to Mr. Stephen Salisbury for his generosity. This time it is for the portrait of D. Waldo Lincoln.

Mr. Lincoln, father of the present treasurer of the institution, was for some years secretary of our school. Mr. Lincoln is better known as having been the vice-president of the Boston and Albany Railroad Co. for a long time. His picture hangs on the wall beside Division B of the Junior class.

These two pictures, together with the six we had before, form a very creditable gallery, and the students at the "Tech" may well be proud of the appearance of their chapel.

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### READING.

*For Curiosity, Culture and Use.*

EDITOR OF THE W P I.

I avail myself of the suggestion made in an editorial in your last issue, to say a few things concerning the purposes of reading. If a half-score of other contributors do the

same, it will not be amiss, since the topic is always a live one and many-sided. What one may think about it will not be exhaustive, nor suited to the practical needs of all readers.

Few men in these days are content with knowing only one thing, or with the range of ideas which concern simply a special pursuit. Our lives are linked with those of the whole round world. Java and Arabia, Brazil and Jamaica and Florida help us to our breakfasts; we dine on the beef and grain of the Mississippi valley, the rice of Carolina, the macaroni of Italy, the figs of Smyrna, the grapes of Spain, and the salads and sauces of London and Holland; we sup or lunch with China, Japan, Ceylon and the Congo Free State. Our tables are spread with the products of every clime, and are overspread with fresh news, hardly a half-day old, from every nation under heaven. It is impossible for us "to hear the sound of the great Babel around us, and not feel its stir." Hence the ever unsatisfied desire to know of the important events which make up history. What men are now doing and thinking is more valuable to us than what men have thought and done ages ago; the latter may have influenced our present experience, but the former will more largely mould our future. Here the chief channel of communication is the modern newspaper. We must use it to keep abreast of the times, to satisfy curiosity, to supply our material wants. But the modern newspaper, however necessary it is to us, does not furnish much incitement to our intellects nor much stimulus to our social natures. What we crave here is supplied in two ways: first, by personal intercourse with men, and, secondly, by that indirect communing with them which gives to us the best of their recorded thoughts. Society broadens us, but tends to make us superficial; reading makes us more thorough and intense. Society affords close contact



with common souls like ourselves; reading offers reserved and distant acquaintance with the choicest and most gifted. Reading tends to make us thoughtful; society encourages small-talk. Reading alone may make us dull; society inspires vivacity. Society coalesces; reading develops individuality. Society renders men cylindrical, *i. e.*, smooth, facile; reading and thinking renders them pyramidal, *i. e.*, strong and stable.

Social tastes among students are easily fostered in certain lines, or rather on certain planes, which are recreative rather than intentionally educative, and this is really a necessity as a relief from the close strain of study. Among business men society is chiefly a luxury or a duty, a method of display, a means of influence, or an incident of over pursuit. But reading is one of the two or three great conduits of intelligence; experience or experiment as respects matter and observation being the others. All study of books is in a sense reading, but not all reading is study. The reading of the child is chiefly in the direction of satisfying curiosity and intensifying sympathy, that of the ambitious and right-minded youth seeks the knowledge of principles and of facts which illustrate these principles, the maturer mind reads to support theories, evolve new truths, and compare notes with his peers or his rivals. The reading of each of these classes with these motives in view is education. By such reading a man grows, and is at the same time conforming himself to an ideal, or group, or succession of ideals which his reading presents. Hence the result of thought and feeling thus created is character,—the mental and moral mould or quality of the man. All such reading for utmost profit should be select—of none but the very best, chosen just as we choose the latest and best machines for stocking a new factory. The reading into which we put thought is slow, and in extent must be limited. Two or

three volumes yearly, aside from those we use as mere tools, is enough, and few read thoroughly even so many.

But a great share of our reading must be necessarily a winnowing process. Papers, periodicals, and most books are chiefly made up of what to us, individually, for our needs and uses, is a few grains of wheat in a great threshing-floor of straw and chaff. Reading this class of writings must, therefore, be very largely elimination. We retain a few useful things and throw the rest away. The method of scanning and sifting this varied material must be rapid, yet so thorough as to lose nothing valuable. It is said of Mr. Gladstone that he has a remarkable faculty, when taking up a new volume, of extracting the essence of it in a very short time, often in a few minutes. It is this power that almost more than any other characterizes the disciplined mind. It is a faculty that improves by use. But this sort of work is not easy, and requires for the time, most vigilant attention. The danger is that we shall toil much and take nothing away. Hence this kind of reading should be done when the senses are all alert, active and unwearied.

ROLYAT.

### INTERCOLLEGIATE TENNIS.

**A Proposed New Feature for the Spring Field Day. Shall a Tournament be Added to the Sports?**

A very important and interesting suggestion has been made by *The Dartmouth*, namely, that a tennis tournament be held in connection with the field-sports of the Intercollegiate Athletic Association. Among other things, the above-named paper says:

“The proposition was made that we induce the Athletic Association to add to the list of events at the Worcester meet, two more events, tennis in singles and doubles, and the second place in each to count as seconds. This would include all the colleges in the Athletic league and would ensure the interest not only of the

tennis men of the colleges, but of all who take an interest in general athletics. It was thought that a tournament comprising all the colleges of the league who wished to enter, could be held at Worcester, beginning on the forenoon of the day previous to Athletic day and could be completed in two days. The representation should be limited to two men in singles and one pair in doubles from each college, in order that the tournament might be completed in two days. Such a plan as this could be carried out with but little extra expense to the association. It would be placing tennis in with other athletic sports where it surely rightly belongs. It would create a more general interest among the students and would give a much greater impulse to all tennis players. It would be a new honor to some one of the colleges to hold the championship of the league, and lastly it would so elevate the standard of tennis playing among us, that in the meeting of all the colleges in the fall, some of those from the smaller colleges who were obliged to content themselves with trying for the consolation prize shall come forward in the race for the intercollegiate cup."

The plan is certainly a very attractive one and at first sight looks quite feasible. But there are one or two important reasons why it is not best to carry the scheme out. In the first place, tennis is not a branch of field or track athletics and properly has no place in a list of "field-sports." Lawn tennis is a game by itself, and there is no more reason for its introduction to the sports of the Athletic Association than there would be for base-ball or foot-ball. Moreover, it very often happens that the best tennis players are also track and field athletes, and on the day of the sports, one of these would have to be given up for the other. Thus injury would be done to both athletics and tennis. The fact that Intercollegiate field-day comes so early in the season is another argument against this hybrid combination. Tennis is not fairly started by the time the Association has its meet; and men would not have enough

time to practice to get themselves into form. Taking these facts into consideration it seems that *The Dartmouth's* suggestion is hardly practicable.

Still, there is food for reflection in their article. Why should there not be an Intercollegiate Tennis Tournament separate and at a different time from the field-sports? Of course, there is one college tennis association, which includes all the larger institutions, but we advocate the establishment of an association to take in the same colleges which are now represented in the Intercollegiate Athletic Association.

The tennis enthusiasts at the Tech agree that intercollegiate tennis is desirable. They also think that the W. P. I. would stand a reasonable show with the rest. One says that from observation he knows we would be "in it" with Dartmouth, and if that college has a place in the major league, as it does, the Worcester Tech would certainly profit by joining the proposed one.

## THE NEW EXAMINATION SYSTEM.

### A Variety of Opinions Result from Its Trial.

Unfortunately for the students, it does not appear that the new examination system is such an unquestionable boon for them as it was expected to be. Men who succeed in examinations, anyway, are somewhat indifferent to the frequency of the dose, but there are more to whom an examination seems a mountain, and their failure to do well in the hour examinations is proving a source of discouragement. It seems impossible to invent a system that will meet the approval of all. The instructors, even, are not a unit in favor of the present method. The following are a few of the opinions expressed on this subject, that is of such vital importance to every student.

"Well I rather like it. It's a good deal better to have the examination cut up into four pieces than to take it all in a lump. A man can do himself more justice in four

separate hours than to have to wade through four or five long hours at a stretch and be all tired out at the end. Then I think he's more liable to keep his work up ready all the time than if he didn't expect an examination till the end of the term. I think it's a pretty good thing."

\* \* \*

"Well, I don't know, things haven't changed very much. In some of the branches, the new method seems to go first rate, but part of the instructors are not carrying it out very closely.

"I don't know but it would work well enough if carried out fully, but it is a little shaky to rest one's mark for a whole three months on a single hour's examination and, say, five questions."

\* \* \*

"How do I like it? Why, pretty well. I rather like to get things off my mind as often as possible. It makes a fellow feel relieved, even if he didn't do very well. But really, I think it gives a fellow a better chance. If he does poorly the first time, it rather touches him up and he has a chance to make it up next time. The old way, when a fellow failed on the exam. it was all up with him."

\* \* \*

"No, I don't think that the fellows keep their work up any better, in fact, not as well. In the old way, they expected to have to retain most of the matter till the end of the half year, but now a month or so is the longest, and consequently less work is thought to be needed. It may be rather rough on the fellows to say that they work that way, but it is human nature."

\* \* \*

"I think the best thing about it will be found in the personals. It seems as far as one can see that a man's personal mark is the biggest part of what he gets. Now if he is under a cloud the first "exam." he can work up by the second and may change his mark a good deal.

"The professors are pretty good fellows and if they see a man trying to make up for lost time and putting in his best lies they will do their best to help him. I think if the fellows just take it right, the plan will prove satisfactory to all."

\* \* \*

"My opinion may not be like any of my

fellow-students', but I am willing to say what it is. I do not like the system. In English it is very satisfactory, because I can tell the moment I see the questions, whether I can answer them or not. In the other branches, however, particularly those involving mathematics, I find that I need about the full hour to discover what is wanted, to say nothing of the time needed to recover from the initial scare that the sight of examination papers always gives me. Beside this, the men about me have numberless questions to ask, whose answers may be of prime importance to me, and the continual disturbance is fatal to careful work. Before I realize it, the hour is gone, and I have failed to do what I am positive I could do in the quiet of my room, or with a little longer time."

### SCIENTIFIC SCRAPS.

#### Interesting Items Concerning Current Questions.

1500 men are now employed in hastening work upon the Nicaragua canal. The undertaking is considered certain of success.

Thinkers on electrical subjects are at work on different schemes for transforming the energy in coal to electricity without the intervention of the steam engine.

There are 413 different kinds of trees in the United States, of which 16 will, if well seasoned, sink in water. The heaviest woods come from Florida and the arid western lands.

Work has been begun on the Niagara Falls hydraulic tunnel by means of which it is expected that 120,000 horse-power now wasted will be utilized without damage to the natural beauty of the place.

The question of cheap production of aluminium is a very prominent one in the metallurgical world, and new methods are recently reported which greatly reduce the cost of this very useful but somewhat shy metal.

A railroad has been built to the top of Pike's Peak, 14,200 feet above the sea-level. Except the single instance of a railroad over the Andes in Peru, this is the highest elevation a locomotive has ever reached.

France and Germany have added balloons to the equipment of some of their war-vessels. On a clear day, all important ob-

jects within a radius of twenty miles can be readily distinguished. These naval balloons are inflated with hydrogen.

It is well known that changes in the sun-spots have certain connection with atmospheric phenomena upon the earth. With reference to this, Edison has arranged a huge electrical apparatus in New Jersey by which he intends to cause the sounds made by bodies falling into the sun to be heard.

A new invention is an apparatus for detecting metallic ore. It consists of a battery and spark coil enclosed in a box to be carried on the back of the prospector, with two flexible wire conductors. These conductors are placed in contact with the supposed metallic ore, and the presence or absence of a spark will indicate whether or not the rock contains free metal.

### COLLEGE CLIPPINGS.

#### The Essence of College News Extracted for Tech Students.

The Persian language is taught at Cornell.

Work has been begun on a new gymnasium at Brown.

The Williams College Library is open to students on Sundays.

One of the candidates for coxswain of the Yale crew weighs only 76 pounds.

One hundred and fifty men at Yale tried for places in the College Glee Club.

There are now thirty-seven Japanese students at the University of Michigan.

The youngest college president in the United States is twenty-eight years old. He is President Quayle of Baker University.

It is said that college journalism originated at Dartmouth in 1800, Daniel Webster being editor of the paper.

Plans have been drawn for a new chemical laboratory at Amherst, and twenty thousand dollars are already pledged towards the expenses of building.

Sibley College, the mechanical department of Cornell University, issues a journal of scientific and college news under the name of "The Crank."

Worcester's most distinguished son, Geo. Bancroft, is the oldest living graduate of Harvard College. He was a member of the class of 1817.

There are 190 college papers in the United States and only one in England. Harvard has four: the *Crimson*, the *Advocate*, the *Monthly*, and the *Lampoon*.

At the Boston Tech there are 933 students, of whom 111 are Seniors, and 270 special students. *The Tech* claims that the M. I. T. is the leading scientific school of the world.

The richest American college is Columbia with an endowment of \$9,000,000. Harvard comes second with about \$7,000,000.

Amherst College is in its seventieth year and has had six presidents. Dr. Merrill E. Gates was elected president this year.

The five college dailies are: the *Harvard Daily Crimson*; the *Yale News*; the *Princetonian*; the *Cornell Daily Sun*; and the *University of Michigan Daily*.

The tug-of-war is fast disappearing from the list of college sports. Many college athletic associations have recently condemned it as being injurious.

The school for colored students at Salisbury, N. C., supports a neat and interesting college paper under the title of the *Living-Stone*. The printing is done by students.

Harvard and Yale received about \$5000 each from the profits of the great foot-ball game at Springfield. The money will be used for athletic purposes, principally in the rowing department at each college.

### LABORATORY NOTES.

All the principal patterns for the triple-expansion engine which is to be made for the Salisbury laboratories have been completed and the moulding is now in progress at the builder's iron foundry in Providence.

The transmission dynamometer which M. W. Allen, '90, commenced, is now about completed.

By the way, it was M. W. Allen, and not A. P. Allen, who was one of the victors in a "three-legged race" at a Lake Waushacum church picnic last summer. A local paper at the time announced that A. P. Allen and Elsie Smith were the winners. We recognized in "Elsie," our old friend, L. C. Smith.

Several new and interesting experiments have been planned for the Senior mechanics, some of which they have already begun.

The armature for the three-hundred light dynamo which was designed by the electrical engineering class of '90, was recently completed. The field magnets for the dynamo have also been wound. The straight-line engine which furnishes 12 to 15 horsepower is used in trying the new machine.

In the chemical laboratory both Dr. Kinnicutt and Dr. Moore are carrying on research work in organic chemistry.

Some of the recently discovered compound, nickel carbon oxide, has made its appearance at the laboratory and is calling for some attention. The substance is a liquid at the ordinary temperature and has a boiling point of 43° C. Its formula is given as Ni (CO)<sub>4</sub>.

It is expected that the Electrical Laboratory on the first floor will be piped for steam during the Christmas recess, making it a much more endurable room than it has been during some of the past cold weather.

#### SOCIETY NOTES.

The Tech Elect has changed its meetings from weekly to once in two weeks. It was found with the work on hand rather too much of a burden to prepare for a meeting each week. The change will, no doubt, have the effect of increasing the attendance. The work at present is discussion of papers on the Electro Magnet.

The Camera Club proposes to give a public exhibition of its pictures in the near future. It is thought that some time in the last week before the Christmas vacation will be the time. Some talk of prizes has been heard. We think it would be a good plan and bring out a better showing of pictures. It would be well, if we may suggest, to make the offer soon that time for preparation may be had.

The Y. M. C. A. has succeeded very well this year, even beyond the hopes of many. The leaders have shown what energy and determination can do. It is no small matter to carry on any society in a school as busy as ours, and the value of such a society as the Y. M. C. A. to such a busy school can not be overestimated.

There is another society that has its meetings on Dix Street, corner of Lancaster, that we would like to report, but lack definite information. We may be able to publish something definite about this club in the next issue.

#### PERSONAL.

News from R. F. Gardner, '89, informs us that he is still "in it" at West Point and is much pleased with his situation.

Fred D. Holdsworth, '88, formerly with the R. I. Locomotive Works at Providence, is now with the Knowles Steam Pump Works at Warren, Mass.

Chas. L. Griffin, '88, late of Brown and Sharpe, is now with the Shaw Electric Crane Co. of Milwaukee, Wis.

Clinton Alvord, '86, has accepted a position as head draughtsman with Schaum and Uhlinger, manufacturers of textile machinery in Philadelphia.

L. H. Harriman, '89, is the Assistant Superintendent and Electrician of the Haverhill Electric Co. at Haverhill, Mass.

F. H. Metcalf, '91, has charge of the electric light, steam and water plants of the Farr Alpaca Mills at Holyoke. The capacity of these mills is being greatly increased by the erection of new factories which, when completed, will receive Mr. Metcalf as Mechanical Superintendent.

C. G. Davenport, '90, has finished the expert course at the Thomson-Houston Co.'s factory at Lynn, and now has a good position in their Boston office.

John E. Gallagher, '83, has opened a civil engineer's office in this city, and is making a specialty of water-works and sewerage engineering.

Guido F. H. von Wrede, '88, returned to this country from Europe last October, and is now Master Mechanic of the main line division of the Philadelphia and Reading R. R. with office at 20th street, Philadelphia.

W. S. Ball, '88, has been seriously ill at his home in Upton, for several weeks. He is now able to be around and expects to return to his work in Holyoke about the first of January.

## TWEEDLE DUM AND TWEEDLE DEE.

Professor X. is a very nice man,  
To this the fellows will all agree;  
But there's a difference in *his* plan,  
"Twixt Tweedle *Dum* and Tweedle *Dee*.

He wouldn't be partial to one—*Oh! No!*  
But then when he's quizzing, don't you see  
There's quite a difference in the *men*—  
*That one's Dum, and this one, Dee.*

If this one don't know it, it's a terrible thing,  
And why in all nature shouldn't it be?  
He ought to have it because his name,  
As every one knows, is Tweedle Dee.

But as for Dum, that's another case;  
That another plan's needed, is plain, per se;  
It wouldn't be right, in the nature of things,  
To put *him* on the same plane with *that*  
Poor Dee.

Yes, Professor X. is a *very* nice man—  
To this plain fact we will all agree;  
But it makes all the difference in the world  
If *you* are *Dum* and *I* am *Dee!*

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## TECHNICALITIES.

How we did howl on "44."

The fighting friends—Kvady and Kofflin.  
Where is the school pin committee?

"Shall the sports be held in Worcester next year?"  
Is the question the Dartmouths have met.  
As long as the city has voted "Yes"  
They won't go to Springfield, you bet!

Have you paid your soap tax?

How long is a Tech "hour"?

No apologies called for this month.  
What's the matter?

There ought to be a clock in the Library  
room.

The unannounced hourly examinations  
are being "rung in" about as often as the  
boys care to meet them.

Boys, the Prof. says "Hug if you want  
to," so don't be bashful.

We are officially informed that there is as  
yet no news anent the disposal of the Bige-  
low Gift.

Descartes, the great mathematician,  
studied only one hour a day, and then died  
young. What's going to become of *us*?

There is one thing the McKinley bill  
hasn't raised at the Institute, and that is  
the marks of a few of us fellows.

Not yet having passed the domain of the  
three-headed dog, E. S. W., '93, didn't  
know what *wood* changed to when cremated.

Jonah wants to know if the fire-axe which  
hangs under the chemical fire-pails in the  
Lab. is for the purpose of busting the pail  
in case of fire.

First chemist.—"What's your favorite  
song?"

Second chemist.—"Iodine Dollars to  
O'Grady,' of course."

First chemist.—"I thought so; but I've  
got a better one—'Halogen Maloney'—it  
means more, you know."

Prof. Kinnicutt mixed drinks and then  
set 'em up for the boys the other day, at the  
Lab. Anyone want any more?

The Senior chemists will undertake a  
rather new line of investigation, next half.  
The school being now in a state of ferment,  
they propose to examine the product.

The Seniors have made a solemn compact  
to leave the room *en masse* the next time  
they are asked by a Professor "What will  
happen if an irresistible body meet an im-  
movable body?"

Two Harvard students were arrested last  
week for stealing tin signs. Some of the  
Techs who are otherwise above reproach,  
would do well to burn about half the furni-  
ture in their rooms.

Prof. White recently told one of the  
smallest of the Senior civils that he thought  
he actually had an idea. The embryo  
spike-driver is said to have indignantly  
denied the charge.

We suggest that the Middle class pass  
over those two editors they owe us before  
the holidays. We know you will enjoy  
yourself when your indebtedness has been  
squared.

Many of the boys went to Springfield to  
see the Harvard vs. Yale foot-ball game.  
The recitation hours were changed to enable  
them to catch the train, and one instructor  
is said to have dismissed his whole class  
fifteen minutes too early for the accommo-  
dation of two of its members.

The new method of gauging our knowl-  
edge of experiments in Physics ought to

prove satisfactory to all. It will really test the student's knowledge beyond a doubt, with the advantage of freshening his memory on many of the details by the appearance of the apparatus.

(During an oral quiz.)

Prof.—“Where is Mr. B.?”

Student.—“Skipped.”

Prof.—“Well, he's a nice fellow.”

Student.—“Out of sight.”

Mr. S. has a girl down in Barre,  
Who on L—r street lately did tarry;  
He bought a fresh clip,  
Went to see this fair chip,  
And the Techs outside raised the old Harry.

Here is another list of books proposed for general reading:—

Some things I don't know about teaching.

Ponies: their use and abuse.

Audoquercum, or, How to hear through an oak door.

In it, and how to get out.

Kutchuck; an adventure on rubber-soled shoes.

Excuses and apologies: use and construction.

Inquisitions: ancient and modern.

Bad Boys in Boston; a detective story with a sequel.

All the above will soon be published by our local “fire” department.

’Twas good advice to say “Hump yourself,”

When you simply meant to “hustle,”

But the women all understood the wrong way,  
And deformed themselves with the bustle.

And now *that* is thrown to the fatted goat.

And the weather is growing colder,

Every woman and maiden appears on the street  
With a hideous hump on each shoulder.

We are indebted to the class of '88 for a copy of the report of its first reunion, held in June, 1890, during commencement week. The book contains letters from every man in the class,—their experiences since graduation combining to make a volume full of humor and pathos. Several of the writers gave some opinions regarding the work done at this school, which their experience has led them to form. For this reason the undergraduates would do well to read the book, even if they had no acquaintance with the members of '88. To those who remember some of the men in that enterprising class, a perusal of the report of its reunion

is a source of great pleasure. Anyone who would like to see the book, may do so by applying to the editors of the W P I.

The boy stood on the burning deck  
(You sure will think him looney);  
For there, amidst that awful wreck,  
He whistled “Annie Rooney.”

He might have lived thro' even that,  
His “dander” was that flinty,  
But he sang “Where did you get that hat?”  
And then he tried “McGinty.”

The Juniors, division C, could not wait for the catalogue in which to see their names in print. The following list is therefore published for their special edification. Chemists,—A. R. Bingham, Worcester; C. H. Dwinell, Fitchburg, Mass.; C. D. Howard, Littleton, Mass.; P. W. Lincoln, Worcester; F. W. Howe, Hollis, N. H.; A. D. Butterfield, Dunstable, Mass. Civils,—A. H. Child, E. Thetford, Vt.; C. W. Dyer, Holyoke, Mass.; R. B. Farwell, Hubbardston, Mass.; S. A. Farwell, Hubbardston, Mass.; A. D. Flinn, Worcester; D. H. Hodgkins, E. Brookfield, Mass.; I. M. Stoddard, Worcester.

Political Science,—C. H. Andrews, Boylston Centre, Mass.; C. Baker, Jr., Worcester; F. Bucklin, Worcester; R. J. Clapp, Hartford, Conn.; Nathan Heard, Worcester; D. I. Wright, Tatnuck, Mass.

Mechanics,—C. B. Blanchard, N. Uxbridge, Mass.; H. W. Bowen, Adams, Mass.; N. M. Paull, Fairhaven, Mass.; A. I. Osterman, Springfield, Mass.; G. Kuwada, Tokio, Japan; A. C. Higgins, Worcester; H. B. Da Cruz, Rio de Janeiro, Brazil.

The regular routine of recitations in English, from Gen. Walker's Political Economy, was recently broken in a very entertaining manner. Members of the Senior class were given an opportunity to display photographs that they had taken since experiencing the camera craze. A particularly seductive description was given, of an improvised gallery in a woodshed in northern Vermont, wherein an innocent maiden threw her prettiest blushes into the camera, only to produce freckles on the negative. Lunt showed pictures, mainly of the seashore; Davis, views about Lake Champlain; Tracy, pictures from a variety of sources, principally views in Arcadia, and Fitts, whose camera is an omniverous consumer

of fine views, gave a specially pleasing exhibition. One of his instantaneous pictures is that of "Gov. Benton," a trotting stallion, going at full speed. The horse is entirely off the ground and the picture is very clear and "sharp."

Some things for which to be thankful: Thanksgiving is a good thing in its way. It brings with it the first recess of the year, and generally something to eat, with plenty of time in which to eat it, which is quite as much to the point. Yet right here in school are men upon whom the recess and the Governor's proclamation seem to have had no effect, and they find nothing in particular for which to be thankful. We have in mind a Senior who seems quite unaware that he is more fortunate than some other men, and believes his lot a particularly hard one. Now, Mr. Senior, just look at the conditions and see if you do not change your mind. Aren't you thankful that you were born an American, instead of a monkey, or a girl,—that you did not grow up half-baked, a professor or a minister,—that you are a Senior,—that they can't work you but seven days in the week,—that the W P I exists,—that your Christianity is of that calibre that doesn't permit you to repeat what your classmates do in the implied secrecy of a class meeting; and, in fact, that many things are not what they seem? You have many things, Mr. Senior, for which to be thankful.

Our importunate printer, after twice informing us, against our protest, that the paper was full, and in a tone of voice that implied that we, too, were full, now has the nerve to give us the remainder of this page without a line to show for it. What shall we do? It was some columns back that we

began writing "just to fill up," and the few ideas we then had, have been worked until they are crying for rest. We look about the office for inspiration. No one here but a pretty proof-reader, who as yet is supremely indifferent to oily smiles and officious interference when she essays to put on her wraps. We look at the frost on the window panes and at the mercury leaking through the hole, which it has made in the bulb in its effort to sink lower. Eureka! We have it,—just the thing, a poem appropriate to the season. Our subject is—

#### SIGNS OF SUMMER.

The mellow "spring poet" is taking a rest;  
From labor rejected he 's free—  
For now doth he float,  
In a flat-bottomed boat,  
And heave his best works to the sea.

The base-ball enthusiast goes to the game,  
And watches the bat smashers sweat;  
While the mucker galore,  
Congregates at the door,  
And yells as you exit,—“Who bet?”

As the weather grows warmer, you wish you  
were free,  
Your girl 's so seductively sweet,—  
She hooks you to stay,  
Lives on soda all day,  
And at night haunts the ice cream retreat.

'T is now your lawn sprinkler refuses to squirt;  
The gardens are dried up and sere,—  
The 'skeeter, the bee,  
Proclaim lustily,  
That summer, hot summer, is here.

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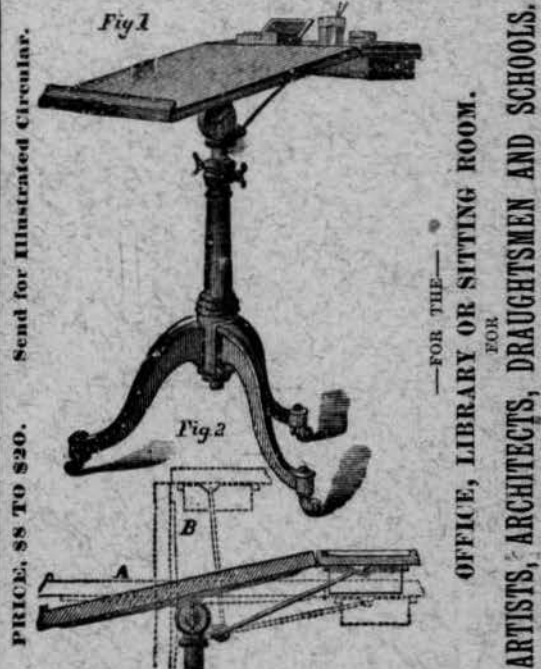
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