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# THE COLLEGE SPECULUM.

VOL. II.—No. 3.

LANSING, MICH., APRIL 2, 1883.

WHOLE No. 7.

## Dreaming.

Read at the meeting of the Alumni of the Michigan State Agricultural College, Aug. 15, 1882, by F. Hodgman, '62.

The shadows of evening are quietly falling  
And draping the earth for its season of rest;  
The whippoorwill out in the thorn-tree is calling;  
With clear plaintive note to his mate he is calling;  
The wild echoes answer him out from the west.

I sit in the gloaming and dream of my roaming,  
My roaming when life seemed all happy and bright;  
And memory comes bringing, with laughter and singing  
Whose tones thrill the heart like a fairy bell ringing,  
Sweet dreams overflowing the soul with delight.

Those fairy-like visions have something elysian,  
So sweet and so mellowed by passage of time,  
Such tinges of sadness commingled with gladness,  
The gladness subdued and refined by the sadness,  
Like the harmonies sweet of a musical chime.

And Fancy, her magical pinions outspreading,  
Soars away over valley and mountain and plain,  
And mingles the past with its memories olden,  
The future with hopes ever joyous and golden,  
And the present with all of its pleasure and pain.

I see, on a mountain, a crystalline fountain,  
Whose waters glide rippling and dancing along;  
They peep under ledges, and wind among sedges,  
And wander mid fern leaves and thickets and hedges,  
As they dance down the mountain side all the day long;

Then threading the valley they linger to dally  
By meadows and fields that are waving with grain;  
By lakelets that laugh when the merry winds blow them,  
Tall grasses that nod to the nestlings below them,  
And sweet clover blossoms that sprinkle the plain.

They always are flowing and ever are growing;  
The rill is a river and reaches the sea;  
On its banks there are hamlets and cities abiding,  
And boats on its waters at eventide gliding  
To meet the great ships floating in from the sea.

Thus ever progressing they scatter their blessings  
From mountain to ocean in bountiful train,  
The birds lave their sides in the cool rippling waters,  
The herds slake their thirst in the health giving waters,  
Then seek their repose neath the trees of the plain.

And now, like the fountain that gushed from the mountain,  
Comes a well-spring of knowledge, pure, priceless, and grand;  
The waters that flow from its bosom are living  
Young spirits, who, toiling and striving, are giving  
The best of their lives for the good of the land.

That fountain of knowledge is a husbandman's college,  
Where the lord of the soil of its mysteries learns;  
Where he searches the caskets of earth for their treasures,  
The storm-cloud and sunshine enquiringly measures  
To gather the knowledge for which his soul burns.

And hither come thronging the youth who are longing  
For merited honor, distinction, and fame;—  
With forms that are sturdy and cheeks that are ruddy,  
And hearts never flinching from labor or study,  
"Press onward," their motto;—perfection their aim.

They search the sweet bowers of the wildwood for flowers,  
They follow the rootlets down deep as they toil,  
They trace the crude sap in its upward path going,  
As ever from rootlet to leaf it is flowing,  
To learn how the plant gathers strength from the soil.

They ask of the zephyr that onward is gliding,  
What burden of blessings it bears on the air,  
How the leaflet shall gain of the life it is bringing,  
A morsel of food from the atmosphere wringing,  
Receiving from earth, air, and sunshine a share.

They watch where in hiding the worm is abiding,  
Destroying the plant or the fruit on the tree,  
And see the dull worm to the chrysalis changing,  
Perchance to a butterfly lazily ranging  
Mid flowers and sunshine, gay, tireless and free.

They follow the track of the rushing tornado,  
And whirlwinds that circle careering along  
To glean from the midst of their raging commotion  
The laws which must govern the air in its motion  
And which to its nature and substance belong.

They are working in every department of labor,  
And studying every department of thought;  
But the gems of their thought, and the wealth of their labor,  
They bring to ennoble the husbandman's labor,  
And help him to rank in scale where he ought.

For the farmer who goes to the storehouse of nature  
To gather for all of the nations their bread,  
Has ranked, since the days of old Adam's creation,  
Low down in the scale of the world's estimation;  
Walked humbly behind while the warrior led.

The soldiers and statesmen have gone on before him;  
Philosophers, painters, and poets, and all  
Of the men who have followed more favored vocations,  
Where rank must be won by the mind's cultivation,  
Stood first, and the farmer has followed them all.

For he followed the steps of his fathers before him,  
Content with the things which were known and were tried;  
Till the sweet voice of liberty over the ocean  
Awoke in his heart a more noble emotion,  
And called him to make a new home o'er the tide.

And freedom awoke in him new aspirations,  
A thirst for more knowledge, more vigor of mind,  
A restless endeavor to better his station;  
To stand as compared with the rest of the nation,  
As capable, honest, and pure, and refined.

And he found that to work out the problem before him,  
His mind must be busy as well as his hand;  
That farmers from henceforth must be their own teachers;  
Must do as good brain work as lawyers or preachers;  
Or rank evermore in the laggardly band.

That work must be done that is full of attraction,  
And farmers the men who have got it to do,  
In orchard and meadow and every surrounding,  
The secrets of nature are richly abounding,  
And farmers the men who must bring them to view.

So he entered the work with the strength of conviction,  
With blows strong and sturdy all over the land,  
The forest reëchoed the sounds of his chopping;  
The prairies he checkered with fields he was cropping;  
And plenty rewarded the work of his hand.

Tall spires pointing upward the pathway to heaven,  
Mute witnesses they to his virtue and truth;  
While school-houses standing along the broad highways  
Or bowered mid trees in the cool shady by-ways,  
All tell of his care for the culture of youth.

Tis the fruit of his labors I see in my dreaming,  
As thoughts of the future are filling the brain,  
And picture our Country—a rapturous vision—  
The home of free millions, a dwelling elysian,  
Like the garden of Eden reopened again.



Where the husbandman equals the peer in position;  
 Where virtue and intellect rule in the land;  
 Where titles to place in the world's estimation  
 Are based upon virtue and such education  
 As brings out the best that there is in the man.

\* \* \* \* \*

The sweet stars of evening above me are shining;  
 The night-birds away in the starlight have flown;  
 And far in the forest their notes are repeating,  
 The tone softly reaching the ear with its greeting,  
 The purest and sweetest that ever was known.

My senses now wander in dreamland no longer;  
 In thought to my old college home I return,  
 To seek for the fountain, the high inspiration,  
 The home of the husbandman's new education,  
 Where he in his hopes for the future may turn.

I find there the fountain with waters upwelling,  
 Which flow, like the rill of my dream, to the sea,  
 Its sources lie deep in the hearts of the nation,  
 In homes of the humble and lowly in station,  
 And the waters that flow from the fountain are free.

All honor I'll give to my old Alma Mater;  
 Good cheer to the children she's sending abroad;  
 To cheer up the working, awaken the sleeping;  
 To search out the secrets which nature is keeping;  
 And bring the world nearer perfection and God.

### Debt and Responsibility of Civilization.

BY EUGENE F. LAW, ECLECTIC SOCIETY.

Every factor and element that enters into and forms a part of modern civilization is the result of a long and intricate process of development. The earth came not into existence ready fitted to be a dwelling place for life, but countless ages passed, and innumerable changes took place before it could support the lowest forms; and with a slow but perpetual development, it became the home of curious vegetable forms and animal monsters, until it was finally capable of sustaining man. In a like manner all the ideas that have modified and revolutionized the moral and intellectual life of mankind have been developments.

The world, at present, is too likely to look at civilization as something for which much credit is due itself for building up and sustaining, rather than as an inheritance for which it is responsible. That men are created with equal rights we now recognize as a principle upon which is based all true equity in the government of man; yet self-evident as this may seem, it cost many a painful struggle to secure its recognition in the political philosophy of any nation; and the blood of the noblest and best has been shed in its vindication. In the history of the English people every concession of kings, from the charter of Henry the first, that has been incorporated into English law, has cost the lives of many pioneers of liberty; and human equality under our own government existed only in theory, until a cruel war blotched from our land the curse of slavery.

Science, now so closely connected with civilization, has not been elevated to its present position by the bravery of armies, nor by the skill of generals and statesmen; but rather by the quiet working of the noblest faculties of the human intellect. The world now rejoices in the victories of science; and its cost seems to lie chiefly in the brilliant minds that its interesting problems attract from the other vocations of life; but it has not always been thus. Science has had its martyrs. Nearly every advance made in its early history involved the rejection of established authority, and for their bravery in refusing to adopt

what they knew to be false, men have suffered. Those who die upon the field of battle fighting bravely to sustain a right principle, deserve all the honor that man can bestow; but those who have studied out, preserved, and promulgated the great truths of science, when to do so was to court persecution in its worst forms, are the greatest heroes. Their work involved persistent courage for a life time, the fruit of which could seldom benefit themselves; hence, theirs was the highest forms of heroism, for it included self-sacrifice in doing more than duty. Such men were the pioneers of science, and their intellectual and moral grandeur shone far out of the dark ages in which they lived, a noble prophecy of what science was to achieve for the world. Civilization has not only the benefit of their work, but the inheritance of their example.

Free speech and free press are the natural outgrowths of republics; but they have become so important, that a free government must depend upon them for its existence, and a republic thus sustained and perpetuated symbolizes the highest type of enlightenment that the world has yet known. The free expression of opinion is the worst enemy of tyranny. Popes and bishops have proclaimed against it, for it is a deadly foe of bigotry and superstition. Its struggle has been long, painful and expensive; and in the old world it yet contends with despotism, and impatiently awaits recognition; but men must yet end their lives in dungeons, and on Siberia's frozen plains. The arm of the executioner, directed by malice and ignorance, tyranny and oppression, must silence those who would have voiced the longings for liberty of millions before free expression of thought will gain the ascendancy.

Nowhere does the world seem to be more indebted to the past than in literature. To the vast accumulations of past literary labor we look for one of the great educating and refining forces of modern times. Science and art have caught and stereotyped the thoughts of the intellectual giants of all ages, and have placed before us the result of the literary labor and genius of the past. These acquisitions not only directly enlighten the world, but they nourish and stimulate talent and thus make it possible for literary genius to be perpetuated. Every great book represents more or less of the life work of some master mind; and it is at this expense only, that the world's literature has been enriched by such works as enlighten mankind.

Hastened and encouraged by the achievements and laborious accumulations of the past, civilization has continued to advance. With this advance comes a greater degree of responsibility. The questions that excite the world to-day are more complex and important than those of earlier civilizations, and at present the whole social and political world is stirred to its very center concerning its future. Love and hope for our national institutions bids us prophesy their permanence; but looking at it in the broad light of the general principles of history, unless we can prove that this young republic of the western world rests upon a basis much different from that on which those of the past have depended, there is no good reason to predict its stability. The great causes of the decay of nations have usually come from within. During their most glorious periods the seeds of decay have germinated. Internal strife ruined Greece. Huns or Goths would never have reduced Rome to a state of barbarism, had not wealth and luxury first prepared the way. We have the benefit of the experience of past nations, and we are responsible for all the means by which civilization has been strengthened. To science



we are indebted for man's position in relation to nature, and as it develops and is trusted by man its representatives become responsible for that trust.

When the principles of natural science are properly mingled with those of political and social science, and the whole incorporated into the government of man, when rulers and legislators recognize the responsibility of their trust and acknowledge by their actions that no government is worthy the name that does not protect alike the interests of all, when the minds of the people are broadened and made more liberal and intelligent by education, then will the responsibilities of civilization be sustained in such a manner as to be a token that man recognizes his responsibility to the past.

### Theorizing.

BY L. A. BUELL, DELTA TAU DELTA.

Man is by nature a theorizer. It is to this propensity that society owes its development and science and art their progress, for the theorist who attempts to account for either mental or physical phenomena, or he who speculates on the result of any combination of physical forces only evolves principles and laws that are as old as our world. The forces he discovers have only awaited the call of man to leap into action.

The unfolding of nature's laws and the application of them by man have necessarily been slow processes, but undoubtedly they were much retarded by the conservatism which characterized our race up to within a few centuries.

Copernicus dared not to present directly to the world the truth he had demonstrated to himself. He secured himself from attack by a stratagem, by flattering the man supposed to be infallible, by dedicating his work through a cardinal to the Pope.

And Galileo who announced that the world revolved on its axis was pronounced a heretic, and under pain of most cruel torture was forced to recant, but as he said "it does move for all that."

Scholars and scientists however are no longer punished as magicians, and man is allowed to exercise freely the powers that are transforming the wilderness into Edens—powers that are making the forces of nature subservient to his race.

How meager must have been the knowledge of the early representatives of our race, yet how great were the possibilities before them! Let us try to imagine their condition. Surrounded on every side by mysteries; with no idea of time, distance, or quantity; often misled by the apparent operations in nature; with air, earth, fire, and water as the ultimate divisions of matter, they began the work of discovery that has resulted in the diverse, abstract sciences of our time, in fact that has resulted in our civilization with all its concomitants.

Our civilization is brain power stored up, and it is truly said that,

"Not a truth has to art or science been given,  
But brows have ached for it, and souls have toiled and striven."

Discovery has always been a deductive process, a reduction from the concrete to the abstract. But before there can be a more abstract division of a science the concrete division must present a new set of question to be solved. And it is just at this point that man as a theorizer finds a broad field for action.

There are two ways of discovery; we may speculate on the result of combinations of forces and discover

by testing our theories, or we may assume a reasonable hypothesis and proceed to prove it. Thus the misty conceptions of the imagination take form and become tangible. And it is not strange that man's desire to know the mysterious and the infinite, in connection with his desire for personal gratification in innumerable ways, has led him to false theories, to theories that apparently meet the requirements of the case in question but which at the same time are absolutely false.

Such theories pervade almost all sciences and are most disastrous to education. The student of science masters many principles only to find that some brighter genius has found them to be entirely wrong. The system that exalted our humble sphere sufficiently to make it the center of the universe; that confined each planet to its orbit by supposing it to move on the inside of a crystalline, spherical shell, whose radius was equal to the distance from the earth to the particular planet; that accounted for irregularities in the movements of planets by giving them an additional circular motion; the system that received the papal seal of infallibility, and found ardent defenders in most of the wise men for over two thousand years, was found insufficient at last, and it vanished in mid air before the demonstrations of a Copernicus.

This instability has a tendency to make students sceptical as to the truth of every proposition presented in the sciences which they study. The application of a false theory is a waste of force, even more, it may be ruinous. The plan of an architect may be a model of elegance and towering grandeur, but if he has misjudged the strength of materials to be used in the structure it will fall under its own weight.

The demand of our time is that education, especially, shall be preëminently practical; that it shall fit men to meet the stern conflicts of life bravely and triumphantly, rather than produce cloistered wisdom that looks upon labor with disdain. In fact, Mr. Parton's "Ideal University" is but the embodiment of a prevailing public sentiment. Along with this demand there is a growing tendency to regard the theoretical and practical as directly opposing each other. To say that this man is theoretical or that proposition is, perhaps, theoretically true, is to apply terms of reproach of a very scathing nature. And surely if theory is not put to practice, if the model wrought out by reason and polished by the imagination is held in the mind and is never constructed of material things, of what use is it? It may be food for man's spiritual nature, but to satisfy men of this practical age they must have something more substantial.

But the fact is theory is the great chart by which all successful artisans are working to-day. Who can paint fruit that he has never seen so that birds will pick at it, or who that has never had his sight could chisel from a rough marble block a perfect human form? Moreover, who can hew out his own fortune successfully without having it pictured out before him, without knowing what will be the result of each blow before it is struck? "To be destitute of an ideal is to want the best motive of effort."

Beyond the poet's sweet dream lives  
The eternal epic of the man.  
He wisest is who only gives,  
True to himself, the best he can;  
Who, drifting in the winds of praise,  
The inward monitor obeys;  
And, with the boldness that confesses fear,  
Takes in the crowded sail, and lets his conscience steer.  
—Whittier.



## SCIENTIFIC.

### State Weather Service.

The weather is one of those pervading influences which touch all classes and conditions of society. It is the topic of conversation of ignorant and learned, of high and low. Every business, industry, and pursuit of life is molded and shaped by the weather. But agriculture and commerce are at the mercy of the weather. I here use agriculture in its widest sense as soil-producers, whether the product be grains, grasses, fruits, and flocks, or the elaborated products of these, just as I use commerce to represent the carriers of products, whether the means of carrying be ships, boats, cars, or wagons wearily toiling over the highway.

The United States signal service has given a sense of security and protection to the shipping interests of incalculable worth. The benefits of the storm signals and warnings are so great that no person of ordinary prudence would consent to abandon them even if the cost were ten fold what it is. In the domain of commerce the signal service has come to stay.

But there are other interests which need the protection of science as well as those of commerce. I wish to call attention to three propositions which deserve earnest consideration.

1. That no industry, except navigation, is so completely at the mercy of the weather as agriculture in its widest sense.

2. That in the magnitude of the interests thus threatened, agriculture outweighs all others in importance. Vast as are the interests of commerce they are only a drop in the bucket when compared with those of agriculture. Indeed without the sustaining influence of agriculture commerce itself would vanish like the dew of morning. If the demands of the shipping interests are imperative, why should the greater interests of agriculture be forgotten?

3. Timely warnings of impending meteorological dangers might be given by the signal service which would be of incalculable worth to the agricultural interests.

Take as example the rainy weather from the 9th to the 16th of last July whereby one-fourth of the wheat crop of this State was ruined, entailing a loss of many million dollars upon the farmers of this State. The peculiar meteorological conditions which promote the sprouting of wheat still in the harvest field—warmth and excessive moisture, a slowly falling barometer with tendency to frequent showers and tardy evaporation—were known for days before the damage was done. Meteorological observers in the State had noticed and commented upon the peculiar atmospheric conditions, and had predicted a protracted storm as early as the 6th of July, while the damaging storm did not begin till the night of the 9th. On the 4th the mean daily temperature at this college was a trifle above 59°F. but it steadily rose day by day till the 9th when it reached 77°F. *At the same time the mean temperature of the dew point rose even-paced with the temperature of the open air, the mean temperature of the dew point on the 9th being 18°F. above that of the 4th of the month.* In other words, the absolute amount of vapor of water in the air had increased more than 75 per cent in five days—from 4½ grains to 7.25 grains of water in each cubic foot of air. In the mean time, as early as the forenoon of Thursday, the 6th of July, long bands of cirro-stratus clouds drew across the sky, and by 2 P. M. one-half the

face of the sky was covered with the these celestial storm-signals, warning of coming change. If specific warning had been given our farmers at that time or even on Friday morning, every sheaf of wheat might have been safely housed and the farmers of Michigan saved from a loss of more than \$1,000,000.

The damage inflicted by the meteorological conditions last July is not isolated and exceptional. The frosts of the 18th and 21st of September, 1863, which killed the half-ripe corn of all the northwest; the frost of 17th of September 1875, which did so much damage to the corn, and the wave of cold which on 18th of October, 1875, froze millions of bushels of apples, might have been known and timely warning given to ward off their effects if adequate means of announcing the danger had been provided and put in operation. The dangers of the past will menace the future unless timely provision is made to guard against their attacks.

Those who have attentively studied the meteorology of this continent, especially as unfolded by the signal service, have observed that storms and meteorological changes are not the fitful and lawless disturbances they were once regarded. "The wind bloweth where it listeth, and thou hearest the sound thereof but canst not tell whence it cometh or whither it goeth," was true of the meteorology of 2,000 years ago, but some progress has been made since then in the study of natural phenomena. In the language of Gov. Porter

The laws that govern the condition and movements of the atmosphere are, as all scientific persons now believe, as fixed as those which govern the ocean currents and the movements of the planets. The inconveniences which we suffer from the vicissitudes of the atmosphere proceed chiefly from a want of knowledge. It is pleasant, however, to know that nature is always willing to lend a key to the diligent, to give them access to her "mysteries," and to teach that what seems mystery is not in truth so, and that not chance but law rules the universe.

The great disturbances of the atmosphere, the waves of heat and cold, of high barometer and low barometer, of moist and dry—in other words, the meteorological storms of continental sweep—have for the most part their starting point or incubating ground in the high plains of Dakota and Manitoba, from whence they pursue a somewhat definite path southeast, then east and finally northeast, the path being changed and deflected by meteorological conditions in the neighboring regions, such as local areas of barometric disturbance, moisture, heat, etc., etc.

Knowing the time of beginning of a storm in the far northwest, the violence of the attending disturbance and the meteorological conditions along the path of the storm, the chief signal officer is enabled to foretell many hours and sometimes for days in advance the nature, progress and direction of any great storm and to announce the conditions which will prevail in the country outside of the track of the storm but in its neighborhood. The progress of the storm is from 20 to 50 miles an hour.

Many persons remember the bursting of the dam on Mill river, in Mass., some ten or a dozen years ago, and how the good deacon dashed down the valley on his white mare to warn the inhabitants of the coming destruction, and how many lives were saved thereby. When these storms come sweeping down upon us with railroad speed we need some swift-footed herald to warn us of the coming danger, and this we secure by the telegraph.

In the majority of great storms the prediction of the course, violence and the accompaniments of the storm can be foretold with great accuracy, and so long before their advent that the public may be prepared to withstand its onset. These storm-warnings



the public have a right to demand at the hands of the general government.

I advocate no storm-warnings like those of the late Wiggins—foolhardy guesses, without science or sense but capable of great mischief in a too credulous public. It would be a boon to true science if some international commission could arrest and confine all the meteorological cranks that infest our continent. The folly of such false prophets should not bring discredit on science. Navigation remains and ships will yet plough the sea even though the thistle-down is sucked beneath the ocean wave. When the public come to a better knowledge of the laws of meteorology the vaporings of these cranks will float by as silent and unnoticed as thistle-down in a September breeze.

The duty of the general government to give signals of danger to agriculturalists has been recognized to a certain extent by the promise of the signal service to give warning of coming frosts to the cotton growers of the south and the tobacco raisers of the middle States. Indeed the signal service has got the thing down to so fine a point that I found the following item in a Boston paper last fall:

Arrangements have been made with the signal service bureau at Washington for the establishment of a system of frost warnings for the benefit of the cranberry-growers of Cape Cod. A list of stations to which it is desired that these warnings be sent, has been forwarded to chief signal officer Hazen.

This is all right. The cotton grower and tobacco raiser have a right to warnings of coming danger. Even the cranberry patch is entitled to its share of attention from the general government. But while these departments of agriculture receive the benignant attention of the signal service, why should the vastly greater agricultural interests be forgotten? I do not complain that the signal service "pays tithe of mint and anise and cummin," but do object that it has "omitted the weightier matters of the law, judgment, mercy and faith: *these ought ye to have done and not to leave the other undone.*" The general government, through the signal service, should hold the shield of its protection over land as over sea, over corn field as over tobacco plant, over hay field as over cranberry marsh, over wheat field as over cotton plantation, over orchards and vineyards, and the cattle upon a thousand hills and prairie leas.

To carry out this plan a State weather service should be organized to which the signal service should promptly send by telegraph *special agricultural danger signals* when untimely frosts, storms, waves of unusual cold or heat, or other meteorological disturbances are impending which threaten any of the great agricultural interests. These *agricultural danger signals* might be announced by any means that will attract immediate attention, *e. g.*, a danger flag displayed on the locomotive of every railroad train carrying U. S. mail in the threatened district; the sounding of danger signals by blowing the locomotive whistle in some characteristic way; the display of a danger flag at every postoffice receiving a daily mail, etc.

It will be objected that such signals will not reach every farmer, yet a great many will be reached, and in time more perfect ways will be discovered by which greater numbers may be warned.

I do not desire to criticise the signal service for anything it has done. I recognize the great good it has done in the large contributions it has made towards making meteorology an exact science, and the property and lives it has saved by its danger signals for commerce. I only desire to see its usefulness extended into wider fields by doing for the *producer* what it has so well done for the *carrier*.

## THE COLLEGE SPECULUM.

Published Quarterly, on the 1st of August, October, April, and June,

BY THE STUDENTS

— OF —

THE MICHIGAN STATE AGRICULTURAL COLLEGE.

TERMS, 50 CENTS A YEAR; SINGLE NUMBERS, 15 CENTS.

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LANSING, MICH., APRIL 2, 1883.

No ONE thing has caused more trouble alike to the managers of this institution and its students than the old boarding system. Being under the control of the faculty it was a constant trial on their part to see that it was operated to the best advantage. To the students it was equally objectionable since it failed to provide palatable food in suitable quantities. That it has been a ground for dispute between faculty, steward, and student, even under its best management is enough to condemn its efficiency and pronounce it a failure.

Now that we have the improved plan of club boarding the prospects for the future are brighter; not alone to the student, but the college itself will receive a new impetus. It will furnish better board to the student which does much to make him genial and law abiding; it will bring a feeling of relief to the college authorities by placing the responsibility where it properly belongs, *i. e.*, in the hands of the students. At present it is a matter of experiment; but by systematizing the operations it is intended to lower the price of board, which is an important factor in the student's expense account. Since it is to be controlled by the students stricter economy will be practiced for no one can expect careful oversight from a disinterested steward. Another thing greatly in its favor is the tendency to obviate the disgraceful scenes that sometimes took place in the old dining hall. This method will abolish a great many of the objections that young men have had in entering this college and we hope that every friend of the institution will spread the news of this improvement.

THE METHOD of choosing commencement orators which has been practiced here in the past, and which has generally proved so unsatisfactory has at last been changed. Now, instead of being drawn by lot, they are elected by the faculty, each member selecting those he deems best able to fill the office.



There has always been a portion of the students who prefer a lecture by some noted educator to orations by the class. There is in favor of this system the benefit derived from the address, together with the banishment of the ill feelings that are sometimes engendered in the consideration of this subject.

The efficiency of the system, as it now stands depends upon the action of the faculty. It will be successful as long as they allow the element of fairness to enter their determinations,—ineffectual when they are governed by their prejudices.

There is a matter related to this same subject that still needs attention and that is the eligibility of a student to become an orator. Those seniors who have not passed all studies up to those of the present time are debarred this right. As the next commencement only two societies will be represented. Most of the seniors belonging to those societies were made ineligible by circumstances over which they had no control. A more equal distribution would have given better satisfaction, yet the present senior class is so near a unit that no one may have fear of any dissension. There should be no such qualification. A professor should have the right to choose any one who has avowedly expressed his determination to graduate. This restriction while being of no advantage to the students, does them actual harm. It is intended to incite promptness but it rather affords them a loophole through which they may evade the responsibility of an orator. The student who, purposely, lags behind his class surely incurs detrimental effects. In order to prevent neglect of duty and encourage promptness the system should be amended so as to be practical and thereby a success.

WE NOTICE in back numbers of THE SPECULUM, several editorials favoring the establishment of a department of military science at this college. The arguments used are very plausible, but only one side of the question is given. There are two sides to every question, and we think the other side should be heard from on this point. The proposed plan is not without its disadvantages. The statement is made, that the students favor the measure. We do not believe one student in five understands what a "department of military science" would include. It is great fun to turn out now and then with the cadets. We found it so when we were freshmen. No soldier returning from a hard fought battle ever marched with a prouder step than did our gallant company of a dozen, returning from the annual "target shoot." This was great fun; but when the strict military discipline that the "military science" would bring in began to be enforced, the advocates of the measure would long for the good old days. Then again, what time have we to drill. If we are not misinformed, our college is the only one of its class that pretends to enforce the labor system. We claim that if complete military science should be introduced here, and we surely do not want anything that is not complete,

the labor system must be either sadly broken into, or entirely done away with. The man who works faithfully for three hours on the farm or garden, and prepares his lessons understandingly, has little time left for "military science." The remainder of his time can be spent far more profitably at reading, rest, or recreation. We have no time at present. Will it pay to cripple the labor system which all admit is becoming more and more efficient? The point has heretofore been made that our armory should be used. This room is now occupied by two boarding clubs, and the arms have been sent back to the capitol. Where once the freshman cadet stumbled over his own feet in a vain effort to "right about face," the hungry student now rushes to his meals. The gleaming bayonet has given place to the peaceful knife and fork. May the change be permanent.

THAT NATURAL power of speech which enables one to freely and distinctly utter his thoughts is surely a beneficent gift. But, to the majority, this is an acquirement rather than an inheritance. Many persons are capable of thinking profoundly and of reasoning logically, yet lack the power of presenting those ideas in an intelligible manner. Look through this college and see if it is not true of its students! Are they as proficient public speakers as they ought to be or might reasonably expect to be with an average amount of training?

The especial province of this college is to teach the scientific studies and their application, yet in addition to this it proposes to teach the student those branches "which cultivate his taste and enable him to give expression to his knowledge and opinions." The present course in English composition is a good one. The required critical essays give an insight to the peculiarities of style of different authors besides making one better acquainted with English literature, but that part of the rhetorical work which is intended to aid in giving expression to thoughts is not thorough enough. The freshman's declamations do not receive the proper amount of preparation, which is due to lack of interest, in turn due to his not knowing the importance of this kind of instruction. This need of better training is seen daily in the class-room where the student either follows the text or blunders in the recitation. It would not be so with an increased vocabulary of words so that their language might be pointed or with an easy feeling while reciting, so that they might be energetic, for one may write ever so well, yet, if, in the delivery, his time is given to position and gesture he will fail in expression. During the first year a large amount of the time set aside for rhetorical should be given to declamations with the idea in view of strengthening the memory and in giving them this graceful appearance while speaking.

The argument that farmers do not require this kind of education is as false on the face of it as it is contemptible to advance it. It is important that the coming farmer should be educated and that, too, over



a large range of topics, but it is equally important that he should be able to impart those principles as effectually as possible. No other class of people are in such want of it, and to meet this almost universal need THE SPECULUM proposes that a thorough course of elocution be added to the college curriculum.

DR. CALDWELL, in an article on Agricultural Colleges, in a recent number of the Rural New Yorker refers to our college as the most successful one of the kind established in any State. Similar high praise is granted to our institution by Secretary W. I. Chamberlain in the same paper for March 24th, of the current volume. Secretary Chamberlain, in an open letter to the Legislature of Ohio, widely circulated in the papers of that State, dwells more at length on the excellence of this college and the methods which have been adopted to bring it to the front. The above expressions only voice the general sentiment of agricultural writers throughout the country.

What is it that has given to our college this proud position among the colleges of this class? It is, plainly, the actual demonstration that graduates of an agricultural college can be induced, if the proper training be given, to return to the farm.

No praise, however eloquent, will so commend one of these colleges to the agricultural classes, as the fact that its graduates do become farmers. That one-half of our alumni do become actual tillers of the soil, and a considerable fraction of the remainder own and manage farms, in a way to win general respect, is unquestionably what gives us our prestige. Other colleges have as able professors, more costly apparatus, and far more extensive libraries. Ours alone educates any considerable number of actual farmers.

Why does our college win in this most desirable feature while the other similar institutions fail?

Doubtless one important reason is that we have kept agricultural and its kindred departments of labor in the front ground. Those colleges which have extensive courses in engineering, the classics, and what ever else makes up a great university, may win students, and a great name, but they will never flood the country with cultured farmers. Alack the day, when our college introduces even the mechanic arts, farther than is necessary to make skillful farmers. The makers of steam engines, and the holders of the plow, will not, we believe, fraternize. The neat polish of the turning lathe can but work discontent in the minds of the youth fresh from the ditch or the compost, in the susceptible period before mature judgment guides the mind to more just conclusions. Tradition, the press, in fact the very atmosphere of our time makes it imperative that we keep our eye single to agriculture and its interests would we maintain our prestige. Hence a separate institution was wisely created. Equal wisdom has kept other industries than those relat-

ing to agriculture away. Wise councils will be slow to vary the conduct of affairs in this respect in the future.

The second, and equally weighty reason that we show such a favorable record, comes from our labor system. Three hours of actual manual labor so directed as to be productive, keeps the student in sympathy with labor, so that going on to a farm at the close of his school life, is not like springing from a precipice. Withhold all manual labor during the years of student life, and there is developed a habit of mind no less than muscle, which makes farm life distasteful, and generally in the very few cases where it is adopted unsuccessful. Book farmers are often worthy the ridicule they receive, through no fault of the books however. Our college has fully demonstrated that while this manual labor is no obstacle, but the rather a help to the best mental effort and progress, it builds up such habits of thought, taste, and physical activity as impel towards the farm, rather than drive from it.

That the graduates, especially the older ones, appreciate this fact is seen in the vehement attack which they made upon the idea of a change of time in vacations, at the last alumni meeting as endangering this most vital feature of our college. Every true friend of our college, student, graduate, or officer, recognizes the transcendent importance of this characteristic of our institution, and if thoughtful will do all in his power to promote its well being.

In the early years of the college with its few students, the managing of the labor was comparatively simple and easy. With our greatly increased numbers, this is no longer true. To secure the greatest success two things are imperative: First, more time and pains to instruct each student in every manual operation of the farm and garden; each student should be shown personally just how to handle a plow, to manipulate a hoe, and to swing an axe, no less than to lay tile, to plan buildings, and to feed and breed thoroughbred stock. Secondly, there should be ample supervision so that the professors should have time to thoroughly accomplish the above work, as the first depends on the second. This matter of competent supervision is one of paramount importance. As we understand, Professors Johnson and Satterlee are united in a plan which promises such relief that hereafter the instruction can be given. It is this: For the first three years of the course, the students are to understand that faithful service, studious attention to instructions in manipulation, and aptness and skill in their work will secure the position of foreman when they reach their senior year, with extra remuneration. Thus the added supervision will be at hand, which of itself will be valuable discipline for the students. The honor and extra recompense will be a constant incentive to the best effort all through the course. The relief given to the professors in charge of the



work will permit the desirable instruction in all the various manipulations of the garden and farm. As fewer foremen will have to be employed, there will be funds at command to pay the extra amount for the supervision, which would need to be but a small amount. Surely, if this scheme can be realized it will be another triumph for our labor system.

One other feature is just adopted. There is to be no excuse from work except such as would excuse from class. And when the work is insufficient, all are to be excused a part of the time, and no one all the time. This, too, is greatly to be commended.

## COLLEGE NEWS.

The freshman class shows a total matriculation of 63.

The Juniors are making a thorough study of the cat.

There was a marked improvement in student labor last term. Let the good work go on.

We are glad to note an improvement in the condition of the road between the College and Lansing.

Mr. L. A. Ross of the freshman class cut his foot quite severely several weeks ago. He is just getting about again.

Dr. Kedzie "hangs his banner on the outer wall." The sign over the door of the chemical laboratory is very neat.

The college asks of the State \$57,822 this year. This includes \$18,000 for a mechanical department, and a small sum for an instructor in "military science."

A short time ago we found an old piece of white cloth with a dust pan printed in black upon it. It brought back the stirring times of the "anti dust pan campaign."

There is a marked improvement in the conduct of students at meals under the new boarding system. The change from the rattle and disorder of the old dining room is a most agreeable one.

We understand that an effort will be made to form a College orchestra. We hope it will succeed. There are plenty of musicians wasting their sweetness on the desert air. Let them be organized.

Several students claiming to have no other home besides the College, attempted to vote at Okemos last fall but were not allowed to do so. Is there no law to cover this case? A man must live somewhere.

The State Board of Agriculture met at the College shortly after the opening of the term. They re-organized with Hon. Franklin Wells as chairman. The new members are Hon. David Rising, and Hon. Henry Chamberlain.

Under the new boarding system the groceries are purchased at wholesale in Detroit, and milk, butter and vegetables are obtained from neighboring farmers. The business is divided, one steward buying all the meat, another all the vegetables, and a third all the groceries.

Who is this gentleman in such a brown study? Is he a poet? No. Is he a philosopher thinking out some world startling theory? No. Is he a defeated candidate for the Senate? No, my child, he is the steward of a boarding club. He is wondering what he will have for dinner.

Scene in Logic: Professor. "Does the effect ever come before the cause?" Senior. (after a thoughtful pause), "Yes sir." Professor. "Name an instance." Senior. (suddenly remembering his work on the horticultural department), "When I wheel a wheelbarrow before me."

It is highly probable that a very strong College base ball club will be formed this year. Students are enthusiastic over the project, and it is doubtful if the College ever possessed better material for such a club than at present. A meeting will soon be held to complete an organization.

The Seniors elected their class officers last fall as follows: President D. C. Holliday, Jr., Vice President H. W. Baird, Secretary E. J. Fletcher, Treasurer H. A. Danville, Jr., Orator W. A. Bahlke, Poet H. W. Collingwood, Historian H. C. Nixon, Prophet J. I. Breck, Statistician M. St. John, Toast-master Eugene Law.

We do not remember a time in the past four years when the students have preserved better order than at present. Much has been said against the "students' organization," and yet we

believe it has been, and can still be made a success. Persons who criticise the conduct of our students, do not think of the conduct of students at other colleges.

The steward of a certain boarding club recently discovered a defective drain in close proximity to his kitchen. It was evidently a very defective drain, and one that called for immediate action. The alarm was sounded and in a short time the entire engineering department appeared upon the scene. With trembling haste the sanitarian reformers tore up the floor and found, folded in the embrace of death a—*mus decumanus*.

The statement of College expenditures in the circular issued last winter is the fairest we have yet seen. Why would it not be a good plan to settle this vexed question by stating what it has cost students in the past to complete the course. For instance, quoting from the statistics of the last class we find the average expense to be \$763 for the course, or about \$190 per year. The least economical student went through for \$1,200 or \$300 per year, and the most economical for \$550, or about \$140 per year.

Readers of the last SPECULUM will remember an article stating that an addition to the price of board had been made, and asking why it had been done. Last fall a committee was appointed to investigate the matter. They found that the extra 25 cents per week had been added to pay a debt contracted during the fall term of 1881. The steward's books show that if the full amount had been charged to the students at that time, board would have been over \$4 per week. The late steward was very popular with students, but his administration cannot be said to have been an economical one.

The old plan of selecting commencement orators by lot, has always caused more or less dissatisfaction. It has seemed as if the College went blindly searching in a hat for men to represent her. The seniors determined to try and change the system of selection. They petitioned the faculty last fall to grant them the privilege of selecting the orators themselves. This seemed fair as the class provides the entertainment and pays the expenses. The class proposed taking two men from each of the four literary societies in College. The faculty refused to grant the petition, but submitted a new plan of their own, which was agreed to by the class. Each member of the faculty selects from the members of the class who have completed all back exercises, the eight men who have in his opinion done the best work in his own department. The names appearing on the greater number of lists are selected for the orators. The orators for this year are, H. W. Baird, A. M. Bamber, L. A. Buell, W. F. Hoyt, A. F. Kinnan, J. T. Mathews, F. F. Rogers, and C. M. Weed. This list seems to give general satisfaction.

**THE CLUB SYSTEM.**—Students who were in college at the time THE SPECULUM was started will remember that it was in a certain sense the outgrowth of the trouble concerning board. At the second indignation meeting held in the chapel THE SPECULUM was first proposed, and at each subsequent meeting the paper was discussed and at last started. It is not strange that the paper attacked the old system of boarding. Hardly a number has been printed that does not contain a plea for some new boarding plan by which students might secure good board at fair prices. It is with peculiar pleasure therefore that we announce that the efforts of THE SPECULUM in this line, at least, have met with success. During the greater part of last term, the question of changing the manner of boarding was considerably discussed by the students. It had become evident to many that the old plan was both expensive and unhealthy. The high price of board was evidently driving students away from the College, and many of those who remained were much dissatisfied with the quality of the food. It was evident that a change was necessary. The only practical change seemed to be the adoption in some form of the club system of boarding. Various plans were proposed, such as class clubs, society clubs, etc., but none met with entire favor. At last at a general meeting of students a committee was appointed to look the matter up, and suggest some plan for division of the students. After several meetings and much discussion, the report of the committee was accepted, and a constitution drawn up by them adopted. The State Board of Agriculture consented to the change, and made the necessary changes of rooms with the money derived from the sale of the College furniture. They appointed a committee consisting of Pres. Abbot, Dr. Kedzie, and Prof. Carpenter, to have general oversight of the system. The State Board deserve the thanks of the students for their action. The division of students was left to a committee elected for the purpose. It was agreed that no society or no class should control any club. Each club was to elect a steward who should have charge of the business management, and be responsible to an auditing committee of three members. Five clubs were organized and stewards elected as follows: Club "A" A. M. Bamber, "B" H. W. Collingwood, "C" R. M. Hemphill, Jr., "D" C. C. Lillie, "E" M. St



John. The stewards were elected on the last day of the fall term, and the students went away, many of them it is feared, wondering how the whole thing would turn out. During the winter the rooms were arranged under the eye of Prof. Carpenter. The old dining room is now divided by wooden partitions into three rooms. The armory has also been divided, and now serves for two clubs. Much praise is due Prof. Carpenter for the energy with which he pushed the work to its accomplishment. At the opening of the spring term three clubs were started. One more was started at the end of two weeks, and the last one week later. There are now 30 students in each club. Of course this system is as yet only an experiment. Of course we have seen only the pleasant side thus far, but up to the present time it has surely been a decided success. It seems to include the two points for which students have striven so long. The food being prepared in smaller quantities is of far better quality, and a person directly interested has charge of the finances. The students have no excuse if they are cheated now. Board thus far has varied from \$2.35 to \$2.75 per week. Students seem to prefer good board at a fair price, to an attempt to reduce the price at the expense of their stomach. Everything seems to favor the new system, but the students must remember that the success of the enterprise depends to a large extent upon themselves.

## PERSONALS.

THE Editor of this Department desires the earnest co-operation of the alumni in aiding him to fill these columns with interesting items. Give occupation since graduation, what offices held, whether married or not, etc. Let this receive prompt attention from every alumnus.

Wm. H. Smith, '75, is now at Cedar Springs, Mich.

E. D. Millis, '82, is foreman of the Horticultural department.

F. E. Skeels, '78, is the father of twin babies, a boy and girl.

C. B. Charles, '79, is master of the Van Buren county Grange.

R. B. Barber, three years with '82, is slowly recovering his health.

Geo. A. Royce, '75, is clerk to the committee on judiciary this session.

"Vet" Share tallies lumber at Ludington, Mich. He was once with '81.

T. F. Millsbaugh, '82, is clerking in a drug store at Walden, New York.

Henry H. Jenison, '67, is a member of the present Michigan legislature.

C. B. Plummer, '82, is running a saw mill at Boyne, Charlevoix county.

Chas. S. Crandall, '73, is engaged in manufacturing at Harbor Springs, Mich.

Joseph A. Horton, '76, is a farmer at Osceola, Cassia county, Idaho Territory.

Thomas H. Rees, once with '85, now at West Point, stands forth in his class.

A. H. Voight is working for a large furniture firm at Los Angeles, California.

John R. Shelton, '82, is a clerk in the office of the Secretary of State, Lansing, Mich.

D. C. Oakes, '74, is deputy county clerk of Ionia county. His address is Lyons, Mich.

J. S. Gray, formerly a student in this college, is a member of the Michigan legislature.

W. H. Goss, '82, is farming at Bangor, Mich. He wins the class cup of '82 if rumor is true.

E. T. Wood, for one year with '84, has just graduated at Mayhew's Business College, Detroit.

Will S. Holdsworth, '78, is a designer and draughtsman at No. 157 LaSalle St., Chicago, Ill.

Carl V. Hinman, '78, is junior member of the firm of Ross & Hinman, druggists, Portland, Mich.

A. L. Bemis, for two years with '83, is canvassing for "The Heart of the World," at Scranton, Pa.

W. S. Hough, once with the boys of '83, is president of the junior class in the Michigan university.

R. D. Sessions, '78, was elected county clerk of Ionia county on the Republican ticket last November.

E. E. Vance, for over two years with '82, has returned to college this term, and will graduate with '84.

N. P. Graham, for more than three years a member of '79, is teaching school in the village of Manton, Mich.

W. J. Price, once a popular steward at the college, is a traveling agent for Christiancy & Co., Grand Rapids.

H. E. Emmons, '78, is still doing a thriving business as a flour and feed merchant, 47 Congress street west, Detroit.

Will Norton, once a member of '75, is prosecuting attorney of Charlevoix county. He is located at Boyne City, Mich.

W. K. Prudden, '78, was married Jan. 3rd to Miss Birdie Whitney of Lansing. THE SPECULUM sends congratulations.

S. M. McKee, formerly with '84, is attending school at Oberlin at present. He goes to Minnesota to spend the summer.

Everest Dyckman, once with '78, still leads a bachelor life at South Haven, Mich., where he is engaged in fruit farming.

E. O. Ladd, '78, is father of the first boy born to any member of the class. The young lad was born November 28, 1882.

Frank L. Carpenter, '73, lately spent a day visiting the college. He is a successful lawyer in Grand Rapids, Mich.

W. D. Place, '68, runs a large farm about three miles out of Ionia, and dispenses "pure milk" to the inhabitants within.

L. W. Hoyt, '82, is at present in the employ of Robinson and Lacey, New Orleans, La. His address is 188 Gravier street.

O. P. Gulley, '79, has charge of the Gulley farm, Dearborn, Mich. He is successful, contented, still a bachelor and happy.

Wm. H. Coffron, '82, spent the fall and winter at the college as an assistant in chemistry. He is now at North Branch, Mich.

Enos Northrop, who took a special course at the college in '79, was recently married to a very estimable lady at Mason, Mich.

Sherm. Upton, '81, did a good business at portrait painting in Paw Paw last season. Has not made his plans for future work yet.

Frank Wells, once with '73, has given up the hotel business at Harbor Springs, Mich., and will soon go to Ohio on a pleasure trip.

John F. Evert, '82, has just finished a successful term of school at Moore Park, Mich. He will engage in farming for the summer.

A. E. Ball, for a time with the class of '81, is a very successful farmer of Iroquois, Dakota. Was married last fall to a lady of that place.

C. P. Cronk, '79, who has been in the Signal Service department at Washington for nearly a year, will soon take his station at Cape Henry.

Will E. Hale, '82, is at home on the farm. During the past winter he had charge of the experiments in feeding ensilage at this College.

M. S. and W. L. Thomas, '79, have sold their fine farm near Decatur, and will remove to Dakota, where they have purchased a large farm.

Charles W. Crossman, '82, has canvassed during the winter for a book entitled "The Great West." His address is Benton Harbor, Mich.

Elliott Langley, for over a year with '82, was at work at Cadillac, Mich., for a short time this winter, but has returned to Grand Rapids.

N. A. Earle, who was a special student in chemistry for some time, is making a good reputation as attorney at law in Grand Rapids, Mich.

Geo. E. Breck, '78, is junior member of the law firm, Crane & Breck, of Paw Paw. He has a large law practice and is in every way successful.

J. W. Macklem, once with '78, has closed out his law business at Minden, and is now junior partner in a prosperous law firm at Lexington, Mich.

L. A. Lilly, '77, has removed from Allegan, Mich., to New Sharon, Iowa, at which place he took charge of a large stock farm, February 1st.

C. J. Strang, '78, is located at Keelersville, Van Buren county, as pastor of the Congregational church. His congregation speak highly of him.

A. J. Chappell, '82, has entered into an engagement for one year as deputy county surveyor in Montcalm county. His address is McBrides, Mich.

Ira B. Gage, class of '76, is spending the winter at his father's at Dowagiac, Mich. He has been engaged in wheat farming in Dakota for the past year.

R. H. Gulley, class of '78, is principal of the Dearborn public schools, and is very attentive to a very pretty lady whom rumor says he may one day wed.



Mrs. M. J. C. Merrell, '81, rejoices in an addition of two to her family,—her father and mother—who will hereafter divide her sorrows, and double her joys.

"Jake" Hollingsworth, '82, is foreman of Riggs' fruit and seed farm, Francisco, Mich. He has engaged for a year, and will make it his home if he likes it.

L. B. Walton, one year with '84, has been farming, since he left college, near Attica, Lapeer county. He was married last November to Miss Hattie West.

R. Haigh, Jr., '69, is giving his attention to life insurance work, at South Haven, Mich. His family has been spending the winter at Nashville, Tennessee.

John Sherman, formerly with class of '81, is senior partner of the firm of Sherman Bros., Ludington, Mich. They are general stationers and book sellers.

Sam Long, for two years with '76, was married last year. He is a farmer at Dearborn, Mich. Has a pretty home, and is the happy father of a bouncing baby boy.

W. I. Lillie, '81, has been teaching a winter school at Dennison, Mich. He returns to Grand Haven to continue the study of law in the office of Geo. A. Farr, '70.

Frank S. Kedzie, '77, at the close of last fall's term went on a hunting expedition to Northern Michigan. He saw a great many "fresh tracks," but did not find the bear.

S. W. Duncomb, who left his class to enlist in '62, is United States Land Commissioner at Aberdeen, Dakota. He has a large property in Van Buren county, Mich.

Frank J. Annis, '75, is doing a flourishing law business at Fort Collins, Colorado. He is a member of the firm of Haynes, Dunning and Annis, of Fort Collins, and Greeley.

Will Sloss, '76, has recently been made partner in a hardware firm at Big Rapids. He was married March 6 to Miss Ida Wilcox, daughter of the senior member of the firm.

J. S. Pardee, '78, graduated at the Rush Medical College last year. He is located at New Troy, Berrien county, and is having a good practice. Was married last October.

James Troop, '78, has just returned from Harvard where he has been taking a special course in botany. He will have charge of the horticulture experiments for another year.

F. C. Smith, once with the boys of '82, goes to Dakota this spring. He has engaged as a surveyor. Wages from six to ten dollars per day, and board about the same per week.

W. W. Palmer, '81, has recently purchased a large farm at Garrison, Benton county, Iowa, which he will make his future home. He intends to make a specialty of stock raising.

W. H. Bristol, formerly with '83, will complete the junior year in the law department this month. He will spend the vacation at East Saginaw in the office of Holden and Kendricks.

B. S. Palmer, '81, graduates from the dental department of the University the coming commencement. He is president of his class. He will return to Paw Paw to practice his profession.

Dr. Byron D. Halsted, '71, managing editor of the American Agriculturalists, was married last summer to a lady of Passaic, New York, and now resides at that pleasant New York suburb.

W. B. Jakways, '76, is teaching at Terre Coupee, Ind. He has followed that profession since graduating, with the exception of one year. Has taught fifty months since leaving college.

Mason Gray, '77, has entered into a partnership with Dr. Le-Baron of Pontiac. He has built up a good practice, and is fast gaining popularity in that flourishing little city as a successful M. D.

W. B. Kirby, of '84, will not return to college this year, having accepted a position in the bank of Nesbitt & Miller, Schoolcraft, Mich. He now expects to return and complete the course with '85.

Warren A. Wells, '68, is teaching a select school at Vicksburg, Mich. During the cold weather in January he was badly frozen while walking from Scotts to Vicksburg, and has not yet fully recovered.

W. L. Carpenter, '75, is meeting with good success in the law at Detroit. He has acquired the reputation of being one of the brightest and most thorough of the younger members of the Detroit bar.

Chas. W. Gammon, '79, of Richland, Cal., is at present located at Los Angeles, where he is speculating in oranges. He will remain there about three months. He may possibly take a trip east this fall.

C. R. Dart, '81, who entered the University last fall to take the course in civil engineering was obliged to leave after two months' study on account of ill health. He has been convalescing at Petoskey.

Prof. S. M. Tracy, '68, has been Secretary of the Mississippi Valley Horticultural Society. At a recent meeting in New Orleans, La., he refused re-election and was presented with a handsome gold watch.

Frank Robson, '78, was admitted to the bar last fall. He has been attending lectures in the law department of the University during the past winter, and takes his degree of LL. B. at the coming commencement.

R. L. Frost, once with '84, the man who used to talk like a steam engine, has been making steam engines at the Michigan Iron Works, Cadillac, during the last fall and winter. He left for New Mexico this spring.

J. A. Briggs, '79, went west last fall for his health, locating at Denver, Colorado, where he has opened a law office. His disease is an affection of the lungs and is very serious. He will make Denver his future home.

The college has a strong friend and supporter in the Legislature this session, in Senator C. J. Monroe, of South Haven. He was a member of the first class that entered, but only remained with them two years.

F. P. Davis, of the class of '68, is in the employ of the Canadian Pacific Railway. He has charge of a party locating the line from the summit of the Rocky Mountains eastward. He expects to make Michigan a visit this spring.

Alva Sherwood, '81, has been teaching during the past winter, but has now returned to the farm at New Troy, Mich. He presented a paper on "Our Agricultural Colleges," at the farmers' institute recently held in that section.

Martin T. Rainier, '74, has been ordained as pastor of the Congregational church, and is now stationed at Clarion, Iowa. Martin will visit Michigan this summer and we presume he will enjoy "peninsular apples," now as well as *then*.

Capt. Geo. W. Haigh, who was with the first class that entered the college, but who left with nearly all his class mates to go to the war, is a prosperous farmer near Manketo, Minnesota. He has a son nearly old enough to enter college.

One of the best articles following the Newhall House disaster, looking toward efficient means of escape in case of fire, was contributed by Eugene Davenport, class of '78, to the Post and Tribune, and has been copied in many other papers.

D. S. Lincoln, '81, is in the asylum for the insane at his own native city, St. Peters, Minnesota. He is acting as attendant at present but will have charge of the floral department and grounds, and vegetable and fruit gardens during the summer.

R. B. Norton, '79, is at present dealing in thoroughbred merino sheep at Henrietta, Texas. He expects to close out his sheep trade this summer and go to New Mexico, where he will again engage in the stock business, making cattle a specialty.

R. M. Brooks, '73, is farming at Wacousta, Mich. He has just been fortunate enough to secure a pension from the government for injuries received in the late war. Good! If any one deserves a pension he does, for memories of Andersonville are ever with him.

Cass Herrington, for three years with '78, is having his taste of political honors. He was elected circuit court commissioner of Oakland county at the last election. Cass is popular and his election shows the appreciation of his friends for his energy and talent.

W. A. Rowe, '73, is farming near Mason, Mich. He is secretary of the county board of school examiners. Of the fifteen who graduated in '73, he with J. L. Morrice and F. L. Carpenter remain unmarried. The rest have buried their woes in other bosoms.

Jay R. Monroe, '78, has returned from Colorado where he has been engaged in mining operations for several years, and has accepted a position in the first national bank at South Haven, which was made vacant by the sad death of O. R. Foote last summer.

J. L. H. Knight, '81, has charge of a large farm belonging to his father at Lee's Park, Nebraska. He is well suited with his western home, and would advise all his friends who are not already pleasantly situated to follow his example. His address is Myrtle, Neb.

C. A. Dockstader, '81, has at last discovered a business suited to his aesthetic taste, and now he sings

"A magnet hung in a hardware shop,  
And all around was a loving crop," etc.

He is in the office of a wholesale hardware firm at Cadillac, Mich., one of the liveliest, busiest, most flourishing, little cities of Northern Michigan. People who live in the slow-and-easy old settled towns have but little notion of business life in these lumbering cities.



Ray Sessions, '79, has been farming at Maple Rapids since graduation. He has given special attention to stock raising. He was married in 1881, but was left alone by the death of his wife ten months after, and is now living with his brother who owns the joining farm.

C. D. Phelps, '81, entered the University last fall to take the course in civil engineering, but was compelled to leave after completing the first semester, on account of the failure of his eyes. He will rest them during the summer, and try and complete his course next year.

Fort Collins (Col.) papers speak in highest terms of commendation of the superintendent of schools in that city. Saying that under his charge they are taking new departures weekly toward a more complete system. W. W. Remington, class of '80, is this superintendent.

Jay Sessions, '74, has given up the practice of law at Ionia, and returned to his farm with a determination to make his occupation a success. Stock raising receives his principal attention. Has a happy family of a wife and one daughter. His present address is Maple Rapids, Mich.

Gaylord Thompson, '82, has been traveling in Pennsylvania and Missouri for a Chicago firm during the past fall and winter, but having come to the conclusion that farming is his only natural calling, he will devote the summer to raising the standard of agriculture in Oakland county.

Harry Wilcox, '79, has been teaching during the past winter at his home at Rochester, Mich. He was recently elected President of the Oakland County Teachers' Association which is a good indorsement of his success as a teacher. He will return to the farm to spend the summer.

W. H. Burgess, '81, is hard at work in the law office of Avery Bros., Port Huron, Mich., and will be admitted to the bar during the summer. He received the Republican nomination for Representative in Sanilac county, but, like so many others, was defeated by a very small majority by fusion.

John E. Taylor, '76, since the last issue of THE SPECULUM has traveled through New York, Pennsylvania, and most of Canada, in search of his future location, but has come to the conclusion that Michigan offers the best opportunities for success, and can still be addressed at Otisco, Mich.

Chas. W. Garfield, class of '70, has become associate editor of the Grand Rapids "Daily Democrat." He continues his work as secretary of the State Horticultural Society, having organized a number of county societies during the winter. He says the State society was never in a more flourishing condition.

Frank S. Sleeper, '68, is a prosperous farmer at Galesburg, Mich. He does not care enough for his Alma Mater to take a trip to see her, and does not attend any of the meetings of the alumni. It is not often that THE SPECULUM has to report such a case as this, but nature is ever producing monstrosities.

The series of articles on rural law which have appeared in the late numbers of the American Agriculturist have met with such marked success that their author, Henry A. Haigh, '74, has been induced to write a "Hand Book of Law," for the use of farmers and mechanics. The Orange Judd Co. are to be the publishers.

F. J. Grover, '74, is practicing medicine at Big Rapids, where he has been since July, 1880. Has a constantly increasing practice, and is well satisfied with his profession. He is physician and surgeon to Mercy Hospital, an institution that cares for about a thousand patients annually, being largely surgical cases.

Will Farnsworth is a staid old married man now. It would do the hearts of the boys of old '82 good to see this matured, mild-eyed paternal, dandling his pink-eared progeny on his knee. Lo! this is the swaggering Soph. who once upon a time concocted some of the most diabolical schemes the world ever heard of.

E. M. Preston, '62, who is president of the Citizens' Bank at Nevada City, California, has employed his leisure hours during the past year in writing a work illustrative of the scenes and events among the hydraulic gold mines. His business interests require so much attention that he will be unable to speedily complete his undertaking.

A. G. Gulley, '68, who has been superintendent of the nursery at South Haven for the past few years, started for the west February 25th. He takes charge of an extensive forest tree nursery at Fresno, Fresno county, California. His engagement lasts for four years, and if suited with his position he will make the west his future home.

Andrew Burnett, who was a member of '84 for nearly two years, is the boss telephone man. To see him flying around these little towns looking after new lines, staying at the first-class hotels, smoking the best cigars, and covering half a dozen chairs with his long frame, one would imagine him to be old Bell himself. Burnett is all solid.

W. O. Fritz, '77, completed the course of study at the Valparaiso business institute last November. Soon after he received the appointment of farm foreman at Purdue University, and reports himself much pleased with his work there. He is connected with the experimental department, and is rendering valuable services to the University.

M. S. Lowder, '72, is very successful in his farming operations at Salem, Iowa. Last year was a poor year, but he hopes for better times in the future, keeps in good spirits, and still retains his customary weight of two hundred and ten pounds. Has twenty head of pure Shorthorns all doing finely. Was married seven years ago, and has two little girls.

Emory C. White, who was a member of the class of '82 for two years, will graduate at Purdue University with the class of '83. He is at present instructor in book keeping at that place. Through his exertions the students of the University have just succeeded in organizing a Natural History Society, which in his workings will be patterned after our own.

Beaumont and Dockstader are together again. They are learning to play the flute. And the suffering boarders of the American House, at Cadillac, Mich., are all leaving. The proprietor, however, will not drive away the villainous musicians, under the vain delusion that they may be able to play duets for his summer boarders during the next season.

F. W. Hastings, '78, who has been postmaster at St. Louis, Mich., for the last three years, has resigned his office on account of ill health. During that time he increased the income of that office from \$1,100 to \$2,000. He has received the appointment of U. S. postal clerk on the line between East Saginaw and Lakeview with starting point at St. Louis. He is recovering his health.

O. E. Angstman, whom the boys of '75 will always remember for his penchant for the use of carpenter tools, still prides himself in his ingenuity in that kind of work. Although now engaged in law at Monroe, Mich., his office and house are filled with cases, cabinets, etc., the work of his own hands during leisure hours. His recreation is thus turned to valuable account.

L. B. Hall, '82, thinks of going to Dakota after finishing his year's school at Grattan. When he has seen the world, acquired his fortune, and made a few other arrangements he will enter the law department of the University. His next step will be to get married, but from that point onward his future he does not foretell. Hall's friends say that the order of his plans are likely to be just reversed.

Linc. Avery, '82, will close his year's school at Brockway, Mich., in June, after which he will commence the study of law with his brother at Port Huron. He will enter the University next fall. Avery is doing good work as a member of the St. Clair county board of school examiners, and his wide spread popularity, combined with his determination to succeed in his profession, is sure to win honor for himself and our College in his vicinity.

G. W. Grover, '81, taught school the winter after graduating. In the spring he became proprietor of a drug store at Concord, Mich., where he remained for about four months. He then sold out and "loafed" the remainder of the summer. Has been teaching the past winter near Jackson. Expects to go into a railroad office in the spring. George evidently intends to acquaint himself with all the occupations so as to be prepared for any emergency.

L. H. Bailey, Jr., '82, is very agreeably situated as assistant in the herbariums and botanic gardens of Harvard University—the finest institutions of their kind on this side of the globe. He secured the position through the recommendation of Dr. Beal. He began operations there Jan. 1st. Previous to that time he was one of the local staff of the Springfield, Ill., "Morning Monitor." SPECULUM readers will remember Mr. Bailey as its first editor-in-chief.

S. M. Millard, '64, although a prominent lawyer in Chicago, still retains his love for agricultural pursuits, amusing himself with architecture, landscape, etc. He has a home twenty-three miles north of the city, at Highland Park, and the bluff where he has large grounds, and enjoys his lawns and flower beds. He is trustee and a member of the executive board of the "Illinois Industrial University," one of the most successful schools of the kind in the country.

Charles A. Jewell, '62, is head salesman in a wholesale hardware store at Springfield, Mo., where he removed two years ago in hopes of restoring the failing health of his wife. But the climate proved of no avail, and we are pained to learn of her death from consumption, which occurred last September. On going to Springfield Mr. Jewell leased his fine farm and property in Adrian for a term of five years, which is the reason for his remaining away. He will return to his agricultural pursuits at the expiration of that time.



Frank Hodgman, '62, is county surveyor of Kalamazoo county. He was the organizer of the "Husbandman's Club," of that county, one of the best clubs of the kind in the State, and is now its secretary. He is engaged in the preparation of a new manual of surveying for the Michigan State engineers and surveyors' association, of which he is an able member. The new manual is to contain much matter not found in any of the other works on the subject, while it will omit most of the mathematical work contained in the text books on surveying. The work is nearly ready for the press.

Ernest H. Bradner, '69, was principally engaged in teaching for the past twelve years up to last fall, when his health failed him, and he was advised to devote his entire time to agricultural pursuits as the only means of restoring his lost strength. He prefers the "golden State" to "poor old simple Michigan," and has made it his home ever since graduating. He thinks often and lovingly of his Alma Mater and hopes sometime to again visit her. The California State Teachers' Life Diploma was granted him two years since. Has been married three years to a Michigan lady and advises all his friends to look for wives in no other State.

Prof. C. E. Bessey, '69, of the Iowa agricultural college, has been spending the winter with his family in the east,—one month in and about New York city, and two months on Martha's Vineyard. During January and February he gave a course of lectures on botany in Plummer Hall, of the Essex Institute. Topic: "Some Problems in Vegetable Physiology." During the winter in his visits at Cambridge he enjoyed the opportunity of making a careful examination of Dr. Goodale's recently imported apparatus for physiological work in botany. Its value is between \$3,000 and \$4,000 and is the finest in this country. Prof. Bessey continues to be the botanical editor of the American Naturalist. The Iowa college is building him a house, and has raised his salary two hundred dollars for the ensuing year. He hopes to complete his new "Elementary Botany," by mid-summer.

John P. Finley, '73, has performed an immense amount of work for the signal service department during the past year. He prepared a pamphlet of nineteen pages on "Tornado Studies for 1882," a pamphlet of thirty pages on "Tornadoes, their Characteristics and Dangers," a voluminous report on the tornadoes of the year, not yet ready for publication, and five circulars on "Storms," varying from two to eight pages each. In September he was ordered to the Johns Hopkins University, Baltimore, to take a special course in physics, mathematics, French, and German. In October his publications received honorable mention before the Paris Academy of Sciences at the Imperial Observatory and Institute of Christiania, Norway, and at the Imperial Observatory and Institute of St. Petersburg, Russia. In November he received the high honor of "Fellow by Courtesy" of Johns Hopkins University. In January, 1883, he commenced the preparation of an important and extended paper on the subject of "Ocean Meteorology," which he will probably finish in the course of eighteen months.

## CORRESPONDENCE.

### Maple Sugar Making.

WOODLAND, MICH., March 22, 1883.

DR. R. C. KEDZIE, Agricultural College, Lansing, Mich.:

DEAR SIR: Being of an inquisitive turn, and knowing you had always kindly answered my questions in the past I send you the following in the interest of maple sugar makers.

1. Is not the well known brown color of maple sugar due to the action of the atmosphere or the ozone in it, i. e., does it not affect the sap of the maple the same as it does the juice of the apple, etc.?

2. If this is so is there any substance that can be added to prevent the coloring, or remove it afterwards, and in no way injure the sugar for eating?

The reasons for laying the brown color of sugar to atmospheric action are quite numerous. The longer it stands before being boiled the "browner" it will be. The same effect follows continued boiling, but nothing but rain water, sour sap, or burnt sugar will make it either black or red. The longer sugar is exposed to the air, the more it takes on this brown color, unless the molasses is drained out of it. To sum all up, it seems that so long as any portion is in the liquid state it will be colored by standing. Some seasons are worse than others, and some days, also.

I am largely interested in the sugar business, and am anxious

for all improvements. If you will kindly enlighten me on this point you will confer a great personal favor.

Very respectfully,

E. D.

### DR. KEDZIE'S REPLY.

There are many causes which contribute to making maple sugar of a dark color, such as old and discolored buckets and storetroughs, the soluble materials washed from the bark by rain and carried into the sap during a long storm, the influence of burning or *caramelizing* the sugar on the sides of the kettle or pan, which converts some of the sugar into a deep brown substance that will color a large amount of sugar.

Most persons recognize the fact that brown and discolored wooden vessels, and burning the sugar on the sides of the pan will darken the sugar. I turn my attention to another cause which E. D. has called out in his letter. Atmospheric oxidation and especially the influence of the most active oxidizing agent, ozone, seems to convert a small amount of sugar into a coloring agent of considerable intensity, and imparts a brown color to maple sugar as ordinarily made. The coloring in part takes place before evaporation, when the sap is stored for any time, and in part during the boiling. It is well known that any saccharine fluid boiled in the alkaline condition will become strongly colored, but it is not generally known that maple sap contains ammonia.

If maple sap could be gathered and kept in vessels incapable of coloring it, excluded from oxidizing influences, and evaporated in the neutral or slightly acid condition, the product would be white sugar. But the profit for this kind of sugar-making would hardly pay the expense. The fact is that maple sugar is too good a material to be degraded to the manufacture of loaf sugar. The exquisite flavor of well made maple sugar is something more precious than the bald sweetness of common white sugar. Yet the maple sugar is more prized if it is free from much color, especially if the other qualities of the sugar are preserved at the same time. The material which gives the delicious flavor to maple sugar is something distinct from mere sweetness. It seems to be volatile to some extent, for when maple syrup, or sugar in the moist condition is kept for some time, the flavor is lost. But if the syrup is sealed up in glass jars or soldered up air-tight in tin cans, the flavor is preserved for any length of time, if the sugar is made into hard and dry cakes, the flavor is preserved for some time.

In answer to E. D.'s second question I reply that the only substance fulfilling all his conditions is the sulphurous acid. It is not a material which you can buy in the market in sufficient state of purity for such uses, but you can make some for your own use at small expense. Make a box 15 inches square and 3 feet high, without top and bottom. Near the top place a tight shelf on one side inclining downwards at an angle of 15 degrees so that any liquid will readily flow down the inclination, and let this shelf reach within four inches of the other side of the box: four inches below the free edge of this shelf place another shelf on the opposite side of the box and with the same inclination as the first shelf, and then two additional shelves, one on each side and arranged in the same way, so that any sap allowed to flow over the upper shelf will flow down and fall in a thin sheet or fine drops on the shelf opposite, and from this in like manner on the next shelf, and thus pour or drop three times before it reaches the bottom shelf, the edge of which has a trough or groove to carry the sap out of the box into some tub or receptacle. In the bottom of the box place an old tin pan with some hot ashes,



and drop on these one or two ounces of sulphur which will burn and form sulphur dioxide, which will pass upward and come in contact with the descending sap as it flows over the shelves, will be dissolved by it and thus form sulphurous acid. The sap which thus flows from some reservoir at the top of your sulphuring box, over the shelves and into a receptacle at the bottom will acquire more acid than is necessary to ward off the effects of ozone of the air; a little of this added to the sap in store—just enough to cause it to redden blue litmus paper—will prevent the browning of the sugar during boiling to a large extent. The sulphurous acid being very volatile, will boil off during evaporation and leave no residue behind.

The sap which has been sulphurized in the passage through the box may be bottled up and kept (well corked) for some time without parting with its acid. In this way it will not be necessary to keep the sulphuring box in constant use.

The sulphites and bisulphites of soda and lime which are sometimes recommended for this purpose, will leave a quantity of foreign salts in the sugar which will render it bitterish and distasteful, and destroy the flavor and aroma of the sugar which are its crowning excellence.

## COLLEGES.

There are 7060 students from America in German institutions.

Oberlin has 1,493 students enrolled in the various departments.

It is reported that Mrs. A. T. Stewart will put \$4,000,000 into a college in New York.

The cost of club board for the students of Ohio State University for the month of January was \$3.36 per week.

Dr. Chadbourne, who was appointed President of the Massachusetts Agricultural College only last summer, is dead.

Rutgers was awarded the hundred dollars by the American College song book publishers for having sent in the best collection of college songs.

The Literary Societies of the Kansas State University have invited Col. Robert Ingersoll to deliver their annual oration next June. He has accepted the invitation.

At present there are in the United States 64 Greek Letter Fraternities having 487 chapters, 35 chapter houses, 70 alumni chapters, and a total membership of 62,256.

Seven graduates of Ann Arbor have been elected to the next Congress. If we are to judge the next Congress by the past, we should say this was a bad give away on Ann Arbor.

Pres. Eliot says the lowest sum for which a student can spend a year at Harvard University is \$650, and if he wants to live with a greater degree of comfort he ought to have \$1,300.

On account of the studying done on Sundays the Vassar faculty have changed the weekly holiday from Saturday to Monday. If they would only adopt co-education, they would probably be no longer annoyed by the girls studying on this day.

We were pleased to notice the following item in one of the numbers of the Purdue concerning W. C. Latta, of the class of '77: "Prof. Latta, our new instructor in Agriculture, is highly esteemed by his students. He is lively and energetic in the recitations and makes them interesting. So says one of his students."

The old and wealthy college of William and Mary's has had to close its doors for want of students. It had one student last year, but as he had to bear the blame of all college tricks perpetrated during the year, and as he could not conscientiously finish his sophomore year without some freshman to haze, he concluded to complete his education elsewhere.

Students at Williams College are requested to attend both morning and evening chapel. The students through one of their organs seemed to seriously object. They are willing to attend in the morning but think they can enjoy their supper as well without a second dose. It is not usually difficult to get the chapel exercises thoroughly committed during the first term even if you hear them but once a day. We do not wonder that the Williams students protest, especially if their chapel like ours is kept at a temperature near the freezing point.

Much comment has gone the rounds of the press concerning the strong free trade principles advocated by Professor Sumner of Yale. A few weeks ago the Willimantic Linen Co. invited the Professor and members of the senior class to visit their immense factories, and observe the beneficial workings of protection. About two hundred Yale men availed themselves of the invitation, and were given a royal banquet by the monopoly. The following item appeared in a local paper a day or two after their visit: "Two of the Yale students got mashed on a couple of mill girls during their recent visit to the Willimantic Linen Co.'s factories. They made an appointment with them, and stayed in Willimantic over night, but of course the girls were too sensible to put in an appearance. Then the fellows got happy over their disappointment. The female operatives of the mills, instead of the mills themselves, would seem to be the ones who will need protection, if all the colleges in the land are to be let loose on them in this way."

Sometime last year the faculty of Purdue University refused to admit a student because he would not pledge himself not to join any fraternity in college. The students contested their power to refuse him admission on these grounds, and the case was carried to the Supreme bench, where the decision of the faculty was sustained. A bill has recently passed the Indiana legislature forbidding the exclusion of any student from a State institution on account of his belonging to any society or Greek letter fraternity. We presume now the question is permanently settled. The *Wabash* contains the following in regard to the affair: "The passage of the bill settles a long and continued struggle between the Sigma Chi fraternity and Dr. White, president of Purdue University, giving to the Sigs the victory. Much time and money has been spent on each side, and now that it is settled it is to be hoped that we will hear no more of it. The other fraternities congratulate the Sigs on their success, for they feel that although they had no personal interest in the fight, the principles of fraternities should be vindicated. Fraternities no doubt have their faults as well as all human organizations, but they certainly contain some good, for they have been subjected to the severest tests and still exist, with good prospects of continuing to exist as long as colleges." Pres. White claims that the students have no right to take action against the faculty even though a higher power favor them. On account of the action of the legislature he has resigned his position.

We are indebted to Dr. Beal for the following notes on some of our leading industrial institutions:

In these times there is a growing interest manifested in industrial education. There are about 40 agricultural colleges in the United States, quite a number of which are very liberally equipped with all that is necessary to make them strong institutions.

During the past winter it has been my good fortune to visit for the first time four of these colleges, the plans of which are quite similar, making the agricultural college a department of an university. The four institutions referred to are the University of Wisconsin, the Industrial University of Illinois, Purdue University in Indiana, and Ohio State University at Columbus. I present as they occur to me a few notes which I hope may interest your readers. At Champaign, Illinois, the literary societies have neatly designed programs with names of officers and business for the meeting. The headings are permanent, but the changeable portion is inserted over a blank space left on the sheet. The whole is neatly framed and displayed near the college bulletin before every meeting of the society. The chapels, halls and recitation rooms of all these Universities were neat and well kept. In each case the large number of ladies about the premises may have had something to do in sustaining good order and keeping things tidy. In each case the ladies made the government of the students easier for their presence. Most of the students (and in one case all) procure rooms and board in private families. The colleges all have military drill, and for the little time spent the faculties are quite unanimous in its favor. The boys generally like it; they are straightened up and get rid of uncouth manners. In two or more of the colleges the subordinate military officers are selected from those students taking highest rank in their studies. At Champaign the roll of each company is called, and then the students march in and out of chapel to the music of a large brass band. A large choir of twenty or more persons aided by an organ and other musical instruments, together with singing by most of the students make the chapel exercises quite impressive. The students' government at this place extending all about town is said to work admirably. It has been somewhat changed within a year. A club system of boarding is common, a club often including members of both sexes. I heard of no instance where board ran lower than \$2.50 per week. It was generally considerably above this figure.

All of the universities have shops where the students in certain courses work in wood and iron. This shop work is universally popular and not hard to manage. The agricultural students have more or less shop-work, for which they are marked, and the marks go on record and count according to the quality, the



same as for lectures and laboratory work. For six or eight years a similar plan has been adopted with reference to certain instructive works in the college, such as potting plants, budding, and grafting.

Some of these universities are older than others and have more money to use, but all seem to me are on a better plan for our times than the old fashioned literary university. Laboratory work—a training of the hands to work and the eyes to see—goes along with mental culture. This plan is bound to become more and more popular as time advances.

In some of these colleges, one-third or more of the senior orations or literary exercises even, at commencement, are illustrated and the illustrations brought on to the platform and shown to the persons present. Wisconsin university is the oldest of the four and was started on a plan much like that of our own State university. The establishment of agricultural and mechanical departments has been recently grafted into the university, but the cions do not thrive as well as the parent branches. The additions are weak and over-shadowed and fail to draw their share of sustenance in the form of money and students.

The writer was invited by a convention of the State Agricultural and the State Horticultural societies with a sprinkling of members of the Legislature to speak on this subject of uniting an agricultural school to a university. While he was there a bill was drawn up and presented in the Legislature, to make the agricultural department a separate college and to remove it from Madison.

While at Indiana, five or six of the faculty of Purdue University posted off sixty miles to the State capitol to see about their appropriation. All did not run smoothly, on account of some former action in reference to secret societies.

## EXCHANGES.

That the general public is taking a greater interest in College affairs would be inferred from the fact that some of the leading daily papers now devote regularly a column of their weekly editions to college news.

We notice the following in the *Chicago Tribune* regarding the oratorical contest recently held in that city: "There was an oratorical contest in this city last night, but so far as heard from no damage has been done to the shipping on the lake. Oratory is a valuable acquisition. Some of the best orators in our colleges frequently make good third basemen after graduating." Evidently the *Tribune* reporter failed to receive an invitation to the banquet following the exercises.

The *Coup d'Etat* is a tasteful looking sheet from Knox College. Its editorials are sound, and all its departments complete with the exception of the alumni notes. These are sadly wanting.

The *Hamilton College Monthly* comes to hand with an abundance of literary articles, rather to many we should say in proportion to the local matter. Most of the articles show original thought, and the paper evidently carries out the intention of its editors in being "an exponent, especially in the drill the students receive in English composition."

From Washington University come two excellent papers, *The Student Life*, published by the literary students, is well conducted in all its departments, and reflects credit on its managers; *The Palette Scrapings*, from the same university, is conducted by the students of the art school, and is the first production of the kind ever attempted by art students. The last number contains a number of pleasing drawings besides some good literary matter. The publication of this sheet opens a new field in college journalism, and we wish for it a successful career.

The last number of the *Varsity* contains the following concerning the would be famous weather prophet:

A gay old professor named Wiggins  
Said a storm was to visit these diggins;  
But he had to postpone  
His intended cyclone,  
For the sun caused a hitch in his riggins.

Of the many distinguished men who have gone forth from the classic portals of our Alma Mater, we can not claim one, named by a local paper as a graduate of this college. To Albert University belongs the honor of educating Prof. E. Stone Wiggins.

The subject of co-education still agitates the college world. An unsuccessful attempt has been recently made to admit women to Columbia. The boys evidently did not desire their company if the following resolution expresses the opinion of the majority: "Resolved, That it is the fixed opinion and firm conviction of the Senior class of Columbia College, that the co-education of the sexes is undesirable from an educational as well as a moral standpoint, and that its introduction here would be

a fatal blow to the future welfare and prosperity of the institution." It is amusing to notice the comments of the different papers regarding the above note. The *Lantern* whose editors are evidently badly gone on the co-eds, relieves itself in this way: "The above resolution is the sort of 'bosh' the Seniors of Columbia spend their time formulating into resolutions. 'Tis a pity that that senior class have so far missed all the benefits which a college training is supposed to bestow, not the least among which is common sense." The *Lantern* seems to forget that there are two sides to all questions, and that a man has a perfect right to express his convictions concerning a question even if it does not exactly agree with every one else.

The *Niagara Index*, in an article of considerable length, discusses the action of the trustees of Columbia in refusing to admit women, and closes as follows: "From this it appears that those who have the welfare of Columbia at heart do not wish to jeopardize the interests of the college and thwart its real aim by the admittance of women. The mutual influence of the sexes when brought together in the same institution is derogatory to the well-being of each. While the trustees express their willingness and determination to afford all the possible facilities for the furtherance of female education, they do not wish to permit the prattling gum-chewers to disturb the equanimity of the college sprites." Still another writer on this topic, in an article in the *Student Life*, among other things says: "Co-education is the only means whereby a thorough universal education can be acquired. About two hundred of the universities and colleges of the United States have adopted co-education; among those best known are the Universities of Michigan and Wisconsin, Cornell and Syracuse Universities in New York, and Washington University in Missouri. From the fact that co-education has been maintained in these institutions of learning is proof enough that no evil results from it." While we take but very little interest in this subject ourselves yet were we asked for an expression of opinion we should say the following editorial from the *College Mercury* of the college of the city of New York very nearly coincided with our own view of the case: "When we come to the question of co-education and the competition of women with men, the case has a different aspect. Much can be said on both sides of the question from a theoretical point of view, and practically it has not been so thoroughly tested as to afford convincing proof either pro or con. In many colleges, both in this country and abroad, it has been tried for a short time with varying success. On one hand, we have the example of Cornell, Oberlin, Wesleyan, and the university of Cambridge and London, and on the other the university of St. Petersburg and the recent trouble at Syracuse. However other colleges may excitedly wrangle about this question, it has no practical importance for us. We can sit calmly on our safe pinnacle and moralize upon the theory of co-education, with little fear that it will ever come near us."

The March number of the *College Courier*, among other excellent editorials has the following which might be applied with considerable force to many rooms in our own dormitories: "The following ebullition of our editorial pen is intended exclusively for gentlemen: President Potter, of Union College, according to a great many of our exchanges, has offered a prize to the student keeping the neatest room. This action has called forth considerable comment, favorable and otherwise. One religious weekly has vigorously protested against such action on the ground that it will tend to create an extravagant spirit among students. We scarcely see the propriety in offering a reward to the student keeping a neat room. If some system could be devised by which those who do not do so should be punished, it would be a more practical measure. Belonging to students of our college there are rooms and rooms. In some of these rooms it is always a pleasure to spend a few minutes. Others we positively dread to enter. The difference arises not from the fact that some rooms are furnished more luxuriously than others. Some of the most expensively furnished rooms belong to the latter class. The difference arises from circumstances fully under the control of every student. There are little indescribable things that give an air of refinement to a room and which it is certainly no mark of manliness to overlook; no indication of femininity to regard. But aside from the pleasure of having a neat room, there are practical considerations in its favor. Not only will a room look better for having the books and papers neatly arranged, but in the college course a very considerable amount of time will be saved by knowing just where to put your hands on books of reference. This may seem a very little thing; it is not so. Moreover we cannot but be influenced by our surroundings. Just what effect it will have on a man to spend four or five years of his life in a room which never has a genuinely neat appearance, we do not attempt to say. These influences are too subtle to be thus analyzed. But we feel assured that the influence will not be beneficial."



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