The WPI Volume 6 Issue 10, March 1891

Students of Worcester Technical institute
CONTENTS.

Editorials ........................................ 225 | A Pressing Need ................................. 240
Graphical History of the Tech .................. 228 | Scientific Scraps ............................... 240
Solon Bartlett .................................... 230 | College Clippings ............................. 240
In Memoriam ...................................... 280 | Y. M. C. A ........................................ 241
Francis C. Blake .................................. 232 | Camera Club ..................................... 241
A Defence of Base Ball ............................. 234 | Sanitary Engineers' Club ....................... 241
New Apparatus .................................... 235 | Personals ......................................... 241
Another Death Blow ............................... 236 | The School Pin ................................... 242
Topics Athletic .................................... 237 | Technicalities .................................... 243

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Death has again come between us and those whom we respected and honored. It would seem almost as if they were chosen because they were so well prepared to shine in a purer light. Certainly it is not for us who remain, to chide or question, when two such noble characters as Solon Bartlett and Francis Blake are suddenly taken from our ranks. It seems incredible to us that anyone acquainted with the lives of these men, should believe for a moment that death can do more than to hide them from their friends for a season. In life they cultivated those traits of character that lead to strong, noble manhood, and we who remain are fortunate in the security of our belief that such nobility is not developed, only to be utterly annihilated in death.

The present number of the W P I makes Volume VI. a finished product—that is to say, finished in the sense that the requisite number of monthly issues has been evolved.

Now that the time has come for us to fold the editorial wings with which we have been soaring so high for some months, we are honestly sorry to stop flying. Whatever else may be said of our product, it cannot be thrown in our teeth that we have ever tried to give anyone a well deserved stroke, and save our own heads at the same time, by the use of ambiguous English. Whatever we have wanted to say has been said in as unmistakable language as we could construct, and our failures have been the result of lack of ability rather than the result of indifferent effort.

We had planned the usual elaborate and artistic retiring editor’s address for this number, but more important matter in the news columns, has caused us to postpone the pyrotechnics. It would be an injustice to complete our farewell, however, without thanking our associates on the paper for their royal service. The W P I might not be a howling success without an editor-in-chief, but it would be a miserable failure if the lion’s share of the work were not done by the associate editors. If we have had one purpose more definite than another, it has been to publish an honest and manly journal, but it is to
the credit of our associates and outside contributors, if any success has attended our endeavor.

We call attention to "A Defence of Base-Ball" in another column, because it is in direct opposition to the opinion of many students regarding our athletic policy for this spring. The opponents to school action in base-ball take the position outlined in a communication in the WPI for February, signed "Foot-Ball Crank." This school ought to make and maintain a reputation for being able to play one game well. A revival of foot-ball is apparently our only hope. This matter ought therefore, to receive immediate and intelligent consideration. If it is to be base-ball, let us follow the advice of our correspondent,—if foot-ball, there is no better plan to follow than that adopted at Harvard. We learn from a recent periodical that Harvard’s team for next fall has already been chosen, and has begun practice in the gymnasium. We will begin probably about the last of next September, and then wonder why we can't beat the Academy boys.

Could not the ideas of "Crank" be carried still farther? Suppose instead, as he says, of doing anything with baseball this spring, we should give our whole attention to foot-ball; suppose the men in the school who know nothing of the game, and have never become interested, should be drawn into it; suppose each class should have an eleven this spring, and a series of class games be held similar to the base-ball contests of heretofore;—then at least eleven men in each class would know something of the game; class feeling would be aroused, and secondary elevens would be made up to give the class teams practice. Then the whole Institute would become interested and enthusiastic; a school team would be easily supported and maintained, and the Tech might gain for itself once more a name. This is a small school comparatively, and in these days of specialties and specialists, it behooves us, not to endeavor to dabble in too many things, but make a success of what we do undertake. In times past we had a considerable reputation as foot-ball men. Would it not be better to all try now and retrieve this reputation from the disgraces of last year, than to expend our strength on so many lines of athletics, that we fail to make a respectable showing in any?

A large per cent. of the students here, know almost nothing of the game; a larger per cent. think they know something of it, while but a very few are even experts in theory, to say nothing of practice. Add to the first two classes the chronic grumblers, and you come pretty near to a solution of the reason why our team amounted to nothing last fall; it lacked the support of the school, and the strength which an atmosphere of enthusiasm and interest imparts.

The Prep has been to the Musee! Every Prep class goes to the Musee as a means of introducing itself to Worcester people, but this is a progressive class, and couldn't wait for a good entertainment. The posters indicated that the women in the company had been stranded somewhere and had been obliged to pawn their garments. This didn’t trouble
The Preps any. They bought up four tiers in the bald-headed area, some going as early as half-past five in the afternoon. The usual eight-jointed telescope and big bouquet with string attachment formed a part of the display. The latter, of course, gave one of the comedians an opportunity to remark that there was a cabbage-head at the other end of the string. Some of the men who graduated back in the seventies will possibly remember having the same joke sprung on them.

The class escaped arrest on account of its tender years. It will do well to think twice, however, before it carries such things too far. Spy-glasses in the front row and bouquets with long black strings attached are jokes that are too old to be appreciated, even in such an innocent town as Worcester.

From a student's point of view, it is inconceivable how the Faculty Committee on athletics could fail to act favorably on our recent petition. We cannot imagine a more reasonable request, nor one that would bring more benefit to the school as a whole, if granted, than that described in an article in this issue entitled, "Another Death Blow."

The boys here seem not to be credited with having the interests of the school at heart, or if credited with such interest in the school's welfare, are evidently considered incapable of good judgment regarding those interests. This leads us to say that our ability to run the school better than it is run at present might be questioned with reason—we will reserve our opinion on that point—but it does seem clear that our co-opera-

tion with the Faculty in the discussion of certain questions of mutual concern, might be helpful in many cases. This is certainly true of athletics if it does not apply in any other phase of our school government. Many of the colleges about us have recognized this fact and are managing their interests regarding athletics in a reasonable manner. We hope in time, although we do not much expect it, to see this school assume a progressive attitude in this one respect, in some proportion to its growth and consequent prestige in other respects.

No stars in the catalogue this year! Better times are coming, surely. It is an open secret that the starring of names in the last catalogue did not produce the magnificent results, whatever they were, that were expected. The W P I does not claim that its vigorous kick over a repetition of the dose has had the slightest weight in securing the change, but we are very glad, nevertheless, to be on the winning side.

There is one other excrescence here that ought to go up, along with the stars. We refer to the noisome, unsightly barn behind the shop that harbors the shop steeds. We remember well the old saffron horse that the boys left in chapel one night. It was said then that the horse started out to be a real horse but that it turned into a cheese-colored nightmare the first time it was put into the barn. That was years since, and the barn seems not to improve with age. We suggest to our successors that they make this barn the object of particular attention until the unsightly relic is relieved from further service.
The proposed gift of a plant by Mr. H. H. Bigelow to be used as an Artisans' Training School collaterally with the Washburn Shops of the Institute, has aroused vigorous, though fair minded, discussion as to its expediency.

The methods by which this school would co-operate with the Washburn Shops appear as yet undetermined, except that it will in no sense form a part of the Institute, any more than the Summer Schools which have been so successful the past few years.

The aim of this article is: to present graphically the past history of the Institute; to show the importance of, and demand for, mechanical training; and to emphasize the desirability of co-operation with any reasonable plan for its extension.

As a graduate of the Mechanical Engineering Department of this Institute, with eight years active and varied experience in engineering work, during which I have in no small degree been made to feel the demands placed upon members of the profession, I feel amply justified in urging the existing need for just such men as this plan would help develop; in heartily endorsing its acceptance by the Trustees; and in commending it to the thoughtful consideration of all interested in the Tech.

The following data is confessedly in the interest of Mechanical Engineering, but is in no sense to be taken as derogatory to the worth and value of the other departments. It is but a concise, graphical and statistical presentation of what is on file in the records of the Institute. Nothing has been strained or warped to suit my purpose, and all may be readily verified.

The above diagrams show at a glance an outline of the work done at the Tech in the three departments of Mechanical Engineering.
ing, Civil Engineering and Chemistry, from the graduation of the first class in '71, to the present time. The departments of Designing, Physics, Electrical Engineering and Political Science have not been plotted, for the reason that the lines would not be continuous. In each figure the full line represents the department of Mechanical Engineering, the dotted line, Civil Engineering and the broken line, Chemistry.

Let us look at the first figure. This represents graphically the number of graduates in each of the three departments for each year from 1871 to 1890 inclusive, and also the number of undergraduates now in each department. Of course, it is impossible that all of these undergraduates will receive their diplomas. It will be noticed that each line divides after passing 1890. The upper fork represents the number now in each department. The lower fork shows the probable number of graduates, the estimate being based on the records of the past five graduating classes.

The diagram tells its own story of the growth of the Institute, and at the same time shows the demands of the market. It might be assumed that this preponderance of the Mechanical Department indicates an over-production; but that this is not so is proved by the fact that, of the men who have changed their profession after graduation, by far the larger proportion have been those who, abandoning their first choice, have adopted employment essentially mechanical.

To the best of my judgment the following shows the number of those who would have been better fitted for their present occupation, had they chosen the department indicated, and who have practically changed to them. They are:—

Chemistry, . . . . 5.
Civil Engineering, . . 3.
Mechanical Engineering, 21.

It will be remembered that it is but a few years since the name was changed from "The Worcester County Free Institute of Industrial Science" to its present appropriate title. Many have had the idea that it was largely a Worcester County institution; but the records show that many students have come, not only from distant States but also from Europe, Asia and South America, directly to the Institute.

The next diagram shows the number of graduates from within Worcester County, and the last one, those from without it.

This last diagram may be said to represent our outside reputation.

The matter of dollars and cents, and of the comforts of living at or near home, would largely affect the choice of persons living in or near Worcester. But this would have little or no weight with those living outside of the County. They can just as easily go to some other place as come to Worcester, and their choice of Institutes must depend largely on the merits, as far as they can learn them, of the departments they intend to choose.

Lest it be thought that the preponderance of the Mechanical Department be due to ease of entrance and lack of due regard to merit in awarding graduation, I would say that the heavy percentage of rejections in this as compared with the other departments show its students to be by far the most sharply scrutinized, and rigidly criticized of any leaving the Institute. For example:—

Below is given the record of the past five graduating classes, showing the percentage of those who fell out, compared with the number graduated.

<table>
<thead>
<tr>
<th>Department</th>
<th>Graduated</th>
<th>Fell out</th>
<th>per cent.</th>
<th>fell out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry</td>
<td>28</td>
<td>9</td>
<td>32</td>
<td>2</td>
</tr>
<tr>
<td>Civil Eng.</td>
<td>33</td>
<td>8</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Mech. Eng.</td>
<td>100</td>
<td>71</td>
<td>71</td>
<td></td>
</tr>
</tbody>
</table>

These diagrams might be discussed to much length, and from many standpoints, but time and space forbid. If you are interested in the history and growth of the Tech, look the matter over carefully and form your own deductions.

Edwards, '83.
SOLON BARTLETT.

The news of Solon Bartlett's death, at the very beginning, almost, of his career, brings genuine sorrow to the hearts of all who knew him. Bartlett was one of the pillars of the Class of '89 of this school, and was always identified with organizations for the building up of such projects as promised to prove healthful and elevating. At the time of his death, he was teaching at the Lawrenceville School, New Jersey.

His illness was very brief, and the best of medical aid obtainable was powerless to check the inroads of the fatal disease. He had made many warm friends in Lawrenceville during the short period in which he had taught there, and they proved friends indeed when they learned that he was dangerously ill. After his death, the members of the Lawrenceville School, and also the members of the Philomathean Society, with which Bartlett was connected, met and took appropriate action, draughting resolutions, and sending flowers for the funeral in Worcester.

Prof. Wm. J. George, a member of the Faculty at the Lawrenceville School, attended the funeral and was of great assistance to Bartlett's people. The body was brought to his school home in Worcester, 22 Lancaster Street, where brief services were held.—Dr. Fuller of the Institute presiding. After these services, the body was borne to his old home in Boylston, and he was buried from the church which he joined during his course at the Tech. The bearers were: Rheutan, Hartwell, Desper, Penniman and Allen, of '89, Edwards, '83, and Alley, '91.

IN MEMORIAM.

Solon Bartlett, S. B., Class of 1889.

Solon Bartlett, born at Boylston April 13, 1867, spent his early years at home, from twelve to fourteen lived and attended school at Barre, then was for two and a half years in the Worcester High School, was admitted to the Polytechnic Institute in 1884, but entered two years later—the meanwhile engaged in business—and graduated in the class of 1889. He died at Lawrenceville, N. J., Feb. 25, 1891, of typhilitis, after a brief illness of less than five days.

We at Worcester, to whom the last sad tidings came close upon the heels of the first announcement of his prostration, could not but at once recall the poet's words:

"The fame is quenched that I foresaw;"
and those others:

"Death loves a shining mark;"
and could hardly believe it true even when we knew it. He was so robust, so vigorous, so instinct with life and activity, seemed so much to enjoy all that pertained to the truest earthly living, and to be so fitted and furnished for usefulness that he appeared to be one of the last whom the fatal shaft would seek and pierce. "But God's thoughts are not as our thoughts, nor His ways as our ways."

The origin and progress of his disease is inscrutable. All that medical aid and wisdom could suggest in the case was promptly done. There can be no regrets for negligence or lack of care or skill on the part of those who were next him in these last days. We can only say, as we turn our faces upwards, "Thy will be done."

"The Lord gave and the Lord hath taken away; blessed be the name of the Lord." We cannot but mourn, but even in our sorrow may find some reasons for gratitude. First, we may be grateful that we have known a life and a character such as Bart-
Men praise the beauty and glory of inanimate nature—of mountains, hills, sky, foliage, flowers,—and well they may. For color, odors, symmetry of form, the varied-ness of plant and leaf betoken the lavish-ness—I might rather say, the extraness—of God’s gifts to us. Not merely what is necessary, but beyond this, what ministers to our comfort, our joy, our sense of beauty He gives us. But the best earthly gifts are human spirits, souls that may be linked with ours, sustain us with kinship of feeling, incite us by friendly rivalries, double our strength by welding their own with it, exalt our ideals and show us just how we may not only aspire but attain, as they present to us, in the concrete, characters worthy of imitation, and some hopes measurably fulfilled.

Short as was the life of young Bartlett, he lived long enough to be known and to be loved. He was known, not only in the home circle, and the wider range of his native village and town, but here in this city by very many who will ever cherish his memory. He left a favorable impression on even the chance acquaintance of an hour.

Secondly, we are thankful for the man he was. God gave him an attractive person. His frame indicated strength and vigor—his step was elastic, his every movement energetic. His face was a benediction, a smile came quickly as a flash of lightning, and his eyes were radiant as sparkling waters. He was loved because he was lovable. Not either for external characteristics alone or chiefly. Through those eyes could be seen the lovable spirit. He hid nothing because he had nothing to hide. He was singularly frank and transparent, partly, by nature, but partly because, I believe, he was remarkably pure and true. During three and a half years I saw him nearly every week-day, and do not remember to have received a single unpleasant impression from him. He was manly, honorable, and noble. He was more than these. He was industrious, having a just conception of the value of time and opportunity; he was ambitious, desiring to make the most of talent and privilege. As a scholar he was neither rapid nor brilliant, but, what is better, he was thorough and unsatisfied with mediocrity. There is proof of this in the record of his work at the Institute. While, during the two years he was engaged in business, he had in his contact with men matured more than most at his age, yet in the same time he had lost something of the details of his earlier acquisitions from books, and hence at the end of the first term of the Junior year, his rank was hardly up to that of the average of his class. With this he was not content, but exerted himself more strenuously, steadily improved the quality of his work, and all the last year stood among the first six of his class. He was fond of athletic sports, pulled in the tug-of-war team and excelled as a long distance runner.

But during these years of training he was running a race for a still higher prize with which he has now been crowned. I do not know from what mouth or year he would have dated the beginning of his consciously Christian or spiritual life, but I will recall his request for an absence on a Saturday about the middle of his Junior year, that he might on Friday evening attend the preparation service and on the Sabbath following unite with the church with which he had been wont to worship at Boylston. In this new relation and in everything which grew out of it he was as faithful, consistent, and earnest as in all else he undertook. He was greatly helpful in the Society of Christian Endeavor of his church, and, at Lawrenceville, I am told, rendered fruitful service in assisting to maintain an association of boys in Christian work.

For a year and a half, up to his last illness, he had been a teacher of drawing and mathematics in the well-known Lawrenceville (N. J.), preparatory school. He was commended for this work, because of his success in teaching for a winter or two in the evening schools of Worcester, but I do not think he engaged in it because it was entirely congenial to his tastes. He rather embraced an opportunity to enable him to discharge financial obligations and to assist other members of his family to acquire an education. It was, in part, at least, a work of generous self-sacrifice for those he loved. It was, however, successful because he carried into every detail of daily duty the same devotion to principle, the same high standard of attainment for himself
and others, and the same painstaking and persistent endeavor which characterized him as a student at the Institute.

We bless God for his example—for the symmetry of his character, for its nobility, its lofty aspirations, and for the help and encouragement he gave to all who worked with or for him, or under his guidance. He lived well—long in answering life’s great end. For “life is in deeds, not years; in thoughts, not breaths; in heart throbs, not in figures on a dial,” in faith, not always in prolonged fruition.

The apparently premature close of such an earthly life is in itself, not a proof indeed, but certainly a strong presumption of immortality. Even one who knew him but slightly said, on hearing of his death, “There can be no greater argument for immortality. It is impossible that such a noble, unselfish life can cease forever, that the active, skilful hands, the warm heart, the bright mind have received all this training for this mortal space.” There must be the other life to which this is but the portal.

“He that liveth and believeth in Me shall never die.”

“He sets, as sets the morning star, which goes not down
Behind the distant west, nor hides obscured
Among the tempest of the sky, but melts away
Into the light of Heaven.”

The one other lesson of this event—the warning taught by its suddenness and its swift fatality, is the same as that uttered by our Lord to His disciples: “Be ye also ready, for in such an hour as ye think not the Son of Man cometh.” “Blessed are those servants whom the Lord when He cometh shall find watching.”

Homer T. Fuller.

FRANCIS C. BLAKE.

In the death of Francis C. Blake of the Class of 1876, our Alma Mater loses one of the most distinguished and worthy of her alumni. His position as Superintendent of the Pennsylvania Lead Co. involved great responsibility, and his salary was one of the largest received by any graduate of the Worcester Polytechnic Institute.

For all young men his life has been fruitful in instruction and incentives to high and noble endeavor, since the first day he came to Worcester.

He was the son of the Rev. Dr. Joseph Blake, a New England clergyman and a cousin of Mr. Charles F. Washburn of this city. One day, a little more than twenty years ago, he appeared at the Washburn & Moen Wire Works, a pale, thin lad of sixteen, applying for work. Whether necessity or an inborn passion for industrial and scientific pursuits led him to seek employment at the wire factory is unknown.

Mr. Charles H. Morgan, to whom young Blake’s case was referred, did not often have such an applicant. Small profit could his employer’s eye see in such a frail looking workman, and the work that could be given seemed ill-suited to one so delicately reared. To dissuade him from his purpose Mr. Morgan took him through the works, showed him how dirty, repulsive and rough was the work to be done among companions of various nationalities, unattractive and rough. The youth did not quail at the prospect, but renewed his request. Still reluctant to subject him to so hard a lot Mr. Morgan said: “Go and look about in the various shops of the city, and see if you cannot find something better, and, if at the end of three days you find nothing, return to me.” The three days passed and Blake was again at the wire factory as resolute as ever in his desire for work. A place such as had been shown him was assigned; no favors were asked, nor were any granted. For three years without once grumbling at his work or wages, he faithfully performed his tasks and gained a most valuable experience. In order to live more cheaply he hired a room near the works.

He connected himself with the Union Church, was an active Christian and always had upon his mind and heart some person whom he was striving to lead into the way of truth.

He won the esteem of all his associates. One of the engineers uniformly spoke of him with affection as “Frank, my boy.” On one occasion another engineer, Mr. Congdon, made for Blake a tool-chest, and his fellow-workmen contributed money to secure him some tools. At their request and in their presence Mr. Morgan presented the same. Greatly surprised and touched as he was by this token of their affection,
Blake stepped forward and in a speech, still remembered for its graceful and graceful language, returned fitting thanks.

Not long after this Mr. Morgan asked Blake how he would like to go to the Polytechnic Institute. He said he should like it above all things, if he could only see any way to pay his expenses. Upon Mr. Morgan’s suggestion he wrote for advice to his father and his brother Maurice in California, who had graduated as valedictorian at Amherst in the same class with Dr. A. S. Kimball. Both heartily favored the plan. Mr. Morgan let him have some money, Mr. Washburn some, and Mr. Morgan also succeeded in securing for him the janitorship at the Public Library which chanced to fall vacant just then, and in this way he paid nearly all his school expenses. At the Institute his career was such as might have been expected from one so born, so able, so eager to learn. Courteous, docile, brilliant, high-minded, he was a favorite with students and instructors. He was one of the first six men in his class, chose Physics for his department, in his practice did some excellent work which formed the subject of a paper on “Changes in the Physical Properties of Steel produced by Tempering,” published in the American Journal of Science and Arts for August, 1876, and reprinted in Van Nostrand’s Mining and Engineering Journal.

When he graduated in 1876, it chanced that Prof. Drowne, the distinguished chemist and metallurgist then at Lafayette University was just parting with Mr. Fred. H. Daniels of the Class of 1873, who had been for some time his assistant, but was about to engage in the service of the Washburn & Moen Manufacturing Co. As Prof. Drowne needed an assistant and had been pleased with Mr. Daniels, Dr. Thompson, the President of the Faculty, and Mr. Morgan united in an application for Mr. Blake. It was granted and so much pleased was Prof. Drowne with his new assistant, that, in a letter to Dr. Thompson expressing his gratification, he inquired if Messrs. Daniels and Blake were fair samples of the graduates of the Worcester Polytechnic Institute. “Yes, we keep them on tap,” was Dr. Thompson’s prompt reply.

After Mr. Blake had been at Lafayette University for two or three years, the Superintendent of the Pennsylvania Lead Company applied to Prof. Drowne for an assistant and Mr. Blake was recommended. He was appointed and in this position gave such eminent satisfaction that when in 1881 the Superintendent’s position became vacant, Mr. Blake was instantly promoted to the superintendency. In this situation with increasing salary he remained till his untimely death. The position was very desirable for it was a responsible and lucrative one, affording fine opportunities for the exercise and the increase of his professional skill, for the wide acquaintance with men and for the management of large industrial interests. Prof. Drowne is reported to have said at a later date: “When I recommended Mr. Blake to that position, I made one mistake; I ought to have recommended myself.”

The works are at Mansfield, Pa., not far from Pittsburg. The industry consists in refining the base bullion of lead, shipped from the western mines to where the needed coal can be cheaply obtained. Among other impurities to be removed from the lead are silver and gold. The work of the plant is nearly equally divided between the refining of the lead and the saving of these precious metals. Mr. Blake’s work was mining engineering and it seemed as if his heredity, his practical training in mechanics, his special course in Physics and Metallurgy had combined to fit him for this one responsible post. He used to visit the western mines, and his judgment as to the value, and the ease of working, of the base bullion, the best and most economical modes of treatment became almost instinctive and was accepted without hesitation. The entire responsibility for what was done at the lead works rested upon him when he was but twenty-eight. Such a position could be safely entrusted only to a man whose integrity and fidelity were unquestioned. Mr. Thomas H. Clark of the Class of 1880, who was Mr. Blake’s assistant for some years, and who was so fortunate as to be an inmate of Mr. Blake’s family, says: “The value of the property that annually passed through Mr. Blake’s hands was not less than $5,000,000.” The business which he superintended probably equalled in extent of value the wire factory where he toiled when a young man. In such a position, tech-
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A DEFENCE OF BASE BALL.
A Correspondent Indites Some Spicy Com­ments on the National Game.

Editor of W P I:—

In regard to an article which appeared in
last month’s, signed by “ Foot-ball
Crank,” an answer seems to be in place, to
show that there is another side to the so
called “ foot-ball problem,” and a difference
of opinion permissible, concerning what
should and should not be done this spring,
during the time generally devoted to base-
ball and class championships in this Ameri-
can pastime.

It is perhaps unnecessary to remark that
we Techs have a good deal of work and
study during our course at the Institute, and
that what time can be given to athletics and
such manly sports as base-ball, foot-ball,
etc., are keenly appreciated and help to
make our life less a burden, besides re­minding us that we are still boys—not old
men. This granted, which shall be chosen
as giving us more recreation, more excite­ment, more enjoyment, and last but not
least, creating more enthusiasm within the
boundaries of this staid old school? Let us
compare the results of the two games,
simply taking into consideration the last
season in each sport as a criterion of what
the men now here enjoy, and not what men
who have graduated enjoyed and excelled in.

The fall of 1890 was, as is customary,
given to foot-ball. The men came out and
pr acticed, although they were indeed few,
many less in number than we ought to ex­pect from a school like ours. A school

For manhood is the one immortal thing
Beneath Time's changeful sky.

EDWARD P. SMITH.
Worcester, March 7, 1891.

team was organized and did creditable work,
considering the auspicious prospects with
which the season started, and much credit
is due those who worked for our interests
in the manly game.

Now I do not wish to say anything
against foot-ball, indeed it were useless to
attempt to make opposition to a game which
has increased in public favor as has this
game in the past few years. I only wish to
ask every man in this school a few questions:
How much interest was centered in the
W. P. I. foot-ball team? How much
enthusiasm was created when the team
played games? How many Techs were
seen at the games played with the Acade-
my? I only wish to bring this idea before
the fellows. We are somewhat differently
placed from the colleges of our day, both in
facilities for training a team and as regards
time in which to do it. Even the prepara-
tory schools are equipped with well ap­pointed gymnasiums and able instructors
(some of them famous college war-horses
of by-gone days), in most of which
schools the gymnasium training is a
part of the course. Then again our con­
temporaries are of a population varying
from twice to ten times our own, while here
a man who can excel at any kind of sport
is looked upon as a pearl of great price,
and is indeed a rarity.

Why is this?” need not be asked. We
all know too well. Thus it is an easy thing
to see that the chances for the W. P. I.
competing with other colleges in the line of
team work is something not to be expected,
and if realized, must be due to a strange
decree of fate. The correspondent above
mentioned says “ Why not have a good
team here?” And the echo answers “Why?”
Let us go into foot-ball next fall, as
thoroughly and devotedly as we are able,
and do our best; but let us not, “fellow
Techs,” take away any time from the game
which last spring created more enthusiasm,
and caused more excitement and fun, than
a dozen such seasons as the past, spent in
competing with other schools at a game in
which we were not a factor. Granted that we
are at so great a disadvantage in competition
with other schools, why not turn out en
m osse and have some genuine fun and class
rivalry over our games? If the past fall
had been spent in a class championship at
foot-ball, more would have been learned of the
game and more interest been shown than in a half-dozen seasons of almost certain
defeats. In class games, no such inequality
exists. If the Seniors haven't had gymna-
sium training, neither have the Middlers,
and therefore no class team would have an
advantage over another. Last spring, for
example, one game was played between
each two classes, and with what result? A
crowd of Techs, citizens, and, yes, even
Tech professors, attended some of the
games, and anyone who dares say that enthu-
thusiasm wasn't a large quantity, simply
wasn't there. The only fault to be found
with the series was its brevity.

And now, if anything is to be done with
this time for recreation, let us at once be up
and about it.

Let a base-ball association be formed
with an executive committee of two from
each class, to have full charge of arranging
a schedule, appointing umpires, scorer, etc.
and let the scores be kept accurately and
reported in the columns of this paper, in
place of some of the matter which serves
no purpose but for filling space, and which
is scarcely read.* Let suitable prizes be
awarded to the winning team; and, more
than all, let us have at least three games
between each two classes. Here, I think,
is a solution of the "foot-ball problem"
which, even if it does not teach us the
intricacies of one great game, will at least
demonstrate how much fun and excitement
can be derived from another. On talking
with prominent members of three of our
classes, I have found all to be in favor of
the plan outlined above, and moreover each
class of the three boldly asserting its own
supremacy in the ball field and its own
great chance of victory. And indeed a
resume of the classes finds them very evenly
divided and gives promise of a most decided
struggle in the future. Of course it is too
early to be making predictions, but the
sooner action is taken, the more enjoyment;
—so all together, boys, for a howling class
championship and lots of noise on Bliss's
field.

"Base-Ball Crank."

* [The position of our correspondent, in
asking for several valuable columns of the
W P I, in which to demonstrate the fine
points of his pet hobby, and at the same
time using a portion of the space to tell us
how to run the paper, is so unique, that we
are almost persuaded to refrain from jump-
ing on him. We admire his nerve, and
will subscribe heavily to develop the future
"apple of his eye." (This metaphor is
rather neat, we think, in consideration of
the rumor that our correspondent catches
behind the bat without a mask). We must
call his attention, however, to the fact that
everyone is not a base-ball crank (the
italics are our own), and that for everyone
who skips those articles in the paper which
our friend thinks are invented for purposes
of "stuffing," there are probably two read-
ers, who wonder if our long articles on
athletics are not written just "for the pur-
pose of filling space." — Ed.]

NEW APPARATUS.

A Description of an Interesting Piece of
Recording Machinery.

I have often heard that the American
youth is of an inquiring turn of mind.
That this trait of character does not de-
crease with a higher education, is shown by
the crowd that rushes into the Mechanical
Laboratory between recitations, with such
questions as "What do you call that jig-
gger?" and "What does it do?" These
questions refer to the belt-tester and record-
ning apparatus connected with it. There may
still be some who have not had an explana-
tion of "the jigger," and for these I will
try to explain its construction and use.

The belt tester was designed by Mr.
Bird, and set up last year. Its object is to
find the power transmitted, the amount of
slip, the effect of various belt dressings, and
in fact, to solve any problem relating to
belts. In order to get accurate results it
was found necessary to have an automatic
device, by which the revolutions of the
counter-shaft, the pulley of the tester, and
the belt might be recorded simultaneously.

To describe this piece of mechanism let
us begin at the top. On the end of the
counter-shaft there is a worm which trans-
mits the speed, by means of a train of
gears, to a one-half inch vertical steel rod,
which reaches to within about four feet of the
floor. On the lower end of this rod there
is a narrow brass drum, eight inches in di-
ameter; around the side of this there are twelve needle points. The use of this drum will be explained later. In the same vertical line and beginning two inches below, is a similar drum and rod, which runs to the floor below, where the tester is to be found. On this rod, on a line with the centre of the pulley, is a large ratchet-wheel with 600 teeth, which is run by means of a cam on the pulley, and a pawl, so that for 600 revolutions of the pulley, there is one of the rod. The upper rod is geared to the same velocity ratio.

To count and record the revolutions of these rods, there is a strip of paper rolled on a reel and passing over one of the drums, there being a strip of paper for each drum. As the drum revolves, the needle points before referred to, draw the paper forward, at the same time pricking holes in it. As fast as the paper leaves the drum it is wound on another reel. This latter has a cord wound on the upper part, which runs over pulleys to the ceiling where the end is fixed; between the end and last pulley a movable weight is hung. This weight is heavy enough to turn the reel, thus winding up the paper. We have thus, a means of recording the revolutions of the counter-shaft and pulley of the belt-tester.

To count the revolutions of the belt, the designer has resorted to electricity. Every time a certain point passes over the top of the pulley on the counter-shaft, two strips of copper are pressed together; this makes the circuit and excites an electric magnet which is fixed in front of the drums. At each end of the magnet there is a slender brass rod to which the iron armatures are soldered. In the end of each brass rod, next to the drums, a hole is drilled the size of ordinary compass leads. The pencils placed in these holes, are backed by springs so that they touch the strips of paper before mentioned. Now when the circuit is made, the armatures are attracted, thus moving the pencils. In this way there is a sudden V-shaped irregularity made for every revolution of the belt.

This, I think, completes the general description. The machine has not been thoroughly tested, but there is no doubt that it will accomplish the object for which it was designed.

"NINETY-ONE."

**ANOTHER DEATH BLOW.**

A Legitimate Ambition Squelched Without An Apparent Reason.

On Thursday, February 12, the Athletic Association appointed a committee of three, including President Edwin A. Taylor, Secretary Daniel A. Bullard, and Joseph H. Wallace to consult with the Faculty and get their consent if possible to make application to the Inter-Collegiate Athletic Association of America, for admission to its membership. On Wednesday, February 18, the committee received the reply that on general principles the Faculty must decline to allow the Athletic Association to make such application. What these general principles are it is difficult to determine, but the committee has made the decision and that settles it.

The school has been given permission for two years to send a representative team out of town twice during the year, if it should so desire, leaving out the N. E. I. A. A. games, but even this limited allowance of out-of-town competitions has not been used by our school teams. Only once in two years has the school sent a team out of town. Surely this could not have been an objection. Athletics are not rough or harmful, and there could have been no objection from that source. If the permission had been granted and the Tech had been admitted to the I. C. A. A., as it undoubtedly would have been, it would have been the greatest advance the school ever made in athletics, and would have placed the Tech right where it has earned the right to be, among the foremost colleges of the land. For three years we have competed with such colleges and universities as Amherst, Dartmouth, Williams, Wesleyan, Brown, Trinity and Vermont, and while we have been unfortunate at times, we have always held a prominent place in the N. E. I. A. A. Now most of these colleges belong to the I. C. A. A. A., and as we have
grown in athletic strength it does not seem unreasonable for us to ask permission to join the larger association of colleges, which includes most of the N. E. I. A. A. colleges among whom we have already proven that we are not outclassed. The I. C. A. A. A. includes such colleges and universities as Harvard, Yale, Princeton, Columbia, University of Pennsylvania, Cornell, Amherst, Williams, Trinity and others of lesser prominence. The annual field meeting is held the last Saturday in May, which this year falls on Memorial Day, and is always the greatest meeting of the year. The meeting is held at the Berkeley Oval, New York City, undoubtedly the finest grounds in the country, and every year there is a large and enthusiastic audience of the very best people in the land, present at the games. It is very seldom that championships at these games are won outside of Harvard, Yale, Princeton and Columbia. Two years since, however, Wells, of Amherst, captured the mile run and aroused the Amherst students to such an extent that last year Amherst sent a team to Worcester and captured ten championships out of seventeen events, and three days afterward scored 13 points at the Berkeley Oval, Wells again winning the mile run, while Gregg captured the mile walk. By such work as this Amherst is placed in an enviable athletic position and this year will not be far behind when the championship is decided.

This year, if our school could have sent representatives to these games, we would have had an excellent chance to win a championship, and if we had, our own school would have appeared in the reports of the games prominently associated with Yale, Harvard, Princeton, Columbia and Amherst. The Worcester Polytechnic Institute has an enviable reputation all over the country, and to have the Institute thus brought into prominence among the larger colleges, would have been a source of pride to graduates as well as undergraduates.

Of course we must assume that we would have been admitted to membership in the association, but we have no reason to doubt that we would have been admitted, as President Wells, of the N. E. I. A. A., writes to a member of the school that we should have sent in our application, as there is no doubt that a school of our athletic standing would have been admitted to the association, and that other schools of less prominence than our own belong to it at the present time.

Athletics should not be too prominent in a school like our own, but when a chance like this presents itself, in which we can do ourselves and the name of the Institute credit; when we make a perfectly reasonable request for a privilege we have earned the right to have, it seems as if it ought to receive more than a passing notice from the Faculty, even if its members are in favor of very restrictive measures. However, we have nothing to do but accept their decree, and while we are denied the right to look for honor in a larger association, we can surely put what enthusiasm we have left into preparation for the N. E. I. A. A. games. We can go to Springfield.

**TOPICS ATHLETIC.**

*Some Pointers Concerning the Outlook in Spring Athletics.*

The convention of the N. E. I. A. A. has been held; the convention has deliberated; the convention has decided. For the fifth time the place for holding the annual meeting of the Association has been discussed by the representatives of New England colleges, and, as a result, the meeting will be held this year at Hampden Park, Springfield, some day in the latter part of May.

This move on the part of the N. E. I. A. A. is much to be regretted by Worcester people, and especially by members of the W. P. I. For the last three years the meeting of the Association at Agricultural Park, has been looked forward to with a
good deal of pleasure by the residents of Worcester, and has been supported very handsomely by Worcester people. The management of the games and the preliminary arrangements for them have been almost entirely in the hands of Tech men for the last three years. To Messrs. White, Penniman and Rice of the Tech, a great deal of credit is due for the present good financial state of the Association.

The first meeting of the Association was held in Hartford, at Charter Oak Park, in the spring of 1887. The games were not successful, but few people were present, the association ran into debt, no medals could be given the winners of events, and the result of the meeting was far from encouraging. In the spring of 1888, by the efforts of Messrs. White and Penniman, the games were brought to Worcester. What was the result? A large and enthusiastic audience of 2,000 people was present; the Association made money enough to pay for the medals of '87; to pay all back debts; to pay all the expenses of the year '88 and still have a surplus. The same thing was repeated in '89 and '90. In these two years, however, continued rains up to, and in the latter case, during the competition, made the track very muddy and unfit for use. This fact caused a great deal of grumbling among some of the college men, but cannot be used as an argument for leaving Worcester and going to Springfield. Such weather as Worcester had for two or three days preceding and on the intercollegiate field-days of the last two years, would have made Hampden Park, Springfield, as muddy and unfit for use as it did Agricultural Park.

By the efforts of Messrs. White and Rice in '89 and '90, everything possible was done to make the track at the Park fit for use, but the weather was so rainy that no available track in New England could have been made smooth and hard.

The Worcester boys admit that the track has been poor the past two years, but it has been due to weather that would have made any other dirt track equally bad. No college man of intelligence can argue that the Springfield track would have been a bit better under the circumstances. Even if the convention had been obliged to decide between Springfield and Worcester on the merits of Agricultural and Hampden Parks, the argument is greatly in favor of Worcester, as it has been for the last three years. But this year the circumstances were entirely different. The Worcester Athletic Club, which was organized last spring, is about to open new grounds at Lake View. The grounds are perfectly graded, are enclosed by a high wooden fence, and by the last of May will be perfect in their appointments. There will be a large club house, including lockers, dressing and waiting rooms, shower and tub baths, and everything that makes a club house of the kind a benefit to the athlete. Besides this, the track will be of cinders, a quarter of a mile in circuit and without doubt the best in New England outside of Harvard University. The new grounds will also have a new grand-stand, new hurdles, and in fact everything which makes the modern athletic field perfect in appointment.

These were the grounds which the committee from the Worcester Athletic Club offered to the N. E. I. A. A. free of charge if they would hold their meeting in Worcester. The committee consisted of Col. Samuel E. Winslow, president of the W. A. C.; Frank E. Heywood, secretary of the W. A. C.; and Rufus S. Woodward, of the same club and of the Amherst Advisory Committee. These gentlemen, in the name of the Worcester Athletic Club, made this offer to the N. E. I. A. A.: The club would furnish the grounds, do the advertising, pay all expenses outside of prizes and then would divide the net receipts of the meeting, if the convention would decide on the Lake View grounds as the place of meeting. The committee proved conclusively that it was for the best interests of the Association to accept the offer. In the debate, Worcester put forth argument after argument, but they were of no avail. The convention seemed to have settled on Springfield before the meeting began. Amherst, Trinity and Wesleyan have always favored Springfield. Last year the other five colleges favored Worcester. These were Brown, Dartmouth, Vermont, Williams, and Worcester. When the vote was taken, it was found that Dartmouth, Vermont, and Williams had changed to Springfield. This made the vote six to two against Worcester, Brown and Worcester only voting for this city.

The three colleges that changed gave as
their reason that it was cheaper for them to go to Springfield. Some very amusing ideas were brought out in the debate. One was that the games should not come here as it gave the Tech men an advantage, in training on the grounds where the final competition was to be held. What a great advantage this has been in the last three years! Worcester has always been a very dangerous rival of Amherst and Dartmouth, has she not? The general sentiment with regard to Springfield seems to be that because the city has had enormous crowds at the annual Yale-Harvard foot-ball and base-ball games for the last year or two, that just such crowds will attend the N. E. I. A. A. games. Some people seem to think that the city will present a like picture to the eye, on the day of the N. E. I. A. A. games. It is not Springfield that furnishes the crowd—it is Harvard and Yale and their sympathizers all over New England and New York. Will the N. E. I. A. A. attract a like audience? It surely will not. Without a doubt all Amherst College will be there to cheer her men on, and the Dartmouth athletes will have to go right into the lion's den to win the pennant if they can. Springfield offers Hampden park with a mile track, inside of which is a half-mile cinder track which has not been touched or used for five years. What a prospect! Worcester offered elegant grounds on the banks of Lake Quinsigamond, one of the most beautiful lakes in the country. The grounds would have been in perfect condition, the members of the Worcester Athletic Club, together with the members of our own school, would have gathered together a large and more enthusiastic audience of the best people of the city, than has ever yet attended the games, and the new grounds at Lake View would have presented as pretty a picture of a successful athletic meeting as one would wish to see. There is surely no college at Springfield to boom the sports, and the equal of the Worcester Athletic Club cannot be found there, while as an athletic city, Springfield is not and never was the equal of Worcester. Whence then will the support of the meeting come, and how can the sports be held with as much success as would have been the sure result at Worcester? We shall see! We shall see!

The officers of the N. E. I. A. A. elected at the annual convention of the Association at the Quince House, February 14, 1891, to serve the coming year were as follows:—President, C. O. Wells, Amherst; 1st Vice-President, E. A. Barrows, Brown; 2d Vice-President, T. P. Thurston, Trinity; Secretary, H. L. Dadmun, Worcester; Treasurer, W. E. Hoyt, Williams; Executive Committee, the President, ex-officio; William Clelland, Amherst; F. T. Easton, Brown; M. Shurtleff, Dartmouth; G. Hall, Trinity; G. C. Martin, Vermont; E. W. Moore, Wesleyan; J. C. Rogerson, Jr., Williams; and H. M. Southgate, Worcester. * * *

The Apprentice class has an athletic jewel in J. M. Gallagher. This young gentleman has been running a mile in very fast time during the last winter, and has distinguished himself by winning the mile run at the Worcester Boat Club games the 5th of last November, and the mile at the Chatham Athletic Club games the 21st of the same month. His best running, however, he did at Boston, the 14th of last month, where, with 90 yards handicap he was beaten about 25 yards by H. O. Cakin of this city and Harvard University, the time being 4 min. 26 sec., which is very fast for a board floor. Gallagher's time would have been about 4 min. 50 sec. for the full distance, and is very near the Tech record for the distance. The Tech mile and two mile records will be at his mercy within a year or two, and properly trained, he should be able to make a good showing in these events at Springfield the coming May. * * *

The re-instatement of Mr. John G. Donahue to the amateur ranks, leaves the Tech without a trainer for the coming year. For two years our athletic team has worked during the spring months with John for a helper, and has done some excellent work. John has always been popular with all the Tech boys, and now that he is again an amateur we can only wish him continued success. We only wish he could go to Springfield and be the star sprinter of our team. We shall be greatly surprised if he is not a winner of the New England District Championship hundred yards event, if he should compete, as John has lost but few races, and, in condition, has the reputation
of being the fastest man for many miles around Worcester.

An article concerning the Preps, in the February number of WPI, credits Gallagher of that class with the winning of an event which never took place as described. The article makes Gallagher defeat Dadmun in a half-mile run with 10 yards start. The race which our rattled reporter evidently tried to describe, was a one mile run, and Gallagher's start was 110 yards.

A PRESSING NEED.

A Call for Money That Requires to be Needed.

In about a month now we shall have mild weather, and then the time will come for our athletes to get to work. Of course the greatest interest will be centered in the team that will represent the school at Springfield, next May. We are placed in a position this year different from any we have been in since the school has belonged to the N. E. I. A. A.

Heretofore we have entered a very large team, and almost every man who wished has been allowed to compete, but this year of course, only the very best men in school in the different events, can be sent to Springfield, on account of the expense. This will make a position on the team quite an honor, and as a good deal of care will have to be used in the selection of the team, it seems as if the directors of the A. A. ought to devise some means for this selection at once.

There is one thing, however, that is absolutely necessary in order to do anything, and that is money. It has been a long time since the school has expended much money on athletics, and this spring there is ample opportunity to do this to great advantage of the athletic interests of the school.

Our base-ball series for the class championship will cost something, and if a school team is supported more money will be needed; some money can be spent to advantage to the athletic team by giving two or three cross-country runs for prizes, and last of all, money must be raised to send a team of representative men to Springfield. How can we do this? It seems as if nearly every man in school ought to be willing to give a dollar or two for the support of these things and if this were done we would be assured of success in all these lines of sport.

SCIENTIFIC SCRAPS.

A student at Johns Hopkins has invented a flying-machine, and will soon make a trial trip with it.

The Mexican Gulf railway is the most gorgeously constructed road in the world. Its ties are of solid mahogany, and many of its bridges and culverts are of white marble. The contractors say these magnificent materials are the cheapest they could use, since both abound along the line of the railway.

Col. E. The University of Pennsylvania is to send out a scientific exploring and dredging expedition to the Bahamas and the Caribbean Sea.

Harvard's collection of meteorites is valued at $1,500,000.

COLLEGE CLIPPINGS.

There are eight club-houses in New York City, representing college fraternities.

It is said that an Anti-Students' Club has been formed by the young ladies of Bethlehem, Pennsylvania. Its aim is "to ignore the frivolous, flirting college student of Lehigh, who does not mean business."

Prof. Harper of Yale has accepted the Presidency of the new Chicago University.

About one hundred and fifty Harvard men are training for the Intercollegiate athletic team.

Of women's colleges in this country, Wellesley has the largest endowment—$2,500,000. Vassar has $1,200,000; Byrham, $1,100,000; and Smith $400,000.

It is said that at Boston University, time spent in getting out the college paper counts for the editors as part of their course. The Faculty must be just and liberal minded.

It is said that Downs, Harvard '90, will make another attempt to break the quarter-mile record this spring.

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

Dartmouth is to admit women as special students.
The Harvard *Courier* fears that the proposed change to a three years' course will injure the athletic interests of the college.

Yale has a Japanese professor.

The United States is putting up a one hundred thousand dollar gymnasium at West Point.

The great telescope in Lick observatory has been injured by an earthquake.

If we can rely upon our exchanges for truthful information, Cornell is erecting new buildings at the rate of a dozen a week, at costs ranging from 20,000 to 200,000 dollars each.

**Y. M. C. A.**

The officers of the Y. M. C. A. have been putting forth some special efforts lately and with considerable success. The membership has increased largely and the general interest improved. On the afternoon of Sunday the 8th, a very pleasant meeting was held in the chapel to which all were invited. After the usual opening exercises, Mr. A. H. Smith, delegate to the College Conference at Williamstown, made a very complete and interesting report of the first and second days of the conference. Mr. Freed followed with a report of the last day. Rev. C. M. Southgate who had been invited to speak on this occasion then addressed the meeting. After a few words of general eulogy upon the school and the opportunities afforded by it, he gave the boys a very practical and interesting talk, the basis of which was the alliteration, "accession, adjustment, achievement." These he applied to the business of life, and drew his illustrations very happily from the work with which the boys were most acquainted.

Mr. Southgate's address was not as long perhaps as it would otherwise have been if less time had been taken by the reporting delegates. The number in attendance was fair though not so many it seems as should have been in.

**CAMERA CLUB.**

The Camera Club is beginning to feel more at home in its new quarters. It feels now like one of the institutions. The programmes of the meetings are very interesting and quite practical. At a meeting two or three weeks since, Mr. Fitton, of the Phoenix Plate Company, addressed the members. The talk was of a direct practical kind and had much to do with the developing of plates. It is proposed to have frequent addresses of this sort from outside photographers.

There are a couple of combination camera building schemes on foot among the members now. It is proposed to divide the labor of building a camera for each man of the party, by giving all of one sort of work, say the brass work, to one man.

One of the parties proposes to make a view camera combining the best features of all the cameras now on the market. The other party will build a 4x5 detective, using films. They intend to put in it only the very best of work and material. The lenses will be the best they can find. The work of both parties will no doubt be most creditable to the mechanical department of the school.

**SANITARY ENGINEERS' CLUB.**

A new club composed of civils and chemists has been formed. It promises to be one of the best clubs yet. The officers are Knight, '92, Pres.; Heard, '93, Sec. and Treas. Dr. Kinnicutt and Prof. White will assist in the meeting. The time of meeting will be Friday afternoons at 4.30. Papers will be read, and open discussions held. Chemists, civils, and members of the new course are eligible to membership.

**PERSONALS.**

An entertaining letter, which modestly prevents us from printing, reached us last month from Winthrop W. Fisk, '78, who has an assayer's office in Alaska. Mr. Fisk seems to have gained the impression, probably correct, that the W P I is next to the "greatest thing in the world."

Henry S. Downes, '82, of Chicago, has been visiting in this city. He was the guest of Horace W. Wyman of the same class.

T. D. Paul, '88, lately in business at Danville, Va., is now with the Frich Company, Engineers, of Waynesboro, Pa., one of the largest manufacturers of ice and refrigerating machinery in this country.

D. R. Collier, '90, is in Gardner, Mass., with Heywood Bros. & Co., chair manufac-
turers, and not in Maynard as previously and erroneously reported.

G. W. Perry, '90, has joined L. E. Booth, '90, at Washburn & Moen Manufacturing Co.'s.

C. S. Cook, '90, is with Brown & Sharpe, at Providence, R. I., as a tool maker. "Stovey" says he can make anything from a bradawl to an engine lathe in a short time.

G. H. Nutt, '90, is engaged in teaching in the Purdue University, Mich.

W. L. Smith, '90, has returned from Denver, Colorado, having severed his connection with the Union Pacific. He is not opposed to the West on general principles, however, and will return there if a good opportunity presents itself.

H. D. Yates, '92, who went to his home in Portsmouth, N. H., a few weeks since in poor health, will be obliged to give up his studies entirely for the remainder of the year, and enter the class of ninety-three next January. Ninety-two thus loses one of her most prominent men.

Fred H. Daniels, '73, has gone to Waukegan, to look out for the interests of the Washburn & Moen Manufacturing Co. This company is building extensively in Waukegan, which is near the mines whence the necessary ore is obtained.

L. E. Booth, '90, formerly at Washburn & Moen's, in this city, has gone to Waukegan with Mr. Daniels. He expects to photograph the works as they go up and send the photographs home to show the progress in the building.

J. H. Clancy, '90, who has been employed in draughting for the West End Railway Co. in Boston, is now with Washburn & Moen in Worcester.

[Will the alumni please bear in mind that this column is their property. Its value depends solely on their interest in making and sending us the news.—Ed.]

THE SCHOOL PIN.

One of Seventy Designs Accepted by The Students.

The big contest over the choice of a design for a school pin has at last ended. Sometime since a committee of two from each class was appointed for the purpose of securing designs for a school pin. A number of designs were presented by jewellers and engravers, one man going so far as to make up a pin at his own expense. The designs did not satisfy the students, however, and it was decided to give the latter a chance to expend some energy in this direction. Someone hinted that a prize of five dollars would be given the man whose design was accepted. The five-dollar prize was a myth, but the announcement that one might be offered, seemed to arouse enthusiasm over the question of designing a pin, and by Saturday noon, March 14th, more than seventy designs had been presented to the committee.

The school seal was a favorite theme with the designers, a large proportion of the drawings submitted having the seal a prominent feature. Another idea that was "worked" in a great many cases was to build a pin that should be emblematical of the three departments,—mechanical, chemical, civil. These latter took no notice of the new course in political science, and they were therefore unpopular with the followers of that course. The rest of the designs were generally modifications of one or other of the above, and some very clever work was done, in trying to solve the problem, by no means easy. Some of the lower classmen deserve special credit for the work that they presented. Indeed, it would have doubtless been much more satisfactory to all, if the committee had chosen a much larger number than three for recommendation to the school. Of these three, two were drawn by members of '91 and '92, the third having been submitted by a down-town jeweller. The three designs were posted in the corridor this (Monday) morning, and at noon the vote was taken. As a result, the design presented by the '91 man met with most favor and was accordingly accepted. The pin will be described in the next number.
I. There was some worry when he was in an electric blue; is sometimes black,

haps it's ghost.

indeed very, though opals might be better tolerated, if he kept a plug in his mouth-piece.

Mr. Badger resumed his duties in the wood-room, the first of the month. His re-appearance was the signal for an ovation by the Preps:

Professor (dictating prose composition) — "Tell me, slave, where is thy horse?"

"Startled Prep — "It is under my coat, sir, but I was not using it."—Ex.

The man who wrote the recent popular song entitled, "They're After Me," is probably a student at some school in which the excuse-book system is in use.

"Misses D. Mc — and Josie G — attended the Electrical Exhibition at the Worcester Institute of Technology, Friday, and pronounced it a wonderful display."

—Fitchburg Sentinel, March 2.

The fellow who said the distinguishing feature of the opal was its "opaleness," sat down with the confused impression that, though opals might vary in color from blue, green, yellow, orange and red to a "hair brown," the one he had in mind must have resembled a miniature "goose egg."

And the fifth angel sounded, and I saw a star fall from heaven unto the earth; and to him was given the key of the bottomless pit. Rev. 9:1.

This indicates that there is a chance for the Faculty yet, despite the facility with which they descend into the bottomless pit, in the school song.

For the past few weeks the Middlers have been greatly interested in the mysterious antics of the gas in mineralogy. Sometimes you have it, then again you haven't. Indeed very lately it went right back on the Doctor when he was in the midst of an extremely interesting experiment. Perhaps it's ghosts.

"This mineral can always be told by its color. It is dull gray with crimson streaks; usually, however, is green with a pinkish tinge of white; is sometimes black with a shade of yellow, but is generally colorless; nevertheless it is frequently found in layers approaching a sky-blue scarlet, which upon cleaning resemble a bottle-green violet."

WANTED — A situation for the summer, by four young men who either individually or collectively can tell the percentage of winkle to one glass of soda, state very exactly the precise amount and duration of "fire" in one small torpedo, or if occasion requires, can trip the can-can with the grace and agility of professional skrt dancers. Photos exchanged. Docky, Nelly et al.

W. P. I.

The Athletic Association met Friday noon, March 13, and elected the following officials: President, E. E. Bradford, '91; Vice-President, A. E. Culley, '92; Secretary, Forest Bartlett, '92; Foot-Ball Manager, D. A. Ballard, '93; Base-Ball Captain, Nelson Andrews, '92; Marshal for the Intercollegiate Sports, S. A. Kinsley, '91.

Dr. Fuller's recent severe illness has led him to give up his school work for a season and take a much needed rest. He will remain in Florida until he is relieved of his bronchial trouble and return at the end of the vacation. He hopes to make several stops on his way home in order to gather material that will be of special interest to his classes in Geology and Mineralogy.

A Kansas farmer recently sent this rather mixed order to a merchant in the county town: "Send me a sack of flour, five pounds of coffee, and one pound of tea. My wife gave birth to a baby boy last night, also five pounds of corn starch, a screw-driver, and a fly-trap."—Etna.

This reminds us of a Junior who has discovered the following remarkable sentence for translation into German, in one of the exercises of Meissner's Grammar: "The girl who had milked the cows, weighed a pound of butter."

Sunday, March 8th, a meeting of Y. M. C. A. was held in the chapel for the purpose of hearing reports from the delegates who attended the College Y. M. C. A. Convention at Williamstown. Practical and helpful suggestions were brought forward by the delegates who seemed to have obtained many new ideas in regard to association work and to have gained much enthusiasm for such work at this convention. The reports were followed by a short
address by the Rev. C. M. Southgate, which was thoroughly enjoyed by all who were present.

Here you are now, catalogues of the Institute, latest edition will be out in a few days—profusely illustrated, every man’s name and residence without a star, every professor’s name with the titles by which he is known in Police circles, a good description of Supt. Higgins’ Emery-wheel Works, and much other valuable information. Student’s price, two copies, with one extra if desired, one hundred and fifty dollars, paid in advance.

The additional facilities afforded by the new machinery in the iron-room, will be appreciated by mechanics “in the hole.” At least ten more men can be accommodated now, than heretofore, so that those who wish to make up time next vacation, will not be compelled either to crawl into their pants at 2.30 a.m., or else camp over night on the hill, in order to get a place on the list.

Upon the invitation of trustee Chas. H. Morgan, an informal meeting of resident graduates of the Institute, was held at his house, on Friday evening, to discuss plans for the proposed Artisan training school, to be established in connection with Mr. Bigelow’s gift of machinery in case the necessary funds can be secured.

Those who gave expression to their views, warmly favored the plan, and several valuable suggestions were made. Among them was the idea that the combining of study and work in the training school, will form habits in the pupils, that will give results in later years, as most successful men in any calling do the greater part of their effective study after leaving school.

The conference gave some present, new views of the value of the proposed school, and all enjoyed a social hour with the genial friend of the Institute, who entertained them at his house.

SHEAR NONSENSE.

“The naked hills lie wanton to the breeze,
The fields are nude, the groves unfrocked,—
Bare are the shivering limbs of shameless trees;
What wonder is it that the corn is shocked?
—Ex.

SHE SHOWED HIM STARS.

For every shooting star he claimed a kiss.
She, seeming coy, at first, demurred to this;
But he, persisting, would not be denied
When he at length a flying meteor spied.

And so, as evening grew apace, their eyes
Oft scanned the glittering aspect of the skies;
And when a darting star caught either’s sight
A sound of kissing broke upon the night.

And so it came to pass anon that she
Looked for a shooting star as much as he;—
Nay, if by chance a star escaped his view
She called his wandering fancy to it too.

When intervals seemed long between each hug,
She called him on a passing lightning bug;
And ever taxing her ingenious mind,
Her ready wit enabled her to find
More shooting stars in three short fleeting hours
Than would compose whole meteoric showers.

But when she did her last pretext exhaust
And was about to yield her cause as lost,
She saw a switchman’s lantern circling swing
And got him down to a steady thing.
—Vassar Miscellany.

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