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Students of Worcester Technical Institute
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THE melancholy days are come, the saddest of the year,
Of wailing winds, and naked woods, and meadows brown and sear;
Heaped in the hollows of the grove, the autumn leaves lie dead,
They rustle to the eddying gust, and to the rabbit’s tread.
—Bryant.

IT seems strange to us that two schools
—the Boston Tech and the W. P. I.
—situated so near together as they are, and which are to some extent rivals, should have adopted the same school colors—crimson and gray. We believe that the W. P. I. was the first to select these colors, but we cannot now state just when they were adopted here. If our opinion can be proved to be correct, we think it would be but just for our friends in Boston to make a change in their colors.

WE are sorry to notice the manifestation of a spirit in the conduct of some of our students, which is anything but commendable. Do not think that we are going to moralize, and to spring upon you that old chestnut that we are here for study, and should therefore lay aside everything else, and make study the one aim and object of every moment of our existence while at the Institute.

With this we do not fully agree. While recognizing the fact that we come here to gain knowledge, we still believe that a portion of our time should be given up to recreation and enjoyment. Fun should be so sandwiched in with our work that our memories of school life may be pleasant ones. But there are certainly right ways of having fun. A good, clean, practical joke is one way of getting legitimate enjoyment. We do not consider the Faculty an august body that should forever be exempt from being the victim of such a joke.

But the spirit which prompts a man, just for the sake of disturbing an exercise, to rattle a bunch of keys, shuffle his feet or give utterance to half-smothered groans, is simply detestable. There is nothing funny, there is nothing smart, there is nothing manly in it. We do not believe there is a man in school, who has
ever allowed himself to take part in any such disturbance, who will not admit to himself,—if he will stop for a moment to consider, and be perfectly honest, that he is ashamed of having had any part in such an action.

If such practices were excusable in any students (which they are not), they certainly would not be in seniors. And yet some members of the senior class have in some of their exercises acted altogether too much like primary school boys. It is no excuse for them to claim that the subject of the exercise is of no interest to them. There may be, and in all probability are, men who may be interested, and who lose much of the benefit they might gain, simply because of the inattention and disquiet of some of their classmates.

We believe that a man loses more than he knows by inattention at any time, but if this is not accepted by all, let us at least hope that hereafter every man will be generous enough not to disturb his fellows.

We have heard of people before this, who sometimes “see double,” but this is the first time a person ever came to our notice who sees just nine elevenths of what is before him. In this same report, we find something of a process called “tacking.” We are at a loss to know just what is meant, but suppose the imaginative reporter may have watched Vic. Harding dodging along in his zigzag way, and compared his motions to those of a vessel beating up the wind. In the editorial mentioned above we learn that foot-ball players are frequently seen lying “on their stomachs to recover their wind.”

It strikes us that this is a remarkable position for a man to take when he is out of wind, but, yielding to superior knowledge, we must perhaps admit that it is the correct one.

That the English-Association rules provide a safer game, we do not admit. We have seen foot-ball played under these rules and consider a man fortunate who gets through a game without being kicked into a jelly. Imagine six or eight fellows all crowded around the ball, and all kicking as fast as they are able. Perhaps one kick in ten will hit the ball; most of the other nine land on those portions of the bodies of the men playing, which happen to be in the path of the oscillating foot.

We fail, too, to see how the English game can be more scientific than our own. A person cannot appreciate the art and skill employed by our best foot-ball players, unless he has a little knowledge of the game. A good player must, it is true, have “speed and strength,” but he must have, besides a level head,
a quickness of perception and a determination, such as are required in no other sport in the world.

As to the popularity of the game, when we know that five thousand people will crowd on to Jarvis Field at Cambridge, to witness a contest between the elevens of rival colleges, and that twenty-five thousand people have turned out to see a championship contest in New York, we must admit that the sport has many supporters in this country.

ARE POSITIONS IN MANUAL TRAINING SCHOOLS DESIRABLE ONES FOR GRADUATES OF THE W. P. I.?

As each graduating class approaches the time for leaving the Institute, and for stepping out into the real battle of life, this question becomes a very serious one to each: Where and how can I employ my energies and abilities to produce the best results for myself and for the world and to best utilize and build upon the special training received at the W. P. I.?

Each will consider the question from several points of view.

First, the measure of compensation, present and prospective, to a great extent will control the decision;

Second, A careful consideration of the natural and acquired abilities and tastes of the individual, should aid in the decision, as success will depend much upon the natural adaptation to the profession chosen.

The question under consideration confines the discussion to the one field of manual training schools. This branch of education has not yet passed entirely the bounds of an experiment. It is now being tried in three ways.

First, by introducing it into all public schools of every grade, as in Washington, D. C.;

Second, by placing it only in the high schools, making it the main feature of one course of study, as in Toledo and Minneapolis;

Third, by having a manual training or technical school of low grade, distinct from the grammar and high school, as in Philadelphia and St. Paul.

An instructor under either of these plans, probably would receive greater compensation for a few years, than the majority of the graduates of the W. P. I. receive in the same period in most other employments, but his chances for advancement and self-development will differ according to the class of school he enters. Let us consider these three grades separately.

First. Manual Training in the Graded Schools. The duties of the teacher in this branch must necessarily be confined to rudimentary work, or first principles, for he cannot advance beyond the understanding of the pupils in the graded school, and hence he must meet in competition, those who may be competent to fill this position with credit to themselves, but who could not aspire to the higher plane of technical instruction. Such a teacher has little scope for the use of higher education, or of increasing it by the performance of his duties; but it has its advantage, if leisure time is an advantage, for this class of instructors usually are not confined by their duties more than twenty-five hours per week and have three
months of vacation. This gives a great amount of time for study or for extra work, which can be used to greatly increase the instructor's income.

Second. Manual Training in the High Schools. General Francis A. Walker, President of the Massachusetts Institute of Technology, in an address on the subject, said, "I would allow no pupil to graduate from a high school who was not as proficient and exact in mechanical as in grammatical exercise." If this standard should be adopted, it would place the work of the instructor upon a much higher plane than that we have just considered. The pupils are of that age when most likely to be especially interested in this branch, when their minds will more easily comprehend and guide the hands to proficiency in mechanical art.

Third. A Manual Training or Technical School. A position in one of this class of schools is much more agreeable to an instructor, as they contain a class of students varying from about fourteen to twenty years of age. To acceptably fill the requirements of such a school it would seem imperative that the instructor be versed in practical work as well as in theoretical knowledge. Familiarity with the most improved methods of doing certain standard lines of work is necessary. The constant effort to analyze the work, to study principles, and develop the best method for reaching results, gives opportunity for the display of all a man's inventive ability. In the present experimental state of these schools there is no chance for a man to stand still. Their certain rapid advance will demand the services of well-educated, practical men, who should introduce into the school a system and method of doing work that would be an example for the best organized practical shop in the country.

Having thus briefly and imperfectly reviewed the character of these schools, and the quality of talent demanded for instructors, and having considered this in connection with the special training in this line afforded by the W. P. I., to the question as to the desirability of positions by graduates as instructors, we would answer: Yes, they are desirable for those men who have a natural gift for teaching, and are expert in the use of tools, and they afford a good chance for employment and advancement.

A RECENT number of the Harvester, a paper published by the Salem-Street Church, contained a letter from Prof. Eaton, most of which we publish below. The letter was written from Redlands, Cal., and is as follows:

"Last week, as I was returning from the bold rocky shore of the Pacific to my ranch in the San Bernardino valley, a matter of business called me to town, a little city which you will hardly find on your map, as it has sprung up almost in a night. It is the creation of Boston capital, and consists at present of a better hotel than Worcester can boast, a magnificent opera house, a depot, grocery store, horse railroad track and a very few humble cottages. Whether it will become what the Boston capitalists expect, or share the fate of Jonah's gourd, only time will tell.

Having several hours at my disposal, I walked out to the Ostrich Farm, and should like to conduct all the good Salem-Street people to see what I saw. It was like a bit of Africa transported to California. There were in a pen by themselves the original African birds, which cost $1,000 a pair,
and a multitude of others hatched on American soil and varying from chicks just out of the shells, to the full grown birds that stride eighteen feet at a step. The three months' chicks were fully as tall as I am. You can hardly imagine how oddly appeared their little heads not larger than my fist on the extremities of their long necks nearly as large as my arm. It seemed to me that they could not have a very large brain or they would not be confined in their yards by a simple rail fence over which they could stride if they chose to do so. They can kick as hard as a horse with their great two-toed feet, and the keeper told me they would kick me to death if I should interfere with their nest. I saw one of these nests simply scraped in the ground with their feet and full of the big eggs, which you have seen in the museum. These eggs properly blown are sold for $2.00 each and form quite an element in the income of the place, which thus far is said to lack $10,000 of paying expenses. The other element, besides entrance money, in the income, is the sale of the beautiful plumes which are plucked every nine months. The male bird is black and has the elegant white plumes, while the female has brown plumes like her other feathers. These grow on the front upper edge of the wing near the body and are displayed either in fear or anger. The keeper would shout at them and then they would trot,—no, straddle is just the word,—around the yard, and hiss like a goose. In the night the male roars like a lion, although I did not hear this noise. The tamer birds came up close to me and looked me over, literally over me, searching for buttons, a watch or some such delicacy. The oddest thing that I saw was the ostrich waltz, which two of the old birds executed. They ambled around each other, all the time turning around themselves, and raising their wonderful plumes bowing to each other just as you would imagine a couple of overgrown children would do when trying to dance for the first time. When you take into the account that it took nearly half an acre for them to circulate in, you will see what a ludicrous spectacle it must have been.

On my way to this farm I walked through a flock of some five hundred sheep not counting the lambs. The shepherd was assisted by his dog in caring for the sheep.

This was only a small flock, as the day previous I crossed a ranch where there were twenty thousand sheep.

With kindest regards.

THOMAS E. N. EATON.”

**Foot-Ball Games.**

**TECH 4—TRINITY 8.**

The game played with Trinity at Hartford Oct. 13, resulted very unsatisfactorily, being lost partly through the absence of three of last year's players, Allen, Bartlett and Gilbert, who were unable to play, and partly through the work of the referee, who knowingly allowed Trinity to score on a foul, thus giving the game to them in the first half. Although the day was very threatening about thirty men, including the team, went to Hartford at 12.20, and were very well received by the Trinity men.

Play was called at 3.30 and the teams lined up as follows, Trinity having the ball:

**TRINITY.**—Griswold, Thurston, Talcott, Hubbard (centre), Hoisington, French and McCook, rushers; Conover, quarter-back; Turnbull and Graves, half-backs; Brady, full-back.

**W. P. I.—** Crosby, Rice, Churchill, Allen, '90 (centre), Crane, Follett and Dawson, rushers; Fiske, quarter-back; White and Lake, half-backs; Patterson, full-back.

All the scoring was done in the first half, Lake making the touchdown for the Techs after a long run of about three-fourths of the length of the field, warding off several men on the way. Turnbull and Crane also made good runs.
The second half was very closely contested, so that after sixteen downs neither side had gained any material advantage. Rice, Patterson and Lake made good rushes, but as soon as Trinity got the ball, a long punt would return it to the centre of the field. Trinity gained most by long end passes, while our team depended more on straight rushing. Many brilliant plays were made, but our eleven did not play a good team game. Morgan, Trinity, '88, was referee, and Camp, W. P. I., '88, umpire.

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HECH 22—HARVARD FRESHMEN 0.

A GAME had been arranged with Tufts for Oct. 20, but, their team having disbanded, a game was arranged with the freshmen instead. Our eleven was weakened somewhat by the absence of Patterson and Dawson, but played fairly well, especially in blocking, although they lacked the "snap" necessary to make large scores. Lake and Bartlett, however, varied the monotony by making some grand rushes. The freshmen were very weak in the rush line and their half-backs were repeatedly downed before they could start to run. Half-hour halves were played, the game beginning at 2.38.

The teams were made up as follows:

W. P. I.—Rice, Bartlett, Gilbert, Allen, '90 (centre), Churchill, Follett, and Crosby, rushers; Allen, '89, quarter-back; Lake and Mills, half-backs; and White, full-back.

FRESHMEN.—Curtis, Putnam, Travers, Hunt (centre), Heard, Newell, and Wren, rushers; Neff, quarter-back; Brooks and Schoen, half-backs; and Baker, full-back.

Harvard had the kick-off and gained fifteen yards at once, but soon lost it and in eight minutes Crosby made the first touch-down for the W. P. I.

The try for goal failed and in a few minutes Lake made another touch-down and goal. After this no more scoring was done in the first half, although the ball was kept in Harvard's territory. When play was resumed in the second half, the ball was forced quickly down to Harvard's goal and they were forced to make a safety. Then the play drifted to the center of the field, but a rush by Gilbert and a long run by Lake soon secured another touch-down. No goal. A few minutes later Bartlett carried the ball across the goal line, but lost it before he could down it. After this the Techs lost some ground, but Lake finally got the ball and by a magnificent rush carried the ball twenty-five yards and secured the last touch-down of the game from which he kicked a goal, thus making the score 22—0.

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HARVARD 66—TECH 0.

THE second game with the Harvard Varsity was played at Cambridge, October 27th, and resulted a little more favorably than the first. The team left Worcester at 11.30 A. M., and went to Cambridge, via Ayer Junction. Before they reached Cambridge, they had plenty of time to admire the scenery of northeastern Massachusetts. As usual the day was cloudy, the rain falling before the end of the game. Harvard put her best team on the field and played a

**TECH**—Lake, full-back; Crane and White, half-backs; Allen, '89, quarter; Rice, Bartlett, Gilbert, Allen, '90 (centre), Churchill, Follett and Dawson, rushers.

**HARVARD**—Sears, full-back; Lee and Vic. Harding, half-backs; Dean, quarter; Cumnock, Longstreth, Dexter, Cranston (centre), Trafford, Davis and Crosby, rushers.

The game began at 3.10, the Techs having the kick-off, but Harvard's weight prevented much gain and the first touch-down was made by Harvard in 4 minutes. During the rest of the half, the Harvards raised the score to 38, chiefly through the fine work of Harding, whose running and dodging was remarkable. Gilbert retired at the end of the half and Crosby took his place.

In the second half, although Harvard had the kick-off, it was 14 minutes before they could score, owing to the sharp playing of the Techs. But once started they managed to get 5 touch-downs and 4 goals, making the final score 66—0. During the second half, Dexter, who, by the way, was so influential in retiring Gilbert, wrenched his leg, and was carried from the field. After the game the Techs went into Boston, and in the evening attended the theatre. They reached Worcester at twelve o'clock.

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**TECH 49—AGGIES 0.**
terson, brought the ball back where it belonged. A short run and a punt by Amherst followed. Then another beautiful run by Crane brought the ball up very near to the line and Gilbert made a touch-down. Patterson kicked goal—Tech 12. Before another touch-down was made Amherst lost considerable ground by her half-backs running backward instead of forward, and thus it was that the next four points came so quickly, Lake taking the ball over in about four minutes. No goal—Tech 16. Amherst now had the ball and punted, but Crane's 15 yds. and Bartlett's 30 took the ball over again but no goal was made—Tech 20. Next the leather was in the centre of the field where it remained but a short time, rushing by Crane, Lake, Bartlett and Churchill taking it to the 10-yd. line, whence Lake carried it over. The try for goal failed and Rice seizing the ball quickly made another touch-down from which a goal was kicked making the score 30. Punting was indulged in by both sides with loss for the Aggies. Then Crane made another of his beautiful runs and scored another touch-down. No goal—Tech 34. A goal from the field by Patterson ended the scoring in this half, the three-quarters of an hour expiring soon after. Final score—39.

In the second half which was but half an hour long, the Techs went to pieces two or three times and the score did not roll up as it did in the first part of the game, a touch-down by Crane and a goal by Patterson, and a touch-down by the same player ended the game. Tech 49, Aggies 0. The game was thoroughly satisfactory to the spectators, Crane win-

ning considerable praise for his fine running. Patterson also deserves credit for his interfering and general playing. The attendance was not what it ought to have been, there being only about 200 present, but the miserable weather undoubtedly detained many from attending.

CLASS GAMES.

With the object of exciting still more interest in foot-ball, and of finding out who the best players of the school were, Capt. White offered a set of silk badges to be played for by the class elevens. The first game of the series was played on Bliss' Field, Oct. 23, at 4.30 P. M., between the Seniors and Middlers, and, as was expected, turned out to be very exciting. Members of the Institute eleven were barred out from playing, but they did not hesitate to coach their favorites at every opportunity.

On the whole '89 played the best game, keeping the ball in '90's territory nearly all the time, but lost the game eventually with a score of 4—0. Both teams played with a snap and desperation worthy of veterans, being inspired to do so by the cheers of their classmates and the yells of their valiant captains. Hadley, '89, did the most brilliant work, perhaps. The teams were as follows: '89, Marshall, Bean, Sawyer, Desper (centre), Putnam, Houghton and Kimball rushers; Southgate (capt.), quarter-back; Hartwell and Sessions, half-backs; Hadley, full-back. '90, Larcher, Cook, Frary, Reinbold (centre), Fitts, Smith and Allard, rushers; Treadway, quarter-back; Barnard and Rockwell, half-backs; Morgan (capt.), full-back.
The second game in the inter-class series was played immediately after the "Aggie" game, and was between '90 and '91. As Fish, '91, was not present, '90 agreed to play with but ten men.

Twenty-minute halves were played, with no intermission. Patterson acted as referee. '90 won the game, and thus the class championship, by the score of 16 to 0. '91 showed a decided lack of knowledge of the game, and was especially weak in the rush line. The best playing was done by Rockwell, '90, who made a number of good rushes. The teams were as follows:

'90.—Rockwell and Barnard, backs; C. F. Treadway, quarter; Larcher, Smith, Frary, Reinbold, Fitts, Cook, Allard, rushers.

'91.—Taylor and Dadmun, backs; Fiske, quarter; Whittaker, Barton, Hyde, Sprague, Alderman, Rice, Whitemore, rushers.

Y. M. C. A. FIELD SPORTS.

A VERY successful field-meeting of the Y. M. C. A. gymnasium was held at the Park, Oct. 20, members of the Tech., Academy, and High School participating in it and sharing the honors. The records made were very good in general, the sports were admirably managed, and the spectators were numerous and appreciative. Of the sixteen first prizes the Techs carried away 7, the High School 5, the Academy 1, while 3 were taken by members of the gymnasium who belong to no school.

As was expected Dadmun, '91, won the championship cup by taking 4 firsts and 3 seconds. He did remarkably well in the dashes, breaking the intercollegiate records in the 100 yds. and 220 yds. handicaps, his time being 10\frac{3}{4} and 23\frac{1}{4} seconds respectively. The other Techs who got first prizes were Fay, '91, who threw the hammer 58' 6"; Desper, '89, who put the shot 27' 10\frac{1}{4}"; and Marshall, '89, who vaulted 8' 8". The prizes were gold and silver medals.

NOVELS AND NOVEL READING.

FICTITIOUS writing has been indulged in to a greater or less extent ever since writing was invented, but that class of fiction which is distinct from both romance and allegory, and known as the novel, has been developed more by the English-speaking people than by any other.

Though some would go back only as far as Defoe to find our first novel, we may with truth say that Robert Greene was the originator, though his works are very crude as compared with later writings. Greene began to write in 1588, and was followed by no other writer worth mentioning, till a century later when Defoe began to address the world, rendering himself immortal by his Robinson Crusoe.

Richardson came next, and made a great impression by his "Pamela," and "Sir Charles Grandison," but Fielding and Smollett soon drew the attention by several productions, which, though they must have been sought at that time, are now valuable alone for the reflections of the life of the period.

The next early writer who has not been forgotten, being, perhaps, remembered rather for his poetry than for his fiction is the author of the "Vicar of Wakefield," in which appeared "Doctor
Primrose,” of whom almost every one has read or heard.

With the dawn of the nineteenth century the greatest of historical novelists, the great “Unknown,” began to attract attention, first by his poetry and later by his matchless novels. He made a standard with which few other works of that class can be favorably compared, and perfected an art in which he stands unexcelled. Who has not read Kenilworth or Ivanhoe?

The nineteenth century has been prolific in the production of great novelists. Indeed, the middle of this century may be said to be the time when novel-writing reached its highest and best development; and that since then the art has been waning. Kingsley, Charlotte Bronté, Thackeray, Dickens, Bulwer Lytton and George Eliot have departed, and who has or can fill their places? The novelists of America are Legion and their productions, as the sands of the seashore; but in this great swarm only a few stand aloft and they cannot be compared with their masters.

Novel reading has assumed startling proportions and no cure has been found for the affection. A certain number of novels should be interspersed with the other books we read, but they should not be the majority, by far. The reports from our libraries show that more novels than any other books are read, and in many instances more books of that class are read than of all the other classes of literature combined. And the greater part of these novels are extremely light or sensational, which not only give false ideas of life, but arouse a morbid sentiment and destroy the taste for better reading. There was a time when views about novel reading were too rigid, and that may have been the cause of the reaction when the ban was removed from them, to the present condition. We are now brought up from childhood to read fiction in one form or another, and it may be hard for some to give up that kind of brain nourishment, though most people revolt from it when old and educated enough to look at it reasonably. As a means of wasting time, it is a great success, being, therefore, much in vogue at summer resorts, and the manufacture of light summer novels, warranted not to leave any ideas in the mind, has become one of our largest industries. One of our popular writers says, “What a blessed thing it is, that Nature, when she invented, manufactured and patented her authors, contrived to make critics out of the chips that were left!” It would appear as if some of these chips, of not sufficient size to make critics, were cemented together to make some of the writers of the present day, who seem to have no other object in view than the money they are to receive for their rapid productions. They depend almost wholly on their readers’ curiosity for keeping up interest, because they cannot portray character, nor bring in descriptions of merit. Their best work is done with an eraser, and they would confer a benefit on mankind if they would test their writings with fire.

Statistics show that there is a steady diminution in the percentage of fiction called for at our large college libraries. This is a healthful sign and indicates that reform has begun where it should—
at the centres of education and learning. Some novel reading is necessary for the symmetrical development of the mind, but let it be the right proportion of our reading, of the best, and taken with discretion.

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STRENGTH.

ON the evening of October 29, Wm. Blaikie, Esq., of New York, delivered his popular lecture on "How to Get Strong." As Techs are quite enthusiastic on the subject of strength many were in attendance.

The speaker began by the comparison of the American of to-day with the American of sixty years ago, and gave his reason for believing that the man of to-day is not physically what the man of sixty years ago was. Then, about eighty per cent. were engaged in tilling the soil, most of the work being done by hand; now, scarcely forty-five per cent. are engaged in the same occupation, and very little of the hard labor is done by hand. We can thus easily see that a very large number of our population has forsaken the industry which produces muscle for those which are better in a financial point of view. Measurements taken in England of several thousand factory hands, and the same number of young men in various schools and colleges, showed that the latter were larger and even taller than the former, which was attributed to the fact that they paid some attention to athletics.

Take some of America's leading statesmen; were they men with feeble bodies? Let us examine. Daniel Webster was a man of extraordinary physical development. Charles Sumner was a man of fine proportions, six feet two in height, and the finest boxer in Harvard College. George Washington was more than six feet in height, and had a chest which measured forty-six inches. His record in the running broad jump (twenty-three feet) has not been surpassed until the present year. Did his physical strength bring him down to degradation? Was Sumner any the less keen in his intellect for being an expert boxer?

In foreign countries we find the same to be true. Bismarck, the greatest of living statesmen, is six feet two in height and weighed one hundred and eighty pounds in his younger days. He has been through between twenty and thirty duels, which is a sure evidence of power. Napoleon, though short in stature, was built for strength, being exceptionally strong in the legs.

"Who is the greatest American inventor living? Thomas A. Edison; old at forty-five and deaf. With upwards of four hundred patents in the Patent Office, and plenty of money, he has not the means to enjoy them. And who is the next greatest American inventor living? John Ericsson; young at eighty-five. * * * * He has found time to spend at least one hour each day in physical exercise. Don't you think it has paid him? * * * * The man who is trained mentally and morally, but not physically, is a cripple."

Mr. Blaikie next spoke of some of the world's famous athletes and gave the following dimensions, with which the body attains its best development, viz.: chest three-fifths, waist one-half, thigh
one-third, calf, biceps and neck each one-fifth of height. Long distance running he recommended as one of the best of exercises, twelve miles being the distance a young man should cover each week. He denounced being a mere athlete, but expressed himself in favor of every person being athletic, claiming that this physical culture put us in better condition to confront the difficulties which cross our paths of life.

At the close of the address medals were presented to the winners in the Y. M. C. A. Field Sports which were held October 20. The handsome silver cup, given by Mr. Blaikie, was won by our fellow-student, H. L. Dadmun; this cup is to become the property of the contestant winning it at three consecutive meetings. Many a Tech had the pleasure of leaving the evening’s entertainment with a medal pinned on his breast.

WE publish below a circular which reached us just after our October number had gone to press. The circular will fully explain itself. We hope that the Collegian may have the support which it deserves among our students, and that it may receive a welcome from some of them on its first appearance:

Editors “W P I.”

DEAR SIRS:

In the first convention of the New England Intercollegiate Press Association, held February 22, 1887, the feasibility of an established magazine, to be recognized as the official organ of the body, was extensively discussed. The idea as a project was finally abandoned.

After the lapse of a year or more the principle has come to activity again, but in a modified aspect. The ground work is now under way, upon which a periodical will take its place to be known as the “Collegian”; not the mere representative of the N. E. I. P. A., but of the American undergraduate.

Through your pages we beg to lay before him, whose support and endorsement we claim, the following tenets for his immediate consideration:

a. The American college man is capable of excellent work, for the coming literary power of the country is germinant in him.

b. The first springs of this power should and must have perceptible manifestation. The “Collegian” makes it a prime motive to introduce young talent to the world of literatecurs.

c. As a magazine, nothing will come to print except the productions of undergraduates.

You will see that the aim is the staunch support of any student heartily desiring prominence in literary endeavor, and this support will be given if his work justifies approbation.

The “Collegian” will resemble “Lippincott’s” in size and general make-up, and its contents will be much as follows:

One special paper, - 10 or 12 pages.
Two Prize Stories, each - 10 pages.
Two Prize Essays, each - 10 pages.
Two Prize Poems, each - 1 page.
Editorial Columns, - 6 pages.
Rostrum, - 6 pages.
Preparatory School Department, - 15 pages.
Eclectic and Chronological Departments, - 15 pages.
Athletic, - 10 pages.
Book Review, - 10 pages.

To give a few words in explanation; the “Rostrum” is to consist of the compilation of the best articles upon a given topic, editorial or otherwise, appearing during a month’s time in the pages of our college press. These several best views will be reprinted in this department of the “Collegian,” with a few appended considerations of the “Sanctum.” This will, we hope, prove a means to induce editorial excellence, and the offer of a liberal prize cannot fail to enhance the zeal of the competition.

The foreign correspondence has for its chief merit the opening up of constantly oc-
 curring new ideas and incentives to the American undergraduate having in prospect a term of study abroad. This department will be made as interesting as able co-workers can make it.

The Eclectic and Chronological pages keep willing space for all truly meritorious productions coming to the surface in "monthly," "bi-weekly," "weekly" and "daily," besides maintaining a constant record of events. In other words, we "clip" and "credit."

The Athletic and Book Review departments explain themselves. Now, as to our scale of Prizes:

For the best Essay, any subject, 6,000 words limit, ..... $50.00
For the best Story, any plot whatever, 6,000 words limit, ..... 50.00
For the best Poem, 40 lines limit, ..... 15.00
For the second best Essay, 6,000 words limit, ..... 25.00
For the second best Story, 6,000 words limit, ..... 25.00
For the second best Poem, 40 lines limit, ..... 10.00
For the best Editorial under "Rostrum," ..... 25.00
First topic for "Rostrum"—'Will the 'Collegian' interfere with the individual work of the College Press?'

Our subscription price is fixed at $3.00 per annum, and twelve numbers will be printed, the first appearing in December '88, as the January number—provided a subscription list sufficient to guarantee publication be obtained prior to December 1; if not, then delay must ensue, but the "Collegian" is a mere question of time, and is a fact of the near future. Articles and contributions for this number will be due on or before November 1, 1888, at the address given below. Contributors must sign full name, class and college.

We trust, in closing, that we are to have your heartiest co-operation, and expect to unite with you as friends of long standing.

"THE COLLEGIAN,"
Samuel Abbott,
Wakefield,
Chairman Editorial Board.

NOT always actions show the man: we find
Who does a kindness, is not therefore
kind."

THE TURKEY'S FATE.

AT midnight on the henhouse roost
The turkey dreamed of that sad hour
When Jeremiah slew the goose
Last year with bloody power.
In dreams he gobbled all about,
In dreams he strutted in and out,
His drumsticks rattled in his dreams,
His neck grew red with sunset beams,
He felt like all possessed.

An hour passed on—the turkey woke—
That dread dream was his last!
He woke to hear Jeremiah say
"To-morrow is Thanksgiving day;
The fattest turkey we can find
We'll take and leave the rest behind."
He woke to die—a gurgling note
Was uttered from his purple throat,
A note of agony:

"Oh, Jerry, Jerry, Jerry miah,
You're goin' to thrust me in the fire,
My wish-bone you're a goin' to split,
Then turn me round an iron spit;
You may say nay! but I say yes,
For gobble-te-gobble correctly will guess."
But ah, a yell! pell-mell he fell,
By Jerry's stick directed well,
For Jerry was a whopper.

His father stood outside the gate
To learn the hen's impending fate,
And shivery (for 'twas very late)
He cried exultingly:
"Strike till the last old hen expires!
Strike ducks and geese, both sons and sires;
Strike lights and kindle all the fires;
Thanksgiving's coming. Strike!"

THERE is a fresh class at the Tech,
You can tell it by means of its neck,
Without paying a $;
They get up and holla
We all want to vote without check.

A MAIDEN sat in the gallery high,
One summer night in Music Hall;
And brave Apollo stood close by,
Proud in a niche within the wall.
She turned and gazed on the lovely god,
And eyed his lovely limbs askance,
Then said in tones a trifle odd:
"Excuse me, sir, do you wear pants?"
—Boston Herald.
Lithium is the lightest metal known and is worth $160 per ounce. Gallium is the costliest metal known and is worth $3,250 per ounce.

It is claimed that about 1,000 years ago the Japanese knew of the existence of petroleum and natural gas, but have only recently found out how to use them.

The number of students in attendance at the twenty-one universities of the German Empire last winter was not far from 28,500. Of these one-half were about equally divided between theology and law, and the other half divided between medicine and general education in the proportion, nearly, of three to four.

A Frenchman, M. De Mongelas, has recently devised a new method for the production of magnesium by electrolysis. The electrolyte employed is a mixture of concentrated solutions of magnesium and zinc chlorides, and an alloy of the two metals is deposited. This deposit is washed, dried, crushed, and finally melted in a crucible containing common salt. The zinc volatilizes and leaves pure magnesium.

A huge hydraulic elevator, capable of raising 1,100 tons has been designed for use as a lock on a Belgian canal. The cylinder is 6' 6¾" in diameter, 2.95" thick and 50' 6¾" long.

Two French engineers have projected to build for the Paris Exhibition a large terrestrial globe of forty metres circumference; that is at the scale of one millionth. This globe is to be supported on a strong column, on which it will rotate, describing a whole turn in twenty-four hours; and circular galleries around it will allow of an easy inspection.

There is as Prof. S. P. Thompson remarks, no assignable "velocity of electricity," as this must vary with the current and conductor. Wheatstone, in 1833, seemed to show a transmission velocity of 183,000 miles a second through copper wire; but in late experiments signals were sent over ordinary telegraph wire on poles, and had a rate of only 14,000 to 16,000 miles. With wires near the earth, the velocity was 12,000 miles but reached 24,000 on very high wire.

A large number of experiments have been made at the University of Liège to determine the effect of compression on various metals. Under a pressure of 13 tons to the square inch lead in the form of filings became compressed into a solid block, in which it is impossible to detect the slightest vestige of the original grains; while under a pressure of 33 tons lead no longer resists the pressure, but flows as if it were a liquid.

By other experiments it was found that tin united at 19 tons; zinc at 38 tons; and copper at 33 tons; while tin was made to flow at 47 tons.

A French observer declares that bees will not settle on anything flavored with saccharine, and that even the common house fly evinces a decided aversion to liquids sweetened with it.

According to Johann Faber, the famous manufacturer of Nuremburg, the people of the United States use, in round numbers, about a hundred million lead-pencils every year.

The new Argentine Pacific Railroad from Buenos Ayres to the foot of the Andes has on it what is probably the longest tangent in the world. This is two hundred and eleven miles without a curve. In this distance there is not a single bridge, and no opening larger than an ordinary culvert, no cut greater than one yard in depth, and no fill of a height exceeding one yard.

Experiments have recently been made on Prussian railways with axle boxes fitted with bearings of vegetable parch-
ment in place of brass. The parchment is strongly compressed before being used, and is thoroughly dried to prevent subsequent shrinkage. An emulsion of water and oil is used as lubricant. The parchment soon becomes impregnated with oil, and is able to go a long time without a renewal of lubrication. The claim is made that the compressed paper bearings make a tough material that is superior to metal.

Electricity is used in a most successful manner for tempering watch springs and other forms of spring steel, whether in the form of ribbon or of wire. The steel is wound upon a spool, from whence it passes down through a bath of oil. The wire is made a conductor in an electric circuit carrying sufficient current to maintain the wire at a proper degree of redness to answer the desired requirements of temper. It is a very successful process, as the heating is done entirely beneath the surface of the oil and is not followed by the blisters consequent to heating in air. The final temper is drawn in a similar manner. The process can be controlled to a nicety, both as to the exact temper desired and its uniformity throughout the wire.

**College News.**

There are 178 American students in the University of Berlin.

The average expense of the class of '88 at Yale, was $1,000 yearly.

There are four divisions of mechanical engineers in the class of '91 at the Massachusetts Tech.

Dartmouth's left guard, Abbot, broke his leg in a practice game recently.

Of 214 students at Wesleyan 160 attend the Methodist Church.

Nine of the Williams foot-ball eleven played on the same team last year.

Cornell is soon to have a new building devoted to the department of civil engineering. Over 300 students are taking that course there at present.

The oldest college periodical and the oldest monthly of any kind in America is the Yale Literary Magazine. Wm. M. Evarts was one of five students who started it fifty years ago.—*Ex.*

Stagg, the well-known Yale pitcher, is playing end rush on the Varsity eleven this fall.

Rutgers draws $15,000 annually from the government to be used in scientific research and experiment.

During the past five years, the number of instructors at Cornell has been increased from 51 to 84 and the number of students from 461 to 1,200.

From the estate of the late Henry Winkley, of Philadelphia, $50,000 will go to Williams College, $30,000 to Amherst, $20,000 to Dartmouth, $20,000 to Phillips Exeter, $25,000 to Bangor Theological Seminary, and $20,000 to Andover.

At Amherst general attendance is required at a class of physical culture, four times each week.

Cornell students propose to raise $2,000 for the support of an eight-oared crew.

Ninety-two of Yale's graduates have become college presidents.

Harvard Medical School has a membership of 274.

Yale has won 117 out of 162 games of base ball, and 82 out of 87 played in foot ball.

"Cowan, who is running half-back (Princeton) is probably the strongest half-back in the country."—*Wesleyan Argus.*

Dr. G. Stanley Hall who has been chosen President of the Clark University is a graduate of Williams College.

Daniel Webster was the editor and
Education is now compulsory in Japan. There are in that country at present 3,000,000 school children between the ages of six and fourteen, 8,800 pupils in technical schools, and the leading college, the University of Tokio, accommodates 1,800 students, and has a faculty numbering 194. The course of study in this university is similar to that of the larger American colleges, and covers five years; its preparatory course includes English, mathematics, physics, political economy, etc., three years being spent in the preparatory schools.

The course in journalism just opened at Cornell is to receive only postgraduates and those men of the upper classes who are editors of the college papers. The class will be organized like the staff of city papers with the professor as managing editor and the students as reporters. Each will be assigned his portion of the work and the reports edited in the class-room.

The Williams Weekly clips, from the Cornell Sun, the following extract of an interview with one of Rutgers' older graduates, which will bear reprinting again:—

"We used to have to pay taxes when I was in college and since the Revolutionary war decided that taxation was a license for representation we used to vote. The good people down on the Raritan once decided that Rutgers men should have to pay a heavy poll tax. The boys held a meeting and resolved to vote at the coming election, if the officers insisted on the collection of the tax. Things took that course, the boys put a ticket in the field and they elected it from alpha to omega. The town council chamber was converted into a club-room, and a council meeting was held nightly. The town was bonded for $50,000, in order to build a walk from the college to the post-office, which still is a model of the mason's art, being of polished granite. The students had no trouble after that, and some people in New Brunswick to-day will tell you it was the best thing that ever occurred for the welfare of the village."

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founder of the Dartmouth Gazette, the first college paper in America.


At a meeting held recently, Dartmouth raised over $700 for the support of her foot-ball eleven.

It is the custom at Amherst each season to present a barrel of cider to the class winning the most events field-day.

Johns Hopkins has 440 students; a gain of 200 since last year.

The Yale Field Association is still in debt to the amount of $13,000 although this is a reduction of $8,000 in fifteen months.

The political parties at Illinois College are represented by base-ball nines.

The University of Wisconsin has been presented with a gymnasium and boat house costing $75,000.

Williamson of the Chicago's has thrown a ball 133 yards and 11 inches.

The following is an extract from the by-laws of Harvard in vogue in 1743:

"Sec. 18.—No undergraduate shall keep brandy, rum, or any other distilled spirits or liquors by him, without leave from the president or one of the tutors; and whosoever shall transgress this law shall have the said liquor taken from him, if found with him, and disposed of by the president and tutors."—Williams Weekly.

The Stanford University of California has ordered from Clark & Sons, Cambridge, Mass., a lens for their new telescope, which is to be forty inches in diameter. This will be six inches wider than the lens of the famous Lick telescope, making it the largest lens in the world.—Ex.

Bliss,' 92, was quite seriously burned by the ignition of matches in his pocket, which set fire to his clothing.—Undergraduate.

Moral: Freshmen should never play with matches.
Exchanges.

We are feeling decidedly unpleasant to-day on account of the weather of the past few weeks, and for several other reasons in which the public will not so generally sympathize, and anyone who has been in the position himself will agree that it is not particularly cheering to wade through a pile of sixty or more college journals, each arriving at precisely the same end; the most prominent feature to distinguish one from another being the variegated covers that enclose them and the curious inscriptions thereon.

While we are speaking about covers we can have no better time to say something we have been wanting to say on this subject: If the Pennsylvania, the Geneva Cabinet and the Niagara Index should mix a few of their own issues with their heap of exchanges and then come upon them unawares we trust the effect would be alarming. The Index is particularly repulsive, its front page being crowded with eleven advertisements set forth in over twenty different styles of type.

The Index also conducts an exchange column which no doubt may contain some very interesting and instructive criticisms; perchance something about the WPI, but alas! it is set in such exceedingly small and indistinct type that we really cannot afford to abuse our eyes in reading that which might after all profit us nothing. If the Index has published anything lately which they desire us to read they would do well to send us a note telling where to look for it, and thus save our time and patience. Inclose stamp for reply and we will gladly give our private opinion of the effort. But this has led us so far from the external appearance of our exchanges that we shall not attempt to go back although we see plenty of chance for reform in many cases we have not mentioned. To proceed then, let us open some of our treasures and take a look at the editorials, which of course properly come first.

Most of the exchanges at present on our table are the first numbers of the season, and commence with a little bow by the new editors, which is generally very pretty and amounts to about the same in each case, of course we will "excuse their inexperience," of course they "mean to do their best to please us" and of course they are "really very much obliged for the honor thrust upon them." The editors of the University Cynic are evidently ambitious of gaining a greater notoriety than college journalism can give. They commence the October number with an exhaustive editorial on the political outlook for the fall of '88. Could Grover Cleveland and his friends have read this article they would no doubt have been greatly disturbed; but it is more than probable that they never heard of it, nor even of the Cynic and its remarkable editors. The other editorial article in their paper, for there were but two, was in praise of a certain biography, which we are led to believe the writer is interested in advertising. If the same space had been devoted to something of local interest to their college, it might have been more acceptable to the subscribers and would certainly have given outsiders a better opinion of the university. We would not have the Cynic think for an instant that we consider theirs an isolated case. This advice would apply to a greater part of our exchanges, viz.: Leave the great questions of the nation to greater and more experienced minds; forget yourselves and strive only for the good of your college and your readers.

Excuse us for getting so wrought up, we will try now and quiet down again,—but it can't be done for the very next thing we pick up is a copy of the Westminster Review that sets us raving again. From the appearance of the exchange column we should give its edi-
tor credit for knowing about as little about his business as he does about several other things that he mentions. Here is a sample of his work:

"The Eastern college journal is filled with fictitious literature, while the Western makes a specialty of science and philosophy. The Eastern college is filled with ball clubs, boat-riding clubs, etc., while the Western deals with students. This is the cause of the great call which is now coming from the East for Western college men."

We could receive this with better grace did it not come from one who has never had the least experience in journalistic work; still there is no need for us to answer this article since he commits himself in the same column by saying:

"No exchanges have reached us yet, so we shall have to content ourselves for the present with simply rubbing our eyes and bidding our contemporaries good morning."

Since he had received no exchanges his information must have come from some other source; perhaps he asked one of his maiden aunts. The scientific (?) articles in the Review are not such as would cause envy to burn in the soul of an Eastern journalist, and the poem entitled "The Senior's Lament," by "One of Them," would have brought tears of shame to an Eastern high-school boy. We wonder if the writer, who seems in hopes of graduating soon, has received many calls from the East. If the Review man could examine the Williams Weekly, The Dartmouth and several others of our Eastern exchanges that lie beside the Review on our table he might find ground for a profitable study in college journalism which he sorely needs before he be turned loose again on the public.

At last we come to something as sweetly smiling as its editors themselves; bearing the title Lasell Leaves. Dear girls, what a sweet way they have of introducing themselves; so interesting and yet so unassuming. They even tell about rainy weather at Lasell in such a charming manner that the sun shines out in spite of the clouds, but there is one line that particularly attracts our attention. It is this: "We learn in political economy that 'man is a lazy animal'; we also have heard that 'man embraces woman.' Of course we must agree with them that man is at times a lazy animal; also that man during leisure moments may at times embrace woman, that is, when woman is pretty and gives man the chance; but these two facts should never be mentioned simultaneously, for if there is any point where man is never lazy it is in the power he has of embracing woman. Come now, girls, you know very well that if man has proven himself lazy in your company it has been wholly your own fault.

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Athletic Notes.


Graves, Yale, '92, brother of Graves, '91, has been asked by Capt. Corbin to try for a place on the Varsity eleven, where he will probably play thereafter.

The president of St. Paul's, at Concord, has positively forbidden base ball from being played there. Cricket is the school game.

Sherrill, the Yale sprinter, who was injured at the Detroit athletic meeting, will not run again till next spring.

Vic. Harding sprained his wrist in the game here, Oct. 6, and could not play again till our other game, Oct. 27. Finlay, one of Harvard's rushers, twisted his knee badly Oct. 23, as did Dexter Oct. 27. Carpenter, who plays on Harvard's second eleven, dislocated his shoulder in the game with Exeter, Oct. 23. Next!

In the class boat races at Harvard, Oct. 26, the seniors won by about a
length, '90 being second, and '92 third. '91 was practically out of the race as her crew broke an outrigger before the race, and had to row with only six men. The freshmen did unusually well.

Out of fifty foot-ball games in the last six years Yale has won forty-nine, scoring 2,838 points to her opponents 47. This includes four games with Harvard and five with Princeton. The highest number of points scored in any one game by opponents was 14 in 1884.

Williams has a very strong eleven this year, scoring six points to Harvard's fourteen Oct. 24, and keeping Yale down to thirty points, Oct. 20 Geo. Kimball, formerly of '89, plays quarter-back on the team, and is the captain.

The committee governing athletics at Harvard College has refused to allow the Harvard-Yale championship foot-ball game to be played in New York. The game was to have been played on Thanksgiving Day. It will probably be played either in Cambridge or upon the Boston base-ball grounds.

Hathaway, '89, was quite badly injured while practicing previous to the Harvard Freshman game. He has been confined several weeks.

Mr. Higgins recently delivered an address before the trustees of the school at Atlanta.

T. L. Grimes, who has been Mr. Badger's assistant for the past two years, has gone to Atlanta to act as instructor in wood work.

Mr. Walls left for Cleveland last Monday to set up the elevators sent there for the American Wire Co.

**Personals.**

Edwards, '83, paid the Tech a visit not long ago.

Priest, '84, was in the city recently.

Chittenden, '88, is studying at Harvard.

Speirs, '88, is taking a course at Johns Hopkins.

Smith, '88, is in the employ of the Rhode Island Locomotive Works.

George, formerly of '89, has joined the class of '90 at Harvard.

Holdsworth, '88, is draughting for the Rhode Island Locomotive Works.

Boyden, '87, is taking a special course in mechanical engineering.

Chemists! Take heed!
geology, which will not be taken up till next half.

The Juniors beat the High School at foot-ball on October 31, score 97-0. Fish of the Junior team did splendid work in rushing and warding.

Out of a vote of 119 cast at the Tech last week, Harrison received 91, Cleveland 23, Fisk 4, while there was 1 ballot with no choice of candidate.

Wm. H. Jourdan's men delivered at the shop last week a shed full of work for the Middlers and Juniors.

The common greeting at the Tech now: "Come in and have some cider."

Three speed lathes, two jig saws, a 3½" grinder and a lot of hand tools were shipped to Washington last week from the shop.

Several members of the football team brought back souvenirs of the last Harvard game, from Cambridge. A longitudinal section of one of them had this equation: 

\[ a^2 y^2 + b^2 x^3 = a^3 b^3. \]

A person high in authority at the shop was seen to attempt the feat of driving a horse, which was hitched to a post.

The students' enthusiasm and singleness of purpose is shown by the fact that the tree full of apples at the foot of Tech hill has been unmolested. Probably the apples are not of the first quality.

We have some peculiar dreamers at the Tech. One of them, in a sleeping mind drama, thought himself transported to a recitation in Chemistry. The professor asked of him the atomic weight of German. He answered that it was eighteen, but was rather startled when the professor said that it was only eight. Several students, if their opinion was asked, would say that this was rather high.

The lecture before the middle class on punctuality in business, becomes signifi-

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A MISS is as good as a mile,
A kiss is as good as a smile,
But four painted kings
Are the beautiful things
That are good for the other man's pile.

—Hallowell Classical.

They were sitting on the back porch, and the gentle night wind moaned and sighed through the apple-branches overhead.

Ella (shuddering)—"How the trees sigh and groan!"

Bobby (speaking from experience)—

"I guess you'd sigh and groan if you were as full of green apples as they be."

—Ex.

Editor of Texas Siftings:—In going down-stairs is it etiquette to precede or follow a young lady?—X. Y.

Answer:—You should follow the lady, but in the case of the young lady's father it is sometimes better to keep pretty well in advance.
DAVIS & COMPANY,
286 MAIN STREET, 286
—DEALERS IN—

Fine : Ready-Made : Clothing,
Stylish Garments for Young Men a Specialty.

Those who prefer garments made to measure will find us prepared at all times to show seasonable goods of all grades and prices.


DAVIS & CO. Opposite Bay State House.

C. E. NEALE,
—DEALER IN—

Drawing Instruments and Machinists' Tools.
SPECIAL PRICES TO W. P. I. STUDENTS.
171 Main Street, WORCESTER.

N. B.—ALTENEDER, and KEUFFELL & ESSER Instruments a specialty.

BIGELOW & LONGLEY,
CORNER MAIN AND ELM STREETS,
Fall of 1888.

Each season shows a marked advance in the quality and style of

Young Men's Ready-Made Garments.

A few years ago the best efforts of the manufacturers were devoted to Men's Garments, but to-day Young Men and Boys are receiving equally exacting care. We have to-day

THE NOBBIEST SUITS

For Young Gentlemen to be found anywhere. These goods are made to our special order and cannot be told from custom made.

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