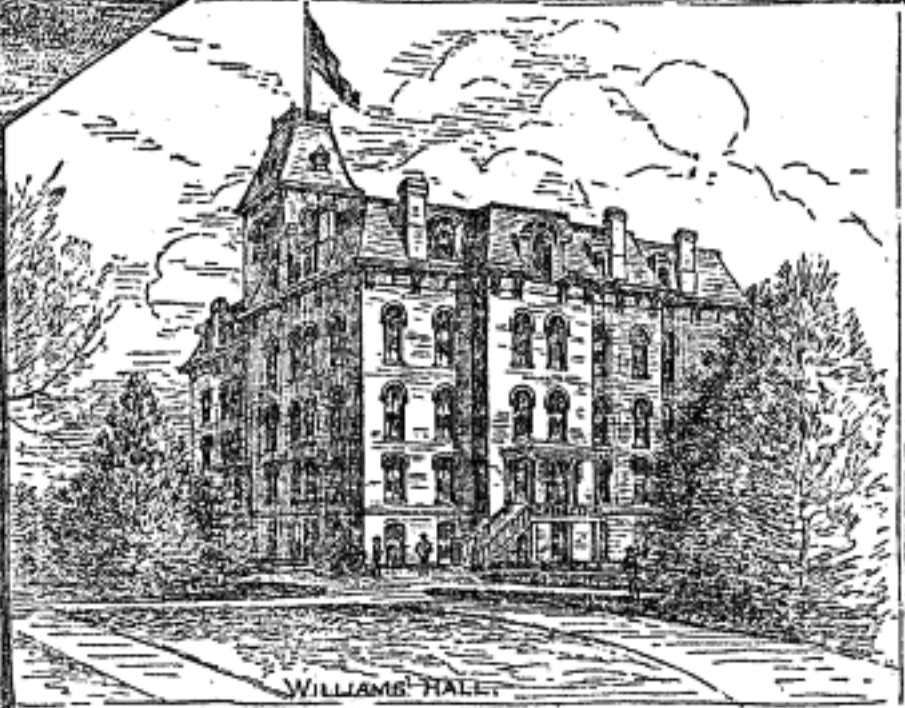


AUGUST 1, 1886.

COLLEGE

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The Death of Eva.

C. H. JUDSON, UNION LITERARY SOCIETY.

With noiseless feet, and softened touch,
A maiden lady moves around
A room wherein is beauty, such
As on this sphere is seldom found.

The bed is draped in hazy white;
And on a mantel o'er the head,
Softened by the fading light,
An image of the one who bled,

That mortal man might thus be healed.
A curtain holds in outstretched hand,
Which, waving gently, seems to yield
To breezes from the perfumed land.

The carpet, with its center red
With handsome roses in full bloom,
Forms striking contrast to the bed,
And gives a brightness to the room.

A dainty stand upholds a vase,
From choicest alabaster wrought;
Which lightly holds in its embrace
A moss rose bud, by Topsy brought.

A last, lone ray of light flits by,
And rests upon the angel face
Of one who soon is doomed to die;
For nearly run is her brief race.

To die?—such souls can never die,
But simply burst their earthly bands,
And, rising to the home on high,
Resume their life in Heavenly lands.

And as he gazed upon her face,
So beautiful, and yet so frail,
So full of mild, angelic grace,
St. Clair could not restrain a wail.

"Oh God! is she to leave me so?
She, whom I would die to save?
My life will be an endless woe
When she is carried to her grave."

As thus in murmurs low he spoke,
The ray of sunlight reached her eyes,
And with a troubled toss she woke;
And as the fog of morning flies

When Phœbus rises in his might;
So St. Clair's trouble face was cleared,
And as the calm, angelic light
Drove sorrow from his face, he neared

Her side, and listened as she said,
"Papa, please have aunty come
And cut a few curls from my head,
So that I may give to some

"Of my dear friends a sign of love,
By which they can remember 'Pet,'
And when I reach my home above
I'll look and see if they forget.

"And, papa, may our people come
Into my room, where I may talk

To them of Jesus Christ, with whom
In Heavenly streets I soon shall walk?"

St. Clair called Miss Ophelia, who
At his approach had moved away,
And soon some curls of golden hue
Shone bright as in a heap they lay.

And then the servants all drew near,
And listened with abated breath
As their sweet mistress, Eva dear,
Talked to them of sin and death,

And of the one who died to save
Us all, and taught us how to live
So that when we reach the grave
We may be prepared to give

A good account to Him who made
Our mortal bodies and our souls;
Then long and earnestly she prayed
That Christ would take them to His folds.

And then, with tearful eyes, they took
The curls she gave them, one by one,
And cast a lingering, loving look
On her whose race was so soon run.

The midnight hour drew on apace,
And found sweet Eva sound asleep,
With Miss Ophelia in her place,
The nightly vigil there to keep.

And as the midnight hour slipped past,
A change swept o'er the sleeper's face,
And Miss Ophelia knew the last
Must soon, yes very soon, take place.

She hastily aroused St. Clair,
And all the house was soon astir,
And hurried to the bedroom where
The doctor and the others were.

No deathly shade o'erspread her face,
The change was one sublime and grand;
One that time can ne'er erase
From minds that by a death-bed stand.

St. Clair stooped o'er his dying child,
And whispered gently "Eva, dear;"
She opened wide her eyes and smiled,
And said, "Papa, why, are you here?"

And as she spoke, she seemed to be
Watching something overhead.
"Darling, tell me what you see."
And answering him, Eva said:

"I see some angels, and they hold
In either pure, angelic hand
A harp of Ophir's purest gold,
And on beyond this Heavenly band

Jesus stands and beckons me
To come to Him, and I must go,
So good bye, papa dear, but see,
The gates are open and they show—"

And without another word
Her soul passed through those Heavenly gates,
As when a long imprisoned bird
Leaves its cage and joins its mates.

The Benefit Derived From Reading Good Classes of Fiction.

L. C. COLBURN, ECLECTIC SOCIETY.

A great deal has been said in favor of the reading of good fiction, and quite as much against it. Many eminent clergymen have written against all classes of fiction as being the source of much crime; but the steady demand for the works of the best authors, indicates that there are many persons who have other views of the subject.

In looking over the shelves of our library we find works of fictions, treating of all kinds of subjects. The historical novel takes us back through long ages, and gives us pictures of ancient domestic life with a vividness that transports us to the time and place depicted. These works supply a want that no amount of history can fill. In reading history we are likely to omit many of the details that are given and strive to arrive at a mental picture of the scene without studying these details, we are wearied and lay aside the volume without completing it. In the historical novel we have the picture formed for us and so presented as to hold our attention; the characters taking part in the events, become as real as those surrounding us in everyday life. Many historians are given preference because their histories are written in the narrative style.

The observation and analysis of character is of great use to novel writers in securing attention and interest. Who can read the works of Dickens without seeing the correctness of his delineation of the characters of men? His characters are those of everyday life. Most of his novels present to us people with whom we meet at every turn. Fagin, the Jew, is to be found in any of our large cities. The description of this one character and the narration of his doings led to careful investigation regarding the education of that class which lives by thieving. Who can read the analysis of the character and lives of George Eliot's heroes and heroines without desiring to imitate their better qualities? Lord Lytton's *Last days of Pompeii* gives us one of the most touching pictures of submission to physical deformity, in the character of the blind girl.

Wilkie Collins gives to us the thoughts of many classes of society. Walter Scott carries us back to the days of the tournament and border warfare. His romances bring to our minds more vividly than any history, the struggle of the Scotch for their rights and liberties. He makes us feel the wrongs and sufferings of the people as if they were our own. His character of Jeanie Deans is the best and purest of womanly sacrifice for one whom she loved.

Most authors have had some great idea to work out in their stories. Perhaps one of the greatest is worked out in Mrs. Stowe's *Uncle Tom's Cabin*. This one work opened the eyes of the North to the barbarities of slavery and roused them to wipe out the blot upon the

name of a nation that acknowledges, "All men are created free and equal." Charles Reade's works are nearly all written to correct the evils arising under the laws of England. His descriptions of the sufferings of the inmates of private mad-houses led to a better knowledge of the methods of treatment in them. His stories of the senseless punishment of criminals, led to substituting labor for those confined, instead of the straight jacket and turning a weighted wheel. They give us an idea of the wrongs that can be done in the name of justice. Many writers on temperance have done much through the medium of their stories, by presenting the pictures of misery and crime caused by intemperance. In the form of a story we get a better view of the real nature of the case than we could by a mere statement of the facts.

There is still another benefit to be derived from reading good fiction. All know that our associations not only form our character, but give to our language a form that can not be mistaken. If a child has been brought up where he has had the benefit of the association of educated people, his language will be correct; when he wishes to tell of anything that has happened he is not at a loss for words with which to express his ideas. Good books supply, to a great extent, the places of association with educated people. In the works of standard authors we have given us the best thoughts clothed in the most correct language, and by reading these works we naturally adopt some of the forms of expression met with.

The student who seldom or never reads a work of fiction can have but limited ideas of life. We can not all travel and see for ourselves the various countries and phases of society; but the standard novel supplies nearly all that we may get by traveling; it takes us into the society of refined people. The careful reading of a good book gives expanded reasoning power, because a person cannot follow such lines of reasoning as are often presented by the best writers of fiction without forming a habit of reasoning for himself. The reading of good novels gives the student expanded ideas and furnishes him subjects for meditation and reflection long after he has finished reading the book.

Prescribed Course in Colleges.

PHILIP B. WOODWORTH, PHI DELTA THETA
FRATERNITY.

The students of to-day are realizing the greatest revolution in education since the time of Lord Bacon, namely—the transition from the exclusive classical course to the admission of the sciences. Not only this great change, but also several minor changes in college training are of recent origin.

The elective system in colleges is one of the changes liable to be carried to excess. Not that we should have a rigid prescribed course for all alike; one extreme is

fully as undesirable as the other. The young college student who thinks he knows just what he wants and just what he don't want, is liable to be mistaken. All students prefer to pursue those studies in which they are proficient, and, if opportunity presents, the much needed studies are entirely forsaken. This is the reason that there is great inducement held out to young men by the upstart institutions of learning where the aim is wealth. They inform young men that they may study only such studies as are desired; and having completed a certain number of hours—graduate. That such a graduate can be symmetrically educated and have anything like a liberal education is absurd.

It is not uncommon to have students, generally second year men, say, "Why stuff grammar or rhetoric down the unwilling throat of a pupil who will never make a grammarian and might make a splendid mathematician?" The statement convicts itself, and would make its ideal a "one idea man," and that so narrow that no one else would be benefitted by the supposed precious idea. Following this same line, our great mathematicians that are referred to as authority, are the men who have written books of real worth. And these books are not found wanting in grammar and rhetoric. Anyone who intends to devote time to the natural sciences must also develop literary tastes in this, the age of books.

Institutions of high standing will not graduate any person on any special study unless it is accompanied by a certain amount of training in the literary branches. The men who stand at the head of the scientific departments object to an exclusive course of study bearing directly on one branch. No one is admitted to such institutions by passing a limited line of common school studies, but all studies must have received some attention.

Some think that it is not reasonable that studies that are distasteful to themselves should be required. The superior knowledge and extended practice of the faculty has not half the weight as what the misused individual *thinks* about it.

The small boys in the district school, and in fact, many large ones in city high schools, object to certain studies which they pronounce absolutely worthless. What the teacher knows about it is of minor importance. Later this much annoyed teacher will attend the normal school or some college and repeat the experiment by trying to improve on the more excusable efforts of their own scholars.

If the course in this college was entirely elective, how many of us would gladly skip all grammar and essay work? Yet with the present required work how few master the branch even passably. The coming college student will probably be blessed as have those of the past by having among them chronic kickers, all good fellows, who require the effort as a tonic necessary to life.

Hard Work Accomplishes More Than Genius.

G. D. PERRIGO, DELTA TAU DELTA.

Genius is an equivocal term. There are very few real geniuses. If a great invention is made, or a man suddenly comes into prominence through some change of civil affairs our first comment is, genius did it. In many cases this is true, but in the majority of cases it is false.

Genius is inborn. A man can never make himself a genius, although he may, by his constant perseverance, by hard work, ascend from the bottom to the top of the ladder of fame; from the condition of the common laborer's son to the highest place in the nation.

Nothing of note can be accomplished by genius without work. Much can be accomplished by work without genius. Look at Edison whom we call the greatest genius in his particular vocation. He is toiling in his laboratory from morning until night. It was by his earnest persevering efforts that we have the great improvements in electrical apparatus to day. Would the "electric light" have ever been discovered by genius alone? No. Can we say that genius emancipated three millions of slaves. It was by hard work, and after passing great obstacles that Lincoln reached that position when he was enabled to accomplish that great object which will be immortalized by history. It was talent, not genius, and talent that was the product of a rich and cultivated mind. Mozart, probably one of the greatest musical geniuses the world has ever seen, was constantly at work on his music. Did he sit idly waiting for his genius to produce his great compositions? If he had the world might never have heard of him.

Trace the career of many of the most enlightened men of the times. Those who hold positions of great trust in the nation, and it will invariably be found that they are not men of genius, of brilliant endowment, but men of good solid worth, men who have fought their way through poverty and through adversity. Though oftentimes discouraged yet they have pressed on until they have won the prize they so richly deserved.

We find almost invariably that the greatest geniuses have been men and women of constant application. Although some geniuses have produced great works, seemingly without any effort, yet if all were told we would find that hours and days of toil had been spent upon the apparently spontaneous production.

On the other hand, much can be accomplished by work without genius. This class is very common to us. We can all point out many who have steadily risen by their patient industry and constant study to fill eminent positions. We can all recall some poor boy who, it may be, came from the farm, determined to go through college, and who now may be holding a position that any of us might envy. There are a multitude of such instances. Was it by genius or hard work that these men

succeeded? The majority of our great men to-day are not men of genius, but men who have known what it is to burn the midnight oil, not in revelry or merry making, but for the earnest thought and study by which they were enabled to attain the popular and honored positions they now hold.

One great fault of men of little genius is that they lack application. In fact, many men and women whom we might justly call geniuses are never known to the world, because they rely too much upon their genius; thinking that that will accomplish what experience has taught us can be accomplished only by hard work. If we should make a careful investigation we would find that the majority of our statesmen, our philosophers, and our business men, are men of little genius but great application.

SCIENTIFIC.

Botany at the Michigan Agricultural College.

In the December number of the *Botanical Gazette*, the editors "wrote up" twelve leading Botanical Laboratories of the United States, and included that of this College in the number. The article was accompanied by illustrations, including one of our Botanical Laboratory. A few extracts from the article appeared in the last number of the *SPECULUM*.

Seeing the article, the editor of the *Michigan Moderator* was glad to use the electrotype, and also spoke good words for the department.

G. W. P., of Penn., editor and proprietor of *Park's Floral Magazine*, also requested the loan of the electrotype, and added a complimentary notice.

The Hon. C. W. Garfield, editor of the *Michigan Horticulturist*, also requested the use of the cut, which appeared on the first page of the July number.

Within eight months our laboratory has been illustrated and highly complimented in four different magazines.

From the last article we make a few extracts:

"At the recent June meeting of the Michigan State Horticultural Society, convened in Lansing, one of the most pleasant hours of the convention was occupied by members of Prof. Beal's class in botany. Seventeen young ladies and gentlemen, fresh from original work in the botanical laboratory, gave three-minute talks to the assembled horticulturists upon topics which they had been studying by the aid of the microscope.

"The work these young people are doing at the Agricultural College was not attempted in any of our colleges fifteen years ago.

"The subjects of the talks given us were as follows:

- "1. Structure of a leaf.
- "2. The mouth of a leaf.
- "3. Young hairs of a leaf.
- "4. Sting of a nettle.
- "5. Protoplasm in motion.

"6. Palisade cells in a leaf.

"7. Starch of common and wild Arizona potato compared.

"8. The frame work of a leaf.

"9. Fibers of cotton, flax, wool, and silk compared.

"10. Why nuts are hard.

"11. Tough and brittle white ash, as seen magnified.

"12. Structure of a grain of wheat.

"13. Pollen and its growth.

"14. Quince rust.

"15. Corn smut.

"16. A study of common mould.

"17. Effects of severe cold or heat in cells and their contents.

"The drawings made by the students and employed in their explanations were admirably executed, and on the whole the entire exercise was as interesting as anything ever presented to the society.

"The students were questioned upon the topics they elaborated by the horticulturists present, and the answers given were prompt and clear. * * *

"The work done here is rendered attractive to the students and is certainly calculated to stimulate original investigation in the field which the 'New Botany' occupies."

W. J. BEAL.

Our Natural History Society.

Since its organization in May, 1872, with W. K. Kedzie as its first president, the Natural History Society has been a prominent feature of the Agricultural College. Occasional lectures have been given by members of the Faculty and others, but the meetings which have attracted most attention were those in which the students took a prominent part. From the large attendance at its meetings and a comparison of our programs with those of similar societies in other colleges, we are confident that our Natural History Society is following the right plan.

To add to the proof that the society is doing good work, let us quote from the *Michigan Horticulturist* for July, 1886. The editor is Hon. C. W. Garfield, class of '70, secretary of the State Horticultural Society, and of the American Pomological Society. He is known all over the Nation among horticulturists for his excellent programs. At the last meeting of the State Horticultural Society, held with Capital Grange at North Lansing, some of the students of Professors Cook, Beal, and Bailey occupied places on the program. The selections made were such as would be especially adapted to a meeting of horticulturists, and all were samples of the illustrated papers that have been presented at recent meetings of the Natural History Society of this college. They were no better than others which have been presented at our meetings. Hear what the wide-awake secretary and editor says in the magazine above mentioned:

"Prof. Beal gave a very entertaining exercise, aided by seventeen members of his class, on botany. Three young men doing special work under the guidance of Prof. Cook, gave valuable papers upon Plant Lice, Mites, and the Imported Currant Borer. One of the most attractive exercises of the meeting was a paper by our Japanese friend, Kizo Tamari (a special student at the college), on the Japan Persimmon.

"The last evening, Prof. Bailey entertained the convention with exercises prepared by Agricultural College students under his guidance, upon A Fire Hot-bed, Training Peas, Experiments in Grafting, Botany of the Raspberries and Blackberries, Location of Walks and Drives, and Effect of Various Solutions in Quickening the Germination of Seeds.

"No recent meeting of the society has had a more interesting program of exercises, nor has any meeting been so well filled with excellent short papers and discussions."

W. J. BEAL.

Velocity of Light.

The most recent determination of the velocity of light is that of Prof. Simon Newcomb, whose experiments, made under direction of congress, have recently been published. From his own experiments and from those of Michelson and others he deduces 299,860 kilometres, or 186,326 miles as the most probable velocity in value, with an even chance of being 30 kilometres in error.

This, with the lately accepted value of the constant of aberration, would make the distance of the sun a little less than ninety-three millions of miles.

AN IMPRESSION is prevalent that mathematics is a science which remains the same now, as it has been for centuries. To elementary geometry, whose processes and text books have not been materially changed since the time of Euclid, much of the impression is due. But very different is the real state of the case. Indeed, no science has made more or greater advances during the last hundred, or the last twenty years than this same science. But unfortunately from the character of the science, the processes of the higher branches of analysis must ever remain unknown to all but a few, and discoveries which broaden the range and vastly increase the power of analysis are unknown and unappreciated by those whose attention is not attracted in that direction. Within the past few months we may chronicle the birth of a new branch of the science which promises to prove infinitely more fruitful to the progress of mathematical science than any of the many great discoveries of the last thirty years. It is known as the method of Reciprocants, and, while closely connected with, it is still independent of the great theory of Invariants, and far transcends it in the extent of its subject matter and the range of its applications.

THE LAST maximum of sun spots was greatly delayed beyond the time expected from the eleven-year period. The eleven-year period, it may not be generally understood, is the mean of many periods, whose average variability from the mean is about two years. There are clear indications that the maximum was passed some three years ago, and that we are now well on the way to the minimum. In general the descent from the maximum to the minimum is gradual, while the rise to the maximum is quite abrupt.

During the first half of 1885 there were, from 59 days' observations, on the average, 61 spots in 5 groups. During the second half, from 86 days observation, the average was 40 spots and $3\frac{1}{4}$ groups. This year, to August first, the average was 33 spots and 3 groups from 81 days' observations.

The sun is rarely seen entirely free from spots, but the days of spotlessness increase toward the minimum. In 1882 it was seen free from spots on two days, six days in 1883, twice in 1884, four times in 1885, and already this year on six days, the last one being July 10.

AN AURORA that was quite brilliant was seen at the College July 27, its arch extending to 45 degrees. It was preceded, as is usually the case, by active disturbances on the surface of the sun, a large spot breaking up into many fragments.

THE COLLEGE SPECULUM.

PUBLISHED QUARTERLY—AUGUST, OCTOBER, APRIL, AND JUNE
BY THE STUDENTS

—OF—

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AGRICULTURAL COLLEGE, MICH., AUGUST 1, 1886.

THE COLLEGE has just passed through a week that for general excitement exceeds any other period of many times that length since the institution was founded.

The circumstances are familiar to all. Beginning

with the investigation of certain charges brought in good faith against the professor of agriculture and his methods of teaching, the week has ended in the departure of eighteen highly respected seniors.

The many accounts of the week's proceedings and its results as reflected back to us from the press, show the false light in which the affair is regarded and the wrong conclusions reached by those ignorant of the circumstances.

Such expressions as "The Rebel Students," and "The boys don't run the school," would indicate that the State Board and students had been fighting each other with bitter hatred to see which would come out best. While the boys do not express themselves as satisfied with all the actions and decisions of the board, yet there was no question as to the power of their authority. Looking simply at the first cause and final result it might appear that the eighteen suspended seniors instigated all the dissatisfaction; nothing could be further from the truth. Regarding the expulsion of a student, for refusing to testify in an affair in which he was not engaged, as unjust, they stated in respectful terms to the board what they should consider their duty in regard to class day and commencement exercises unless the expelled student was reinstated. The seniors believed they were taking a step in a matter over which they had perfect control; that it rested with themselves whether they should engage expensive music and hold class day exercises. Whether the stand taken by them was just and reasonable or not, lies with each person to decide.

The State board did not consider it so, while many of the seniors yet fail to see where they overstepped their right. Whether it was wise on the part of the eighteen to persist in the resolutions after the board had ordered them to be withdrawn, is a question on which the judgements of different individuals of the class differed.

As regards the attitude of the seniors toward disorganization, of which they were accused by a member of the faculty, we have only to say that before leaving they advised all dissatisfied students to fall into line and work as though nothing had occurred to disturb the routine of college life.

We know that the penalty of suspension is generally looked upon as a disgrace, but in this instance we hope it will be regarded by all, as it is by a large majority of the students, as the result of circumstances by which the boys surrounded themselves, in maintaining what they considered to be right.

This must be recognized as a fact, even though the action of the boys be considered wholly wrong, and the action of the board strictly just.

The true, manly character of the suspended students will show in spite of the disadvantage at which they are now placed, and one mistaken action on their part should not be allowed to hide their sterling qualities of honor, manhood and industry so well displayed during their four years of honest toil at the college.

We hope it will not be long before the athletics of the college are as well organized as are the other departments. The value of systematic physical training in colleges is too well established to need comment here. Anyone who has observed the tireless energy of the strong physique and compared it with the weaker efforts of the enfeebled prodigy of learning, cannot hesitate as to which is the wise course for students to follow. The world receives just as much benefit and no more from the wonderfully learned individual who is unable to mingle with this "working day world," as it does from the muscular giant in the side show. True, our labor afternoons has lessened the need of athletics, but when laboratory work partially takes the place of field labor, as it should and doubtless will do as the number of students increases, there will be need for better means for athletic exercises.

The interest taken in field sports is in a measure proportional to the skill acquired in such sports. This skill in the past has been greater or less, owing to the presence or absence of efficient leaders. We can tell of a season when, with good leadership and practice, the college base ball team suffered but one defeat while gaining many victories; on the other hand, the Reform School might relate an instance of the following season—we don't like to—when, lacking organization, we played a game and left our ball with our opponents. If we remember correctly, the interest taken in athletics for the rest of that season could hardly be called animated.

It might be quite impossible to possess equal skill at all seasons, but complete organization in this, as in all other things, would prevent great demoralization.

In the event of organization we could have a second nine in which youthful aspirants could prepare themselves for positions in the first nine. A second nine would also be valuable in keeping the college team in practice. Though they could not expect many victories, yet they might see the time when under favorable circumstances they would be able to run their score up to 50 while the "Invincibles" were getting 53.

Base ball is not the only one of our field sports that would be improved by organization. The three tennis clubs if united into an association would afford much more pleasure and profit to all concerned. Games between the clubs could be arranged, and instead of a few games each season in which the umpire's most common expression is "fault," there would be an incentive for the members to indulge in the sport for a short time daily.

While it is possible to spend too much time in outdoor exercises, yet, as a rule, the students do not have a tendency in that direction. Where such a tendency is too great, the limitations as to time and place that would essentially be made with well organized athletics would be a check upon any excess.

WHY not have a teachers' bureau? Already we hear the boys asking each other if they intend to teach the coming winter, and nearly as often as the question is asked we hear the answer, "Yes, if I can get a school." In most cases, through the help of friends or by being absent from college a week or two in the fall term, they are able to obtain schools, but owing to the limited time at the disposal of the applicant in which to look up a school, the schools obtained are not always desirable ones.

We cannot speak from experience, but judging from the cool reception that strangers are apt to receive, we prefer not to wander around in an unknown country and beg of various school boards the privilege of instructing their young hopefuls.

The knowledge that we had, safely stowed away in one of the otherwise empty apartments of our pocket-book, a slip of paper bearing the president's signature, would be a great comfort to us in our weary wanderings, but we can imagine difficulties even then. Without stretching our imagination beyond what some of the boys have experienced, we can see ourselves answering the questions that some good old district father would ask about the "farm" just before making an offer of twenty-five or thirty dollars a month and "board around."

It is safe to say that in a large majority of schools the officers are ignorant as to when our winter vacation begins or ends. There are doubtless many instances throughout the State when the supplying of an efficient teacher for the winter would be an accommodation, but in such instances the college as a place to get teachers is never thought of. How are the various school-boards to know that the M. A. C. boys are in the habit of teaching winters?

With the co-operation of the faculty and students a bureau on a small scale could be established and a nominal fee from each would enable the members to send out circulars and advertise in popular State papers, thus making themselves known. Besides enabling the boys to secure positions, this plan would greatly extend the reputation of the college as many of the boys are very successful as teachers. Not only that but some of the ignorance in regard to the college that most people harbor so persistently might be dispelled by some of our "brisk wielders of the birch and rule" who would in "lonely lowland districts teach."

IN THE commencement oration of Hoyt Parmalee, '86, of Hillsdale college as published in the *Hillsdale Herald* of July 13, we notice the following paragraph:

"At the Agricultural College on Sunday morning the speaker observed with astonishment a load of boys with cigars in their mouths, a keg of beer in their wagon, starting from the campus to spend the holy day in idleness and revelry at a lake-side resort."

It has never been our purpose to criticise other colleges, especially in their commencement orations or other matter that is approved by the faculty before being presented to the public, but when such a paragraph as the above meets our eye, clothed in the garb of dignity and fairness that are supposed to be found in a commencement oration, we consider ourselves justified in questioning the manliness or honor that would allow such a statement. As far as our knowledge extends we might include more, but as the "speaker" tells us that he "observed" such a scene we will simply add that he saw in his brief visit here, whenever that may have occurred, a circumstance that we, during our three years at the college, have never witnessed nor heard of.

But suppose such an event should occur once in the history of a college, does that justify any one to use that college as a terrible example in attempting to show the appalling immorality of State institutions?

In a measure we can sympathize with Mr. Parmalee for using the paragraph referred to, as we too know what it is to be pressed for elegant material with which to adorn a public speech, but never being quite so hard up as Mr. Parmalee appears to have been, and not having so lenient, not to say indifferent, a critic as he evidently was blest with, our orations have ever been devoid of such ornaments.

We are aware that the prevalent belief is, especially with people that have but a limited knowledge of colleges in general, that, as a matter of course, the

denominational colleges have the higher standard of morality. As a college we do not pretend to be perfect in morals, but we have never seen the day when we were afraid to stand up fairly and squarely, and show to the world our good and our evil, feeling that we would suffer no humiliation in being compared with any denominational school, even though it were the virtuous Hillsdale.

Such a scene as Mr. Parmelee observed would not only receive the severest college discipline but would be discountenanced by our students; could Hillsdale do any more? Judging from some of the highly interesting and complimentary(?) discussions in which the authorities at Hillsdale have from time to time engaged, we would say that the character of the "college on the hill" is not yet perfect enough to justify her in casting the first stone, and until that time comes we feel that she might learn the qualities of courtesy, honor and fairness from the rugged M. A. C.

It is rather difficult to make the business men of Lansing see the advantages that they would derive from having an "ad." in the SPECULUM.

One worthy merchant answered the solicitation of our business manager by saying that he was sure of the custom of the boys whether he advertised or not. We admire the complacent spirit with which he regarded the situation, but we think that a little co-operation on the part of the boys might increase his faith in printers' ink.

If any business man takes real solid comfort in the idea that we will blindly and constantly add to his prosperity without a returning favor, he is entitled to that comfort, and we should be sorry to deprive him of it, yet the time might come when our own interest would require it.

Of course the fifty thousand a year that Lansing receives from the College would not materially affect the prosperity of the men with whom we deal, but it would be better for those who do appreciate our custom, and much better for ourselves, if we would patronize our advertisers to the exclusion of such persons as "would not miss the students."

With this issue the SPECULUM enters upon the sixth year of its publication. We enter upon our rather unfamiliar duties hoping to maintain the degree of excellence so well established and upheld by our predecessors. The increasing number of students should enable us to enlarge our subscription list, and thus put the paper on a better financial footing. And while the

number of students increase the proportion of them that take the paper should also be increased.

We believe that progress is marked, if not determined, by a public spirit made manifest by the zeal with which public organs and institutions are supported. Individual success may depend upon personal efforts, but if all worked simply for self, doing nothing to stimulate public enterprise or to quicken social life, the good time would be long in coming.

Surely when the world outside is so prompt to promote active public growth, the colleges should not be lacking in this respect. If any should recognize the value of publications as tending toward good results, it is the student, and seeing this value he should possess sufficient public spirit to support them.

Until we are compelled to do so, and we trust that such will not be the case, we shall be slow to believe that there are many of our students who have not interest enough in the workings of the body of students with which they move and act, nor pride enough in their social and intellectual standing in that body, to give the SPECULUM their hearty support.

WE FEEL justified in making an apology for this issue, on account of the short time in which we have had to get up the material. The preceding issue being six weeks late, made our time very limited, and as that short time was broken into by a week of excitement in which no work could be done, we feel that we are unable to do justice to the task required of us.

A few of the alumni have remembered us by items but more extended correspondence on their part would add to the value of the paper, especially to the department of personals.

We trust that all will be as free as the editors are in attributing any short-comings of the present number to circumstances, and any criticisms of the future we will be more ready to apply to ourselves.

Constitution of College Paper.

By request of one of the alumni, we publish the SPECULUM Constitution. The amendments now proposed will affect only the number of copies, changing from four to six per year and the time of publication.

PREAMBLE.

We, the students of the Agricultural College of Michigan, for the purpose of literary culture, the attachment of our alumni to their Alma Mater, and the circulation of college news, determine to establish a

paper, and for its government adopt the following constitution:

ARTICLE I.—NAME.

The name of the paper shall be "The College Speculum."

ARTICLE II.—MANAGEMENT.

All powers not expressly delegated to the societies and to the officers shall remain in the hands of the Students Organization.

ARTICLE III.—LITERARY CONTROL.

Sec. 1. The literary management of the paper shall reside in a board of editors, which shall consist of one editor from each of the following societies: Natural History, Delta Tau Delta, Phi Delta Theta, Union Literary and Eclectic, and such other societies of one year's standing as may be organized in the future and accepted by the Students Organization.

Sec. 2. The Students' Organization shall choose an editor-in-chief from the body of editors elected by the societies.

Sec. 3. The editor from the Natural History society shall be a member of the faculty.

ARTICLE IV.—BUSINESS CONTROL.

Sec. 1. The business management shall reside in a board of business control, consisting of all the editors, a business manager and a treasurer.

Sec. 2. The treasurer shall be a member of the faculty.

Sec. 3. The business manager and treasurer shall be elected by the Students Organization.

ARTICLE V.—DUTIES OF OFFICERS.

Sec. 1. The business manager shall preside at the meetings of the board of business control, and shall execute its orders.

Sec. 2. The treasurer shall have charge of all money of the paper, and shall pay out the same at the order of the board of business control.

ARTICLE VI.—ELECTION OF OFFICERS.

[As amended May 1, 1882.]

The officers to be chosen by the Students Organization shall be elected on the first Monday of May of each year.

ARTICLE VII.—ORGANIZATION OF BOARDS.

[Amended May 24, 1882.]

The two boards, viz:—the board of editors and the board of business control—shall meet to organize on or before the first Tuesday of June of each year.

ARTICLE VIII.

No person shall hold in one year more than one office.

ARTICLE XI.—NUMBER AND DATE OF ISSUES.

There shall be four issues of the paper during the year, to be published as follows: First issue, August 1; second issue, October 1; third issue, April 1; fourth issue, June 1, or as near these dates as possible.

ARTICLE X.—SIZE OF PAPER AND STYLE.

The paper shall be in size 9x12 inches, with not less than twelve pages of reading matter. It shall be enclosed by a cover of colored paper.

ARTICLE XI.—REPORTS.

Within two weeks after each issue, the editor-in-chief, the business manager and the treasurer shall render reports in writing to the students' organization.

ARTICLE XII.—SAFETY.

The board of business control shall not authorize the first issue of any year until three-fourths of the expenses of the year are assured and there is a reasonable prospect of securing the remainder.

ARTICLE XIII.—TO ESTABLISH CONFIDENCE.

For the purpose of giving confidence in the paper, the societies represented in the government of the paper shall assume the loss of each year if there should be any; the said loss to be refunded to the societies out of the future gains.

ARTICLE XIV.—CONTRIBUTIONS.

Any under-graduate, alumnus and member of the faculty may contribute to the reading matter of the paper, their contributions being subject, of course, to the approval or disapproval of the editors.

ARTICLE XV.—VACANCIES AND REMOVALS.

Vacancies in the two boards may be filled by the power that elects, and any officer may be removed from his office for neglect of duty by the power that elected him.

ARTICLE XVI.—AMENDMENTS.

Amendments shall require a three-fourths vote of the Students Organization and consent of a majority of the societies, and must be presented at least two weeks before the final vote of the students.

ARTICLE XVII.—PREVIOUS LEGISLATION.

All previous legislation conflicting with this constitution is hereby repealed.

HOWARD HOLMES,
L. W. HOYT,
J. W. BEAUMOUT,
H. A. PRICE,
Committee.

Through the influence of Lieutenant J. A. Lockwood, commandant of cadets, the college band has been provided with some elegant new belts.

COLLEGE NEWS.

How does the little busy bee
Improve each shining hour?
He maketh honey merrily
For juniors to devour.

Examinations.

Use no "ponies."

Read the Librarian's library notes.

We bid good bye to what is left of '86.

No fence around the pear orchard now.

No more confectionery sold on the college grounds.

'86 will hereafter be known as the "Cyclone Class."

There will be plenty of grapes and pears this year.

Berries were very plentiful in the garden this season.

Why may not the green-house have a better water supply?

O. O. Dunham and J. S. Dixon will take their diplomas with '86.

The half acre east of the ice house will be set with huckleberries.

None of the societies will hold banquets at the end of this term.

Where will we find ridge-poles enough for the coming freshman class?

The sophomores had no class day this year—too much excitement.

E. E. Graham has made a set of fourteen lathe tools for a twelve-inch lathe.

The base ball nine, manager and umpire had their pictures taken not long ago.

Members of the faculty should wear rubber coats when visiting the dormitories.

The new catalogue is out at last. The frontispiece is a new map of the grounds.

A Freshman under a Senior tile looks as though he had "greatness thrust upon him."

The mechanical department has turned out 25 bee hives this term for Professor Cook.

The old apple orchard is responding to its treatment, and a good crop is expected this year.

Some of the work of the students in the Mechanical department will be exhibited at the State fair.

Visitor.—Is this the Agricultural farm? *Senior.*—Yes, these are all agricultural farms around here.

Two gentlemen visited the college, not long ago, who were content with earning a (bear) livelihood.

The movable tables in the mechanical drawing room are a great success, and only cost about two dollars each.

The commencement orators are J. B. Cotton, W. E. Gammon, H. N. Jenner, T. A. Stanley and Miss Jennie Towar.

They should compare notes,—Dr. Kedzie says, robins do not eat wire worms, Prof. Cook says, robins eat wire worms.

Still no examination in agriculture, but the sophs. have ceased to sorrow, and have laid aside their sack-cloth and ashes.

Quite a number of the boys visited Brighton during the late encampment, most of whom report a very pleasant time.

The interior appearance of the greenhouse has been much improved by the new stand of shelves which has been erected.

F. R. Smith says, "If you are eating honey for pleasure, be careful to shake off all the bees; they spoil the flavor of the honey."

Lieutenant Lockwood delivered a lecture July 14, on Bermuda; the Lieut. is no orator, but can prepare a very interesting article.

July 12th President Willits delivered a lecture at the annual picnic of the farmers of Jackson and Ingham counties, at Pleasant Lake.

Crandall, Waldron, Chapin, and Hume will occupy the room newly fitted out in the tower of Mechanical Hall. (It will be well "Lit." up.)

Among the important features at the greenhouse is a collection of one hundred varieties of roses, including some very valuable specimens.

It was thought some time ago, that the seniors would be given a vacation the last three weeks of this term, but instead most of them were given a year.

Corp. C. L. Himebaugh made the best record at the last officers target practice, his score was 21 out of a possible 25 at 100 yards, and 18 at 200 yards.

The paper in the chapel will soon be repaired. Before very many years, providing our college keeps growing, we will have an entirely new chapel.

B. B. Smith had his picture taken in tights, showing the medals and mementoes which he won at our own field day and at Albion, Bates has them to sell.

How degraded now is the Senior tile. It hath fallen from its high station and now appeareth on the lawns as "head gear" for the humble Freshmen.

Within the last year there have attended college 11 Post Graduates, 33 Seniors, 24 Juniors, 59 Sophomores, 144 Freshmen and 24 Specials. Total, 295.

Prof. to Class in Agrl. Chem.: Some farmers near the sea shore put a couple of fish under each potatoe hill, and the result is a good crop of natural chowder.

Problem.—If it takes the Faculty a year and a half to get out a catalogue of 250 students, how long will it take them to get one out when there are 400 students.

The subject of Miss Towar's commencement oration will be "Wasted Energy. Through the carelessness of the old Board, it was not inserted in last SPECULUM.

The stewards for the next term are: Club A—R. W. McCulloch; club B—W. M. Munson; club C—G. M. VanAtta; club D—W. W. Diehl; and club E—O. C. Wheeler.

The next move in the line of college improvement will be to make the agricultural and horticultural departments more independent and the work more educational.

Prof. McLouth has been sounded as to whether he would accept the presidency of the Agricultural College of Dakota, and has been asked to go out there and look over the grounds.

In the near future President Willits will have new hard wood floors put down in the second and third stories of Williams Hall. The corridors of Wells Hall will also be kalsomined.

President Willits was invited to deliver an address before a meeting of the Horticultural society at Jonesville, Hillsdale county, but had so much to do that he was compelled to decline.

Lieutenant J. A. Lockwood, U. S. A., detailed at the Michigan Agricultural College as professor of military Tactics, and commandant of cadets, visited the encampment of the M. S. T. at Brighton, July 17.

The lathes on which the boys have been working in the machine shops will be in running order next term. One is an engine lathe, with six-foot bed and twelve-inch swing; the other has a five-foot bed, with fifteen-inch swing.

The party of scientists with whom Prof. Bailey made his northern trip, went so close to British America, that the Prof. could not resist the desire to cross the line, he had to make the journey with an Indian, but he went just the same.

Mr. Knapper expects to go east during the next vacation and visit eastern greenhouses for the purpose of obtaining new plants and learning new methods. It is not the intention of our enterprising florist to get behind the times.

An alarm of fire was sounded in the corridors one evening not long ago, and with anxious faces and flowing robes the students left their rooms to gaze with mingled feelings of joy and disappointment at a smouldering brush heap in the rear of Wells Hall.

The large Egyptian lotus is not so abundant in the botanic garden this year as last, owing to the fact that last autumn the muskrats devoured many of the best tubers. Wood and McClure have done good service in keeping the garden neat and in good order.

Rev. Washington Gladden, D. D., of Columbus, Ohio, will lecture in the college chapel, Tuesday evening, Aug. 17th, on the subject, "The Best Society." Another inducement to stay over to commencement.

A novel ink well has been made lately in the mechanical department. By compressing a rubber ball, air is forced into an air tight chamber containing ink, which is thus forced out in a small stream through a curved glass tube; the pen is inked by simply holding it in this stream.

Mr. Mohn, the foreman of the wood shop, is going to California, and the department has secured D. A. Campbell of Detroit to take his place. Mr. Mohn has been at the college for many years, a faithful and diligent workman. The good wishes of the college go with him in his new location.

Improvement will soon be made in the appearance of the grounds back of Williams Hall. The old oven will be torn down, a hard gravel walk and drive will be put through and the rest of the ground will be sodded, thus making the view at the rear of the hall almost as pleasant as from the front.

The flower beds by the greenhouse were never in finer condition, notwithstanding the excessive drought and poor facilities for watering. Everything has been done to make them attractive for commencement.—"Full many a flower is born to blush unseen, and waste its sweetness on the desert air."

A number of the sophomores have formed a botanical field club, which meets a short time on every Wednesday, when the members report on observations made, or under the guidance of Dr. Beal visit various parts of the grounds, to examine the trees and shrubs, the arboretum, botanic garden, and museum.

The officers of the sophomore class are: President, A. B. Cordley; Vice President, C. B. Cook; Secretary, L. C. Colburn; Treasurer, J. A. Thompson. Literary officers—Orator, L. A. Breggar; Historian, G. Teller; Poet, B. B. Smith; Statistician, H. E. Harrison; Prophet, J. W. Hinkson; Toastmaster, G. M. Van Atta.

The Abbot portrait hangs in a very conspicuous place in the alcove of the library. On the whole the portrait has given satisfaction, though some fault has been found with it. The picture stands as an emblem of the esteem in which past graduates hold Dr. Abbot, and is a very valuable present to the college from our alumni.

Prof. Bailey has been offered the Professorship of Botany in the Madison University, but has declined in view of the fact that he has been made full Professor of Horticulture and Landscape Gardening and has the assurance of additional facilities for building up what he proposes to make the leading department of its kind in the United States.

The Arboretum is in an unfortunate location, back of the barns of Dr. Kedzie, and is not visited as much as it deserves. Here are over 200 species of the most interesting forest trees and shrubs, native and foreign. They are all plainly labeled, so that visitors may learn much without a guide. E. L. Bullen and R. H. Wilson have trimmed things up in good style.

Dr. Kedzie and Dr. Beal will attend the meeting of the Society for the Promotion of Agricultural Science, which will be held at Buffalo, Aug. 16th and 17th. Dr. Kedzie will read a paper on "The Source of Nitrogen in Plants," and Dr. Beal will present one on "Parasitic Fungus as affecting Plant Distribution." Prof. Cook was to have read a paper, but will be unable to be present.

The State Board, at their last regular meeting, went out to see our cadets drill, and occupied reserved seats in front of the Armory. The soothing odors of asphalt were wafted to them from within, and they were so overcome by the grandeur of the occasion that they decided to give the military department an elegant new flag and flag-staff, the latter to be not less than 100 feet high.

The members of '86 have placed two fine specimens of twisted logs in the botanical museum. One is a large, tough white oak, which shows the wrinkled folds of the wood as bent on the lower side. The other is a red maple, showing well the twist of the storm. They stand on the main floor, one on each side of the office door. These will be accompanied by photographs of the track of the recent storm.

Another row of benches will be made in the wood shop, so as to accommodate seven more students. The boys in this department have been putting in extra time on projects of their own. Pelton has made a very neat case for botanical specimens, Judson and Eldridge have made themselves each a walnut book chest, and Everhard, a walnut desk. Some of the boys have been turning ball clubs, and very good ones, too.

The Botanical department had a large number of duplicate specimens of native woods. These were declined by the authorities of the University and Normal School, but were eagerly sought as "Just the thing" in the Iowa agricultural college, where Dr. B. D. Halsted, class of '71, presides as botanist. A dozen large boxes of woods and corn with some bundles of small boards, have gone west. They made a good wagon load.

We see by the new catalogue that the mechanical department will offer a four years course. At present though, only the first and second year studies will be taught. Some of the features of this course will be a special course in botany under Dr. Beal in the fall term of the Soph. year, and the option of French or German during the Junior year, one and a half terms in analytical geometry, and one and one-half terms in Calculus, also seven terms in Mechanics and general Physics.

The Freshman class is the only one which held a class day this year, and they had a very pleasant time. The exercises and banquet were held at the Lansing House on the evening of July 30th. The following was the program: Overture; Prayer, W. D. Groesbeck; President's Address, L. C. Bartmess; Music; History, W. S. Palmer; Oration, A. L. Free; Music; Statistics, C. E. Helmore; Poem, Mamie McLouth; Prophecy, A. C. Carton; Music; Banquet, B. K. Canfield Toast-master.

Not long ago Prof. — was walking along one of our beautiful drives when a lady and gentleman drove along. Seeing the professor, they stopped and the gentleman asked, "Is this the reform school farm?" He was told the name of our institution, and directed on his way, but this did not satisfy him, and he asked "What have the boys done that are sent here?" The professor walked wearily away, he looked at the beautiful landscape around him, gazed at the college buildings, thought of the talented professors of M. A. C. and whispered, "Such is fame."

For some time now the class in mechanical drawing has been doing original work, E. N. Pagalson has made the designs for a new steam hammer which will be built by the department. It has an excellent valve motion, a modification of the Corliss. Culver has made drawings for a hammock stand, with an awning. Axford has finished the designs of a grain barn for his father, and W. E. Gilbert, beside the regular class work has made drawings of a compound condensing engine. Many of the drawings show much ingenuity. Next term more time will be given to this original work.

Considerable improvement has of late been made in the Botanical Museum, and a large number of new specimens have been added to the already interesting collection. Polished foreign woods have been placed upon the walls and in cases. A collection of fibres used in the manufacture of the various grades of brushes, lichens, mosses, fungi in its many forms, monstrosities in plant growth, and some of our rarest and most beautiful flowers preserved in alcohol, a large number of grains, and their manufactured products from J. C. Vaughan, Chicago, Ill. a like collection from A. Langenbacher, North Lansing, Mich., and many sorts of grass seeds are among the recent additions. Frequent visits are paid the museum by students and strangers, which shows that the efforts of Dr. Beal are appreciated. Considering the little time he can give to such work, the Dr. deserves to be complimented on his interesting museum.

REPORT OF THE ABBOT PORTRAIT COMMITTEE.

The committee consisting of Prof. A. J. Cook, H. A. Haigh, and L. G. Carpenter, appointed last August by the alumni association to procure an oil portrait of ex-president Abbot, have the pleasure of reporting that the work is completed, and that the portrait is now framed and at the college ready for their inspection. The committee spent some time in making inquiries concerning artists in various cities as in Chicago, New York, Baltimore, Detroit,

and personally visited a good many and finally engaged an artist whom the secretary of the Art Loan association, the art critics, and the art dealers of Detroit highly recommended, Mr. W. B. Conely of Detroit. The Committee after consulting with many of the alumni thought that a portrait of Dr. Abbot as he was some eight or ten years ago would seem natural to more of the body of the alumni than one painted before or since. For this there was available a most excellent photograph, said by members of the family to be the best one ever taken of him. Taking this as a guide, and also taking sittings to get color, the artist painted the portrait. The canvas is 40 x 50 in size and represents Dr. Abbot sitting at a table arrested in the act of turning over a leaf of an open book in his hands. On the table by his side lies the well worn text books in logic and psychology which suggest two departments in which he has worked for so many years. The criticisms the portrait has received are very favorable, much more so than the committee expected they would be in any case. The criticisms show a variety of opinions as was to be expected, but with regard to most of them, what one has criticised another has praised. As a whole the committee think they are borne out by the mass of the criticism in thinking that they have secured a good portrait.

The portrait is hung in the book room of the library, facing the door, so that it is the first thing one sees as he enters the room. A neat plate with name and date has been attached to the frame. The committee take pleasure in mentioning the words of commendation that the project received from those who were absent as well as from those who were present at the meeting when the subject was broached. All seemed to think it a fitting testimonial of their appreciation of the personal worth of their honored president and of the value of the work which he did as the head of the institution.

SUBSCRIBERS TO THE ABBOT PORTRAIT FUND.

Class of 1861.—A. F. Allen \$5.00, C. E. Hollister \$1.00, A. N. Prentiss \$5.00.

Class of 1862.—Oscar Clute \$5.00, Prof. A. J. Cook \$15.00, F. Hodgman \$1.00, E. M. Preston \$5.00.

Class of 1864.—S. M. Millard \$5.00.

Class of 1867.—D. Strange \$1.00.

Class of 1868.—D. A. Harrison \$5.00, John Swift \$1.00, Prof. S. M. Tracy \$5.00.

Class of 1869.—A. Haight Jr., \$1.00, James Satterlee \$2.00, J. S. Strange \$1.00.

Class of 1870.—C. W. Garfield \$2.00, R. Lillie \$1.00, H. G. Reynolds \$15.00.

Class of 1871.—Dr. B. D. Halstead \$2.00, G. D. Moore \$1.00, Prof. E. M. Shelton \$5.00, F. A. Sessions \$5.00.

Class of 1873.—R. M. Brooks \$1.00, F. L. Carpenter \$1.00, Prof. R. C. Carpenter \$10.00, C. S. Crandall \$5.00, J. L. Morrice \$1.00, Dr. W. C. Hume \$1.00, W. A. Rowe \$1.00, J. H. Tibbitts \$1.00.

Class of 1874.—G. W. Brewer \$1.00, Dr. J. J. Groner \$1.00, H. A. Haigh \$3.00, R. H. McDowell \$3.00, A. L. Lowell \$1.00, D. C. Oakes \$1.00, W. J. Sessions \$1.00.

Class of 1875.—O. E. Angstman \$1.00, F. J. Annis \$2.00, W. L. Carpenter \$2.50, G. A. Royce \$5.00.

Class of 1876.—C. B. F. Bangs \$1.00, W. Caldwell \$1.00, R. A. Clark \$1.00, H. S. Hampton \$5.00, W. B. Jakways \$2.00, J. D. Stannard \$1.00, J. E. Taylor \$1.00.

Class of 1877.—Albert Dodge \$1.00, C. S. Emery \$2.00, W. O. Fritz \$1.00, G. J. Goodwin \$1.00, Prof. W. C. Latta \$2.00.

Class of 1878.—G. E. Breck \$3.00, H. V. Clark \$1.00, Eugene Davenport \$1.00, Mrs. Eugene Davenport \$1.00, H. E. Emmons \$10.00, R. T. McNaughton \$3.00, F. E. Robson \$3.00, Prof. James Troop \$1.00, E. D. A. True \$1.00.

Class of 1879.—L. G. Carpenter \$10.00, A. A. Crozier \$1.00, I. E. Dryden \$1.00, F. P. Hagenbuch \$2.00, Ray Sessions \$1.00, T. E. Sumner \$1.00, H. Wilcox \$1.00.

Class of 1880.—Prof. F. A. Gulley \$5.00.

Class of 1881.—H. Bamber \$2.00, C. W. Clark \$1.00, C. R. Dart, \$1.00, C. A. Dockstader \$1.00, H. M. Holmes \$1.00, J. L. H. Knight \$1.00, E. C. McKee \$2.00, C. McKenny \$1.00, Mrs. M. J. C. Merrell \$5.00, A. Sherwood \$1.00, W. G. Simonson \$2.00, A. B. Turner \$1.00.

Class of 1882.—A. J. Chappell \$1.00, J. E. Coulter \$2.00, F. E. Delano \$1.00, J. F. Evert \$1.00, W. E. Hale \$1.00, J. M. Smith \$2.00, Alice Weed \$2.00, Prof. L. H. Bailey, Jr., \$2.00.

Class of 1883.—H. W. Baird \$2.00, E. N. Ball \$1.00, A. C. Bird \$1.00, A. M. Emery \$1.00, D. C. Holliday, Jr., \$1.00, O. C. Howe, \$1.00, H. C. Nixon \$1.00, F. F. Rogers \$1.00, M. St. John \$1.00, C. M. Weed \$1.00, Miss S. E. Wood \$2.00, W. S. Kedzie \$2.00.

Class of 1884.—C. Baker \$1.00, J. J. Bush, Jr., \$1.00, R. J. Coryell \$1.00, M. Delano \$1.00, C. P. Gillett \$1.00, J. D. Hill \$1.00, W. Leisenring \$1.00, C. C. Lillie \$1.00, H. D. Luce \$1.00, A. Park \$2.00, B. C. Porter \$1.00, C. E. Smith \$1.00, W. C. Stryker \$1.00, Michitaro Tsuda \$3.00, E. E. Vance \$2.00.

Class of 1885.—E. A. Bartmess \$1.00, F. Chappell \$1.00, C. B. Collingwood \$2.00, J. A. Dart \$1.00, George Morrice \$1.00, P. G. Towar \$1.00.

Dr. R. C. Kedzie \$15.00, Dr. W. J. Beal \$15.00, Prof. Johnson \$5.00, Dr. Grange \$5.00, Louis Knapper \$3.00.

C. J. Monroe of '61 \$10.00, C. C. Collins of, '66, \$5.00, Powell Carpenter of, '61, \$2.00.

J. B. Ware (once '82) \$2.00.

Total to date, \$320.50.

The financial report appended shows that \$323.03 have been received in all and that the expenditures have exceeded this amount by \$2.55. This amount the committee may state is covered by two or three small subscriptions not yet paid.

L. G. CARPENTER, Sec'y.

FINANCIAL REPORT.

From Subscriptions,	-	-	-	-	-	\$320.50
Interest from Bank,	-	-	-	-	-	2.53

Total Received,						\$323.03
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To Artist,	-	-	-	-	\$250.00
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Frame,	-	-	-	-	50.00
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Plate on Frame,	-	-	-	-	2.00
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425 Stamped envelopes,	-	-	-	-	4.85
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Printing and return envelopes,	-	-	-	-	6.00
--------------------------------	---	---	---	---	------

Postage,	-	-	-	-	1.20
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Artist's expenses (two trips to Lansing),	-	-	-	-	9.15
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Drafts,	-	-	-	-	70
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Freight,	-	-	-	-	55
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Miscellaneous,	-	-	-	-	13
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Drayage, not yet paid, about	-	-	-	-	1.00
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Total Expenses,						\$325.58
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Balance to be Collected,						\$2.55
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L. G. CARPENTER, Treas.

PERSONALS.

A change in the arrangement of this department will be noticed. It will hereafter contain first college personals, second alumni personals. In the last division the items of each class will be found together. We earnestly ask each alumnus to send class or other news to the editor before each issue thus making his work easier and the department more interesting than it would be otherwise.

COLLEGE PERSONALS.

Prof. S. M. Tracy, professor of botany in the Missouri State University, has recently published a list of the phrenogamous plants of that State.

Elmer B. Norris spent July 6th and 10th, with his old class mates of '87. He is still working for Morley Bro's, East Saginaw, and will be glad to have M. A. C. boys call when in town.

Mrs. John W. Free, of Paw Paw, is visting her son.

We received a call from S. H. Hoyt, '82, July 20th.

Dan Myers, with, '88, was on the grounds July 16.

Arthur Kinnan, spent Sunday on the grounds July 16.

Miss Jennie Babcock, teacher in the Kalamazoo high school, spent a few days early in the month with her brother-in-law Prof. MacEwan.

C. E. Smith, '84, was on the grounds several times in July.

Glen Lawrence, '85, called July 8th.

E. A. Murphy, '82, was on the grounds a week or so ago with the Lyons picnic.

M. Benzaman of Flushing, paid a short visit to his son Jud, of '87, a few weeks ago.

Diamond Stewart, of Flint, made a short call on his son, July 28.

Chas. Gregory, John Preston, and Henry Winds spent a pleasant day with our Howell representatives, July 27.

Lynn Bonham, '84, is visiting M. A. C.

Prof. Bailey has returned from his botanical trip, he is to be congratulated upon having a longer vacation than we less fortunate ones.

Hon. Judge Marston, of Bay City, spent several days upon the grounds during the meeting of the State board as "Guide, philosopher and friend," of Prof. Johnson,

Hon. Perry Mayo visited the college during the late troubles. Why?

James McCulloch, of Detroit, registered at room 23 Williams Hall one afternoon last month.

H. J. Bruen, of Boston, spent July 31 with his brother Cub.

ALUMNI PERSONALS.

CLASS '73.

Rowe-Sheridan.—In Lansing, July 12, 1886, by the Rev. Benjamin Franklin, at the residence of bride, W. A. Rowe of Mason to Miss Mary E. Sheridan.

E. A. Tracey called one afternoon last month. He is still with D. M. Ferry & Co.

The item regarding John P. Finley in the last SPECULUM should have read Philosophical instead of Geographical Society of England.

CLASS '74.

Donald McPherson is married.

S. F. Ingersoll & Co. is the name of a drug firm at Grand Junction, Mesa Co., Col.

H. T. Haight sailed for England, July 2, taking with him \$25,000 to the Parnell fund. He will return in October.

CLASS '75.

O. E. Angstman, child, June 18.

CLASS '76.

W. B. Jakways is to teach the New Troy schools next year.

S. P. Tracey is practicing medicine at Sault St. Marie.

John E. Taylor is managing a 220 acre ranch near Greenville, is also school director and inspector, director of Peoples' Mutual Fire Insurance company of Ionia, Montcalm and Clinton counties. Also president or high dignitary in fifteen other corporations. His only complaint is that the combined salaries do not allow him to rank as a bloated bond-holder. Yet we believe that this complaint is not founded on facts.

CLASS '78.

T. P. Caulkins is having good success with his foundry and machine shop at Thornville, Lapeer county.

Eugene Gregory was at Milan a few days ago.

Eugene S. Davenport, in addition to his farm work, is editor of the agricultural department of the *Hastings Banner*.

A. B. Simonson, one of the physicians of the Calumet and Hecla mine has, been given one year's vacation to spend in Europe. He sailed July 11.

We are indebted to George E. Breck for the following interesting extracts from a letter of Prof. Chas. C. Georgeson:

Imperial College of Agriculture, Komaba, Tokio, Japan.

George E. Breck, Paw Paw, Mich.,

You may or may not have heard of my being here. Suffice it, however, to say that I arrived in Tokio on the 24th of last February, and that, by the terms of a contract with the Japan government, I am to stay here three years from the date of my arrival as professor of agriculture in the Imperial College of Agriculture. The institution is situated a couple of miles west of Tokio in a country district called Komaba. I entered upon my duties almost immediately. To my surprise I found that my students understood and

could write English with perfect ease; and I believe that the best of them can "spell down" many a Freshman in American colleges. They are fine, manly fellows, and earnest students. On the whole, I must say, I like them very much. The course is six years, three years of which is the same for all; but at the end of the first three years they are divided between the departments of agriculture, the department of agricultural chemistry, and the veterinary department. There is a German professor at the head of each of the two latter, while your humble servant figures at the head of the first. * * * * *

CLASS '79.

Arthur A. Crozier is engaged in the preparation of a dictionary of botanical terms.

Miss Carrie Patten and C. Pernie Cronk, of signal service department, Washington, D. C., were married at the home of Miss Patten's parents, Otisville, Mich., on July 7th.

CLASS '80.

C. F. Davis has resigned his position as professor of chemistry at the Colorado Agricultural College, and expects to coin money more rapidly in the drug business in the same place.

CLASS '81.

W. S. Delano, of the U. S. signal corps, has been ordered from Shreveport, La., to Valentine, Neb. He thinks there are excellent chances to locate lands in that section.

W. G. Simonson is at Minneapolis, Iowa.

Alva Sherwood is manager of W. D. Warren's large farm near Three Oaks. His salary is \$1,000.

CLASS '82.

Fred C. Snyder is at Greenville attending to business. He is regarded as one of the representative men of that section.

John Evert received a ten-year State certificate in the July examinations.

E. N. Ball,—a little boy.

CLASS '83.

E. S. Carman, editor of the *Rural New Yorker*, writes that Herb Collingwood is now the second man on the paper, and the best man they ever had in that position.

The SPECULUM is sorry to hear that W. H. Bristol, who has been teaching at Shreveport, La., for the past year and a half, lost his school-house and equipments, including a fine gymnasium, by fire the first of June. Loss \$2,000; insurance \$1,000.

W. S. Kedzie was for a time with his brother, G. E. Kedzie, '73, at Chihauhua, Col., but is now at his home in Deerfield, Mich.

W. A. Bahlke, lawyer, Alma, Mich.

John T. Mathew, attorney at law, Ithaca.

A. S. Bemis taught penmanship and chemistry in the Ionia school last year. He is now "on the road" with anatomical the charts and school supplies.

CLASS '84.

Andrew Park is working in the sleeping car department of the Wabash, St. Louis and Pacific railroad, at Chicago.

Charles Baker is in Detroit with Williams, McFarland & Co.

W. C. Stryker will go to Ann Arbor in September to study pharmacy.

We are indebted to Milton Delano for several personals for this issue. Thanks, come again. He wishes the SPECULUM to become a monthly.

L. Bonham's father is secretary of the State Board of Agriculture of Ohio, vice W. J. Chamberlain, who has taken the presidency of the Iowa Agricultural College.

"Old Ben" (J. D.) Hill combines business with pleasure by teaching and farming.

C. E. Smith graduated from the Normal in June. He now holds a teachers life certificate.

We clip the following from the *Kalamazoo Telegraph* and the *Paw Paw Free Press and Courier* respectively: "Mr. John I. Breck, of Paw Paw, applied for admission to the bar in the circuit court yesterday, and a committee consisting of Messrs. J. H. Kin-

nane. J. M. Davis, V. H. Lockwood, Frank Alley and G. P. Hopkins was appointed to examine him. He was given a rigid examination by the committee, and afterward by Judge Mills in open court, both of which he passed in an exceptionally brilliant manner, exhibiting throughout a thorough knowledge of the different branches of law, and after being highly complimented by the court and committee, he was admitted to practice. Mr. Breck recently graduated with distinction from the law department of the University at Ann Arbor, and gives every indication of a successful career in the legal profession." "Heckert & Breck is the name of the new law firm here, Col. B. F. Heckert having associated with himself Mr. John I. Breck, who received the degree of LL. B. at Ann Arbor last month, and who also graduated at the State Agricultural college in 1884. Mr. Heckert's well known ability as an able lawyer, together with Mr. Breck's universal popularity, will insure for the new firm a liberal share of business. We wish them success."

CLASS '85.

H. M. Wells, has left D. M. Ferry and Co. and is home again.

J. Y. Clark has been teaching near home this summer. He is coming to college during commencement, and hopes to meet many '85 boys.

T. H. Reese graduated at West Point last commencement number four in the class.

It is rumored that E. T. Gardner is married. While in college Gardner was regarded a man of good character. The indications are that after mixing with the bad, wicked world for a year, he has lost the right to such an unspotted name. We are sure that if he remained the same old boy as of yore, he would not have dared to neglect such an important official as the "Personalite" of the SPECULUM of his alma mater. "Yea verily, love changes all things." He has neither informed us of the time, place, or person concerned.

Charlie Hoyt, '85, gave up his school at Climax on account of ill health. His chum Lake finished the year.

D. J. Stryker is helping Dr. Beal in the laboratory during his summer vacation. He will return to Iowa in September. We may add for the benefit of his classmates that "Doc," in the evening seems to find considerable amusement in the Faculty Row.

Glen C. Lawrence holds a teacher's life certificate. He graduated from the Normal in June.

T. A. Parker has been teaching at Elsie the past year. He is now studying at Ysilanti. It has been whispered in our ear that Parker gave complete satisfaction and that some of the Elsieites wish him to stay forever.

E. A. Bartmess, better known as "Old Tom" is now in Minnesota as a drummer. In September he will take the position of principal of one of the Lafayette, Ind. schools. We hope that the metamorphosis from the giddy drummer to the sedate professor, will be a thorough one.

CLASS '86.

H. A. Snowden is way up in the northern part of Wyoming, 200 miles from the railroads. We hope that the natives will treat him tenderly.

Guy Osburn will be here commencement to see the boys graduate. We hope also to see his old friend Marhoff, of '87.

CLASS '87.

Buck is studying law.

J. Norris Estabrook is at present in Europe. He intends to return to college next term, and will occupy room 25, Williams' Hall. '88 will gain and '87, loose and heartily regret a prince of good fellows.

CLASS '88.

Frank M. Bennett is at the Fentonville academy.

Will Miller is attending the Peekskill Military academy.

A. M. until six P. M., with the exception of an hour for dinner. Sunday hours, ten to twelve A. M. Those who are well acquainted with the library know that it is open more than the above, but these are all the hours we live up to every day.

The Abbot portrait hangs in the back alcove, facing the main entrance to the book room; the light there is said by the artist, Mr Conely, to be excellent; a few hours' work made all the change necessary to give the room.

Grant's book, Ben Hur, and The Late Mrs. Null are very popular just now.

Outing, our last magazine, is greatly appreciated by some frequenters of the reading room.

The librarian during the past month went to church in the city two Sundays in succession,—the only Sundays she ever left her post. If she could have that privilege every Sunday she would not mind having the library open an hour or two Sunday afternoon.

COLLEGES.

Harvard has fifty-three student organizations.

Only 150 of the 365 colleges in this country publish papers.

Over half the junior class of Yale were conditioned in Spanish.

Benton Harbor College opens September 6, with thirteen teachers.

Wooster University, Ohio, has in all its departments 523 students.

The senior commencement tax at Dartmouth this year was \$18.

The Oberlin students gave \$2,500 towards their new gymnasium.

The German Universities have 157 professors over 70 years of age.

The aggregate income of all the colleges in this country is \$4,500,000.

At Minnesota State University all students have been made elective.

Yale college library is annually increasing at the rate of 1,000 volumes.

A Jewish theological seminary will shortly be established in New York City.

The graduating class of Columbia college law school numbered 109.

Rev. T. L. Hayes of Boston has been offered the presidency of Hillsdale college.

The College at Middlebury, Vt. has received a gift of \$10,000 from Mr. Levi P. Morton.

Students of Dennison University who have a regular of '85, are excused from examinations.

A fund of \$800,000 has been secured for the founding of a Polytechnic institute in Chicago.

It is said that Yale spent \$14,000 in the college year just past for foot ball, base ball, and boating.

L. I. Chamberlain will take up his duties as president of Iowa agricultural college September 1st.

Forty Dartmouth students are speeding their vacation in the White Mountains—as hotel waiters.

Harvard's 250th anniversary occurs November 6. James Russell Lowell is expected to deliver the oration.

Twenty-three thousand dollars were recently subscribed to a new professorship in Drury College, Springfield, Mo.

Prof. C. M. Lowe of Heidelberg college, Tiffin O., has accepted the senior professorship of ancient languages at Whetstone, Ill.

The class of '86, of West Point was the largest in number and the highest in efficiency that was ever graduated from the institution.

The treasurer of the North Western University at the annual meeting at Evanston, reported the ownership of real estate valued at \$1,726,802 and liabilities of only \$135,409; 943 students attend the college.

In Japan all children between the ages of six and fourteen are compelled to attend school from five to six hours a day for thirty-two weeks.

Library Notes.

The library is open every week day from eight o'clock in the morning until twelve, from half past three until six P. M., and from seven until nine P. M., except Saturdays, when it is open from eight

Prof. J. M. 'B. Sill superintendent of the Detroit public schools has been offered the principalship of the State normal school at Ypsilanti.

President Cleveland never attended a college of any kind, while secretary of State Bavard never got any further than a Delaware rural academy.

At Haverford each member of the two lower classes is compelled to spend one hour each week in the gymnasium under the direction of a competent instructor.

The young Japanese student who graduated last June at Rutgers college, carried off two prizes, one for the best oration and another for the best work done in history.

J. Rendal Harris, an eminent scholar of Cambridge University, England, has recently been appointed professor of biblical literature and palrography at Haverford college, Penunsylvania.

Delaware College has abolished co-education. The College *Review* in speaking of the matter says: "When it was first introduced into our midst how glad it was welcomed and it was thought that a new and better era had dawned upon our school. For a while all went well. But soon the novelty wore off and all the evils of a mixed school became obvious to those not disposed to view them with favor. It was then that the struggle against co-education commenced, the *Review* originating and taking an active part in it. And now it has been successful. But we do not feel the pleasure that such a triumph ought to inspire. We forget the gain and feel but the loss. How void of interest will be college life without the fair maidens to give it charms. How dull the class-room without female faces to lend it grace and beauty. No longer will there be sweet smiles to drive away our cares, and happy, cheerful faces to meet us at morning prayers. Yes, they will soon be gone and with them much of our pleasure and incentive to study. No longer will a failure be so greatly feared as there will be no ladies to see us fail, nor will the professors' frown be so hard to bear for no ladies will witness our disaster. And yet the female smile more than balanced the professor's frown, and we will bid a sorrowful farewell to you, O fair Co-Education.

EXCHANGES.

The *Advance*, organ of the faculty of Hillsdale college, has suspended publication.

The college *Index* is the only one of our exchanges that has a Y. M. C. A. department.

One of our exchanges estimates the amount of money annually expended for base ball in this country at one million dollars.

The Vanderbilt *Observer* laments the fact that Gen. Grant has been praised by a Southern school boy but now that the deed is done it trusts the North will return the compliment by pronouncing a eulogy on Gen. Lee.

The new Williams gymnasium is one of the finest in this country. It is of gray stone, on the first floor are the lockers, bath rooms, base ball cage and bowling alley, on the second various kinds of apparatus, in the gallery a sawdust track extending around the entire room.—*Ex.*

Among the interesting articles in the June *Messenger* are the following—"Art meditation," "The humn mind," "The theoretical and the practical." All the articles show deep thought and logical reasoning and prove that the students of Richmond are well drilled in english composition,

Dr. H. C. Adams is soon to publish an exhaustive treatise upon the question of public debts. Professor Adams has for quite a period devoted much time to this work. It will without question prove a most valuable addition to the literature already existing on this subject.—*Cornell Era.*

Miss Alice Freeman, the President of Wellesley, is a glorious example of what a woman may become. Small and slight and handsome, only 28 years old, she has mastered thoroughly seven langnages, all the sciences and won the right to stand beside any professor on earth at president of a college.—*Exchange.*

"The Michigan Agricultural College sends us the *SPECULUM*, a quarterly paper, which is gaining a wide reputation, and whose private character is worthy of notice. The reading matter, which it brings before the public, is valuable and deserves a careful reading. Among their interesting articles, we notice one on "The Tendency of Applause," which calls forth our hearty applause."—*Carletonian.*

The college *Rambler* criticises the *SPECULUM* for placing in its editorial columns an article on the labor question, however, the criticism will have very little weight with any one who makes a careful comparison between the two papers. We are aware that there is a great difference of opinion as to what should appear in the editorial columns, but the article referred to certainly is a vast improvement to the *Rambler's* base ball editorial.

Of the 111 exchanges that come to our table the *Messenger* of Richmonal college, Va., is the largest and in many respects the best. Indeed it is almost worthy the name magazine. It is a great pleasure to peruse its columns but almost painful to compare some of our other exchanges with it, noticable among them the Hillsdale *Herald*, but what more could we expect from a college who's students have not enough ambition to control their college paper.

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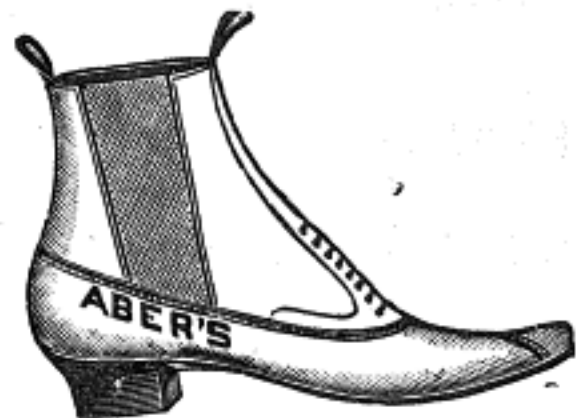
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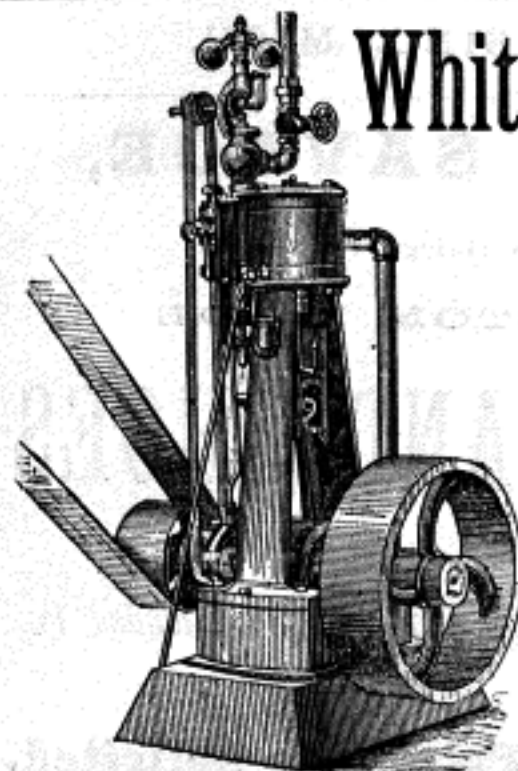
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