

# THE SPECULUM.

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AGRICULTURAL COLLEGE, MICH., JUNE 10, 1890.

WHOLE No. 45.

## A Tradition.

BY A. C. SLY, UNION LITERARY SOCIETY.

Summer had gone, the autumn come ;  
The Pottawatomies their home  
Had left for northern game and trout.  
No war had they, no need to scout—  
The Ottawas, fast friends were they  
With them, and on this very day  
The chiefs had smoked the pipe of peace ;  
Their friendship vow'd should never cease.

Far up in the Ottawa land,  
'Mongst towering pines and hills of sand,  
Where Muskegon its source doth take,  
Hidden there is Neenaba's lake ;  
And there, hundreds of years ago,  
'Tis said (tradition tells us so),  
The savage red-men met as friends  
To treat for peace and make amends,  
And side by side, as they were wont,  
To go each year the deer to hunt.

The twilight reigned, the sun had set,  
The shades of night the day had met ;  
With restless orbs, the arched skies,  
Looked down on earth, a thousand eyes.  
The horizon, though crimson streaked,  
Its western line yet ne'er was reeked,  
Nor did the air in crowded blast  
In angry haste come rushing past,  
But zephyrs soft bore odors sweet,  
And gently fanned the fevered cheek.

As if all nature sought repose  
From weary labor, cares and woes,  
Like fierce dragoons, fresh from the fray,  
Wrapt in their blankets, peaceful lay,  
Bid glad farewell to close of day,  
Dream dreams of gentle ladies fair,  
Of childhood days, a mother's care ;  
Yet knowing well that ere the morn  
Would rage again the awful storm.

Neenaba's lake was calm and still,  
The campfires burned on Chonoc hills ;  
Along the shore, on western side,  
A birch canoe was seen to glide.  
The giant pines that fringed the bank,  
Mammoth trunks with foliage rank,  
Cast, as it were, protecting shade  
O'er warrior and dark-eyed maid.  
Oh, say you, have you never heard  
How the red-man's soul is stirred  
By love, and how he courts and wins ?  
Listen! Thus the tale begins :

The chase was over for the day,  
Inos alone, across the bay  
His canoe he paddled straightway  
To where Long Point projected lay.  
There on the beach a maiden stood—  
Had just emerged from out the wood ;  
Down on his paddle stronger bore,  
And soon he touched the sandy shore.  
Out shot again the light canoe,  
Instead of one it now held two.  
Let minstrels sing of knights of old,  
Dressed in armor trimmed with gold ;  
Yet as brave a warrior here,  
Dressed in nature's most simple gear,  
As ever poised to throw a spear.  
Let poets praise the ladies fair,  
With ruby lips and auburn hair ;  
Yet here, methinks, in nature's child,  
Innocent, free, fearless and wild,  
The dusky beauty all unsoiled,  
The perfect form, the laughing eyes,  
A better theme for poet's praise.

Swiftly glided the bark along,  
Propell'd by a warrior strong,  
A brave young chief—his courage tried—  
Favorite leader of his tribe.  
No flattering word on his tongue  
To win the heart of Monion ;  
No words of love pass'd from their lips,  
No pretty speech to strain the wits ;  
But what fail'd language to express,  
The eyes spoke more perhaps than less.  
Each other lov'd, with simple grace,  
Made known their love by fond embrace.

In voice of deep and richest tone,  
Intensified by emotion,  
Inos, Pottawatomic chief,  
Told the maiden in language brief  
Of great warriors of his tribe,  
How all the nations they defied ;  
Of his forefathers long ago,  
Who met and conquer'd every foe ;  
Of the Pottawatomic land,  
Corn and plenty on every hand.

When nearly round the western bay,  
In the canoe the paddle lay.  
The boat had drifted near the shore,  
And leaning on the oar once more  
Inos, turning the bark around,  
His quick ear caught a whizzing sound,  
And on his shoulder felt a sting  
Made by an arrow on the wing.

A shallow wound, yet though 't was slight,  
Out rushed a stream of crimson bright.

Fierce gleam'd the young warrior's eye,  
And fiercer still when he did spy  
His enemy's dark form glide back  
Into the wood. The stealthy act  
Did not escape his eye so keen  
But that he knew his foe had been  
Before in Ottawa's tribe—

He who his life to take had tried.  
From out the lake, the gentle maid,  
Purest water scooped and bathed  
The wound, and washed away the stain,  
The cooling liquid soothed the pain.

Inos, like a warrior true,  
O'er such a wound made no ado.  
Back to the point, with rapid stroke,  
He madly drove the swan-like boat,  
And on the shore left Monion  
To wend the path that she had come  
From the Ottawa camp, alone.

A war council that night was call'd,  
And Inos, what had happened, told  
His braves. Their ears were never deaf  
To words that came from their young chief;  
And when the wounded shoulder show'd,  
Each dusky face with passion glow'd.  
They lov'd their chieftain far too well  
To know that such had him befell  
Without avenging such a wrong;  
Thus vengeance came from every tongue.

Once Wedesh, an Ottawa brave,  
His life had risked his chief's to save,  
And for the deed, the grateful red  
Had promised his daughter should wed  
This great warrior of his tribe—  
That Monion should be the bride.  
But Monion bore naught but hate  
For fierce Wedesh, the brave so great,  
And had said she'd drown in the lake  
Before the wife of Wedesh make.  
The warrior much was vexed at this,  
For much he loved the pretty miss.  
To win *her* love the more he tried  
Farther away the would be bride.

When Inos first saw Monion,  
Wedesh knew that the time had come  
For him to DO or lose the prize;  
For well he knew that otherwise  
His valor's gift, Kewa's daughter,  
Would be wedded to another.  
With deadly hatred in his heart,  
He vowed the lovers he would part.  
Thus, that he might the maiden save,  
He'd watch his chance to kill the brave.

But the arrow had miss'd its aim—  
His trusty bow for once to blame;  
Some bold deception he must try  
That his rival might surely die,

So on his own arm cut the skin,  
As if the flesh had wounded been,  
And showed it to the great Kewa;  
And when the wound the chieftain saw,  
Heard the story that Wedesh told,  
His anger back could hardly hold;  
Called his braves, that Wedesh might tell  
To them what had to him befell.  
With lying tongue and gesture wild,  
The savage told how Kewa's child  
Had been with him along the lake,  
When an arrow his life to take  
Had missed its aim, yet torn his arm,  
And giving chase had seen the form  
Of Inos swiftly glide away,  
And disappear along the bay.  
When the warriors this had heard  
Their thirst for blood was quickly stirred,  
They resolved to exterminate  
The southern tribe who had of late  
Been their fast friends, but by this act  
Their foes became. The very fact  
That Ottawa blood had been spilled,  
Each heart with deadly vengeance filled.

On Neenaba's most northern shore,  
There the Ottawa warrior  
His wigwam had built, while his guest,  
The southern brave, had thought it best  
To choose some other place where he  
Might camp and unmolested be.  
Where flows the outlet of the lake,  
Muskegon's swift stream soon to make,  
Among the cedars tall and rank,  
There he camped on the mossy bank.  
No star shone in the clouded sky;  
The hour of midnight drawing nigh,  
O'erhung a blacken'd canopy.  
The lake was calm; from hill to hill  
Resounded the loon's piercing shrill,  
And intervening all was still.  
From either camp a thousand braves  
Glided across the western bays,  
Their light canoes cutting the waves,  
As if by magic force propelled,  
So noiseless the form each boat held.  
Each tribe, to surprise the other,  
Had hoped to avenge their brother  
This night—to find their foe asleep,  
And for the dead leave none to weep.  
Around Long Point, on either side,  
A floating mass—a savage tribe—  
They met; with fearful whoop and yell  
The foremost warriors fell.  
Then the awful battle began—  
Man against man and hand to hand,  
They strove with tomahawk and spear,  
Of death had they but little fear.  
Fought long and hard the fight to win,  
Yet ere an hour in battle been  
The lake closed in on all that throng  
Excepting one, about to drown,  
Was rescued by brave Monion.

The morning came, the rising sun  
Peer'd o'er the hills and looking down  
Saw the peaceful lake—nothing more  
Than he had left the day before.  
In the camps, a different scene ;  
Hundreds of women and children  
For brave warriors sadly mourned—  
Who fought the fight, but ne'er returned.

Some Ottawa hunters, away,  
Knew nothing about the affray,  
Came into camp with game that day—  
Row'd down across the western bay  
And fell upon a helpless prey.

When Monion, that dreadful night,  
Had rescued Inos from the fight,  
Across the lake the chieftain bore,  
And landed on the eastern shore.  
With her support he managed well  
To gain the wood and mossy fell ;  
She gently nursed the aching wound,  
With healing herbs to her well known  
Caused the brave to recover soon,  
And hand in hand they started forth  
To leave the lake and cursed north.  
Their descendants (traditions say),—  
Pottawatomies of to day,—  
Never visit the shining spot  
Where long ago their fathers fought ;  
That if they should—their only plea—  
The dead men's ghosts would surely see.

### The Race Question From a Southerner's View.

C. B. COOK, OLYMPIC SOCIETY.

Scarcely a paper is published that does not advocate some scheme for settling the negro question in the South. It is the most important problem before the United States at present, and should have a full, unprejudiced consideration through the press. Is it fairly discussed? Not one article in ten is written by the southerners, and they, of all others, understand the condition of affairs in the south. A northerner takes a flying pleasure trip through the Southern States and returns with a knowledge adequate for writing any amount on the oppression of the negro in the South. Thus the discussion is continued by the enthusiastic northerner doing the talking and the southerner, who knows the circumstances best, remaining silent; as anything he might say would not be acceptable to the people of the North.

Many dailies are filled with accounts of outrages in the South, which are written in a manner to make the people of the North believe the southerners at large are in sympathy with lawlessness, when in reality those south of Mason and Dixon's line are as sensitive to right and wrong as those north. Law breaking which would hardly be heard of if it was perpetrated in the North becomes a national issue if in the South with a negro for its victim.

At every election we hear of great scandal and oppression of negro voting, just because the negroes do not carry the day, and it is claimed they would under free ballot. South Carolina and Mississippi are the only states that have a negro supremacy, and South Carolina disfranchises seventy-five per cent of her negroes by an educational restriction on the ballot. That leaves Mississippi accountable for all the suppression of voting which keeps the negro out of power. How the whites peacefully rule in Mississippi over their ignorant people is shown by the picture in the large northern manufacturing towns, of marching the workmen to the ballot-box to vote under the watchful eye of the employer, and then turning them loose for a holiday if they vote as ordered, or discharged if not. That is worked in the North, where one party has as much wealth and education as the other, with but little disturbance. Let the same thing be done in the South with negroes, and there immediately arises an outcry against such scandals. It is estimated that Harrison received 1,000,000 southern negro votes, which is about seventy-five per cent of the negro votes, a larger per cent of votes than the whites polled. How much suppression of negro voting could there have been?

In court the negro not only gets his rights, but often much more, as the lawyer is enabled to work upon the sympathies of the jury much more than it is possible in pleading for a white man. Negroes evidently realize that the whites are their best

friends, as a negro will always object to a fellow black on the jury. Thus we see that the negro trusts and respects the white man's superior intellect, and if the negro is unwilling to trust his own interest to his fellow black, how can he be expected to rule the states, even where he has a voting majority? Evidently the negro must be raised in his own opinion and that of the whites before he can become a useful citizen. The only way of accomplishing this is by education. The school tax is divided equally per capita between the children of both races. What more could we ask when the whites need it no more and pay practically the whole tax. The southern people are much poorer than the northern, yet pay proportionally a larger school tax. The people of the South have two difficulties to contend with in educating the negro. The people are too poor to raise sufficient school tax to give all a liberal common school education. Many of the negroes are not only indifferent to obtaining an education, but opposed to it, and this prejudice must be overcome before we can expect any considerable advancement.

It would not be strange if the negroes were treated fully as bad as some people in the North imagine. Think of a people put under the military power that had so recently conquered them, with the intention of protecting an ignorant, helpless people who had just been released from the yoke of slavery and made equal to their former masters! Is it consistent with human nature that they will be allowed to exercise their full rights after the power enabling them to do so has been removed?

In South Carolina and Mississippi the negroes would have carried the election if they had been allowed free access to the ballot, and in a few years those two states would have seen their educational institutions and all the public offices under the control of the negroes. They saw this condition of affairs must follow if the negroes *all voted* as they pleased, and to destroy all chance of

such a calamity South Carolina disfranchised most of her negroes by an educational qualification. While Mississippi resorted to the less honorable means of keeping the negro out of power, and the easiness with which this could be done has characterized the negroes all through their career as freemen and voters.

### The Patrons of Industry.

GEO. C. MONROE, ECLECTIC SOCIETY.

Much depends upon why and by whom a trades union is formed, whether it does good or evil to the people immediately concerned, or the community in general. It is no doubt true that a large number of them, representing all kinds of labor, have conferred many privileges upon their members and secured for them rights of which they had been deprived. Others, however, formed of the same classes of people, have failed to secure any good results, if such, even, were attempted, because its organizers or leaders turned its power into their private channels to carry on their own schemes for financial or political advancement. Our country has had much of this; too often do we read of strikes or lock-outs, involving hundreds of men, productive of no good to those concerned, certainly causing the loss of much time, and bringing suffering to innocent persons, all because some men in power in a trades union had seen fit to order the strike. These men are shrewd in their way; they have solved the problem of how to live without work; but could not continue in any such position unless agitation of some kind were present. Revolutionary meetings are held under their direction, into which the masses who prefer to have others think for them are drawn. Again, at these meetings we do not find men with diverse opinions, they are all from kindred trades, and it is but natural that they should thus acquire exaggerated ideas of their own importance, and seek to elevate themselves by crushing others.

It is out of such conditions that a peculiar organization has grown up in this state within the last four years, of which little is known. It is distinctively a farmer's union, having the expressive title of Patrons of Industry, and has for its avowed object the correcting of all evils, real or imaginary, which burden the farmer. Composed as it is of independent toilers it could not follow the plan of other trade unions by ordering a strike when higher wages were desired, or some other grievance was to be settled; but by intimidation it seeks to carry out its own peculiar ideas of business transactions.

The idea of such an organization was first conceived by a retired minister at Port Huron, in 1886. He had spent the best part of his life in an unsatisfactory attempt at preaching, and at sixty years of age found it necessary to improve his worldly condition. Two of his neighbors, one a lawyer and the other a railroad man, to whom he went with his scheme, readily lent their aid. None of them had ever tried farming as a profession and knew little of its actual troubles, but they had observed the attention the farmer was receiving from all quarters, and that the farmer paid for it liberally in some way, so they concluded to have a share in that business. The plan was to unite the farmers into one vast organization, having local, county, state and national divisions, presenting too powerful a force to be lightly looked upon. These three originators also believed that no scheme holding out such alluring prospects to its members should be regarded lightly and so put the membership fee at three dollars. This would provide for handsome salaries, which, of course, the originators looked upon as the principal end in view. After securing themselves in power, the trio set about organizing subordinate lodges, and in this they were quite successful. The poor, down-trodden farmer welcomed his friend, who was to help him out of hard times and depression. Thus the order spread rapidly throughout the state.

One reason for the rapid growth is seen in the fact that the organizer of each lodge received ten dollars for his services, and to be a good talker was all that was required for an organizer. In Lenawee County during the month of April one of this class cleared \$290.00 by being the professional friend of the farmer.

The farmer's condition may be improved in two different ways, by securing to him a greater price for his produce, or by enabling him to purchase more cheaply. In this country there are certain laws of trade which fix the price of commodities so that those prices cannot be changed at will. If there is a demand for any class of goods greater than the supply, then the price will be high, and the reverse is true, as well; because of the great competition between tradesmen goods will be sold as low as possible and yet make a fair profit. The vast areas of cheap farming lands in this country have caused such great crops to be raised as to force the prices on the principal productions to remain at a low figure. But these lands will soon be exhausted and prices that will suit every farmer will be the rule. The agriculturist, however, does not look at these points. He sees that certain things are present, but the future means nothing to him.

The Patrons of Industry propose a new basis for transactions which concern the farmer. This class and a limited number of merchants are to be brought into closer relations by means of a written contract which binds the farmer to buy all his goods of that merchant and the latter to sell them at not more than ten per cent advance on the cost. This seems reasonable enough, but the parties will not carry out their agreement, and it is just here that the weakness of the whole thing is shown. A ten per cent profit is quite an amount where total sales of from \$10,000 to \$20,000 are considered, but when rent, taxes, freight, clerk-hire, and numerous small losses are thought of, the storekeeper can barely live as it is.

Just why the farmer is to be favored above other honest laborers is not clear. Of course he is paid much attention, and all classes are solicitous concerning his welfare. He is the producer of nearly every necessary of life, and upon his success depends that of nearly every one else; but to think that he is to receive prices and concessions denied to all others is too much. The contract signed strictly specifies that no other persons are to get goods at such low prices as the Patrons of Industry. This, if carried out, would have but one effect; the driving of the better class of customers entirely away from that store and securing it a very undesirable class of patrons. As yet the better farmers do not join the Patrons of Industry, and with them the storekeeper has nothing to fear. It is a favorite boast of this order that all merchants who do not agree to deal with them in this peculiar way will be forced out of business by their more enterprising (?) rivals. Such a case, however, has not yet occurred. The only instance in which they have changed the old order of affairs was by electing a few township officers this last spring in different parts of this state. Surely, that was nothing revolutionary.

Many irresponsible merchants agree to the Patrons of Industry contract, with a mental resolve to make it to their own advantage. The greater part of the order are not above the average in shrewdness, and readily fall victims to false invoices, special sales, and the like. One of this class entered a grocery store, said he was a Patron of Industry and would like to buy five pounds of tea at ten per cent above cost. The merchant filled his order and then made out a special invoice showing a price of fifty cents a pound; the farmer paid fifty-five and went out blessing the Patrons of Industry for its splendid advantages, etc. The tea had cost twenty-two cents per pound, and was regularly sold for thirty.

What, then, do the Patrons of Industry accomplish towards bettering the condition of the farmer? It perhaps satisfies a few discontented ones, by affording a temporary diversion, but in this direction it will fail, for all diversions must have an end, and the end of the one in question will be astonishingly abrupt. However, it does some good, for it allows three or four men to draw salaries of from \$1,200 to \$2,000 a year, who, but for organizing this scheme, would be in sad financial straits. Let the farmer then cease to hug this delusion, for it will vanish into that of which it was made, a fanciful dream, and leave him empty armed, gazing into vacancy.

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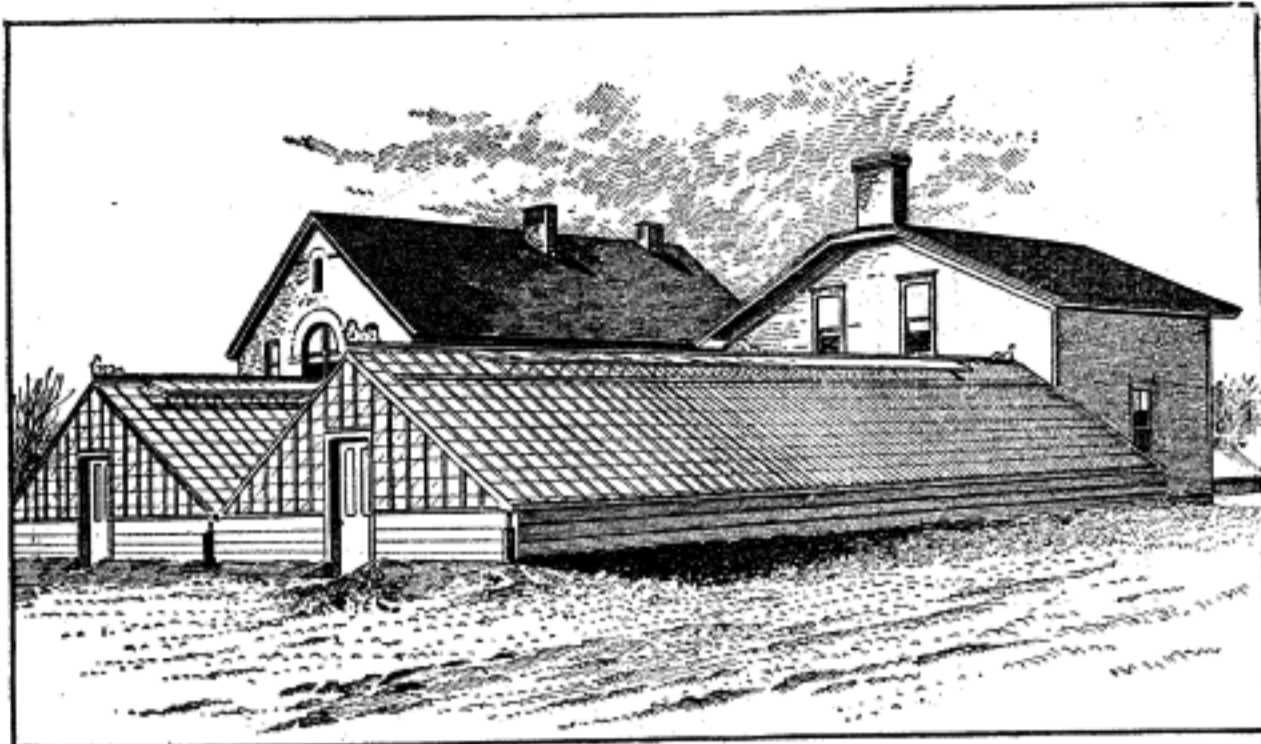
### SCIENTIFIC.

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Prof. R. C. Carpenter presented three papers at the meeting of the American Society of Mechanical Engineers held in Cincinnati, May 16 to 20, 1890.

The one of most interest to the college and the students gave in full a detailed account of a comparative test of heating with hot water and steam, made by Prof. L. R. Taft in the two forcing houses recently erected for experimental station work.

The paper is illustrated with cuts, showing exterior and interior views of the houses, and also a plan and section. The two houses, being of exactly the same size, were well suited for such an experiment. The east one was heated with steam, using for that purpose 200 square feet of radiating surface; the west one was heated with hot water, using 275 square feet of radiating surface. The heaters employed were of the same make, same grate, and same heating surface. The result of the test was surprising, as it showed a constant and large difference, so far as coal consumption is concerned, in favor of the hot water heater.



View of the Experimental Forcing-houses with Horticultural Laboratory in the distance.

The following table gives the average results of the test for each month:

Date.	Average Outside, 6 A. M.	Average Inside, 6 A. M.	Average Inside Maximum.	Average Inside Minimum.	Average Total Change.	Daily Coal Consumed.	House.
Dec., 10 days..	31.8	54.9	60.3	.....	.....	75	HotWtr.
" " "	31.8	53.9	56	.....	.....	93.2	Steam.
January, 1890.	27.7	54.1	57.4	53.4	4.0	90.3	HotWtr.
" " "	27.7	52.5	57.2	52.8	4.4	112.1	Steam.
February .....	22	54.4	57 3/4	53.2	4.25	99.1	HotWtr.
" " .....	22	54.1	57.6	53	4.6	121.4	Steam.
Mar., 20 days.	20.4	53.9	58.7	53.5	4.6	114.4	HotWtr.
" " "	20.4	53.3	57.4	52.9	4.5	135.7	Steam.

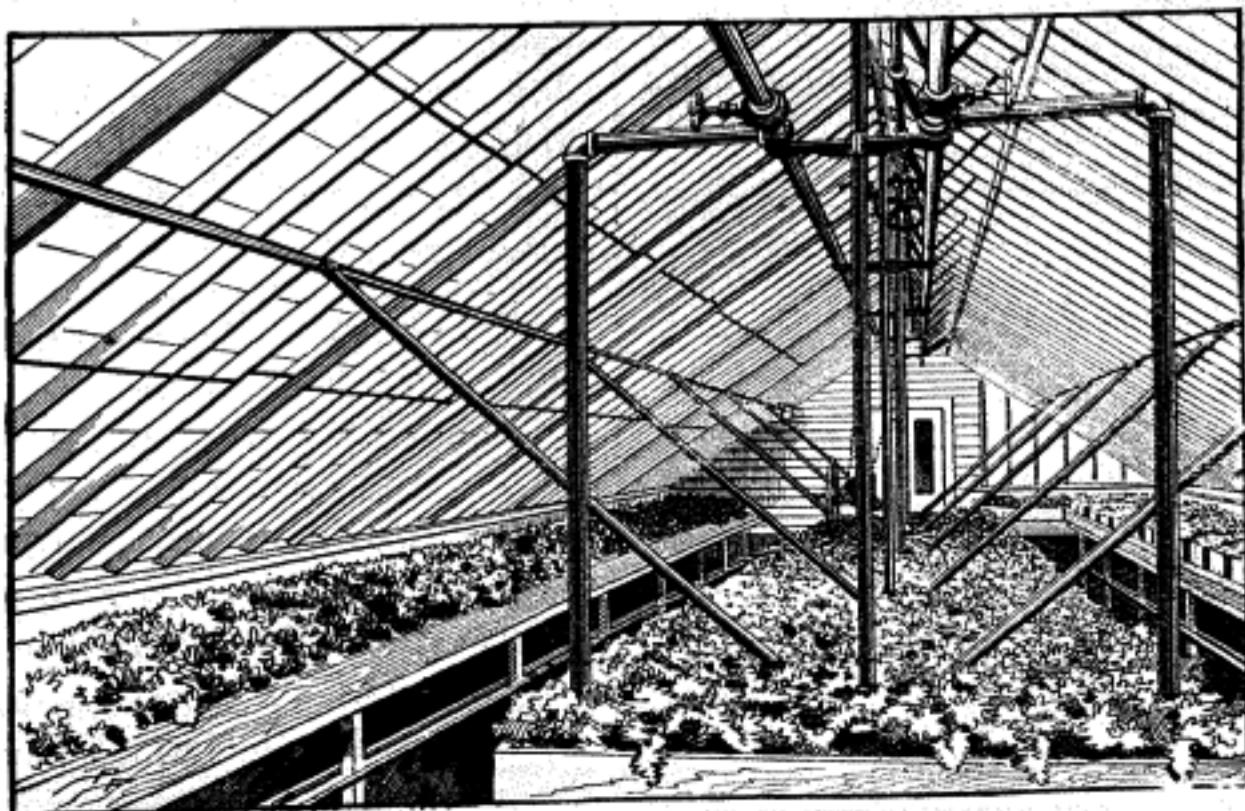
During the month of April each heater was supplied with the same amount of coal each day, and the resulting temperatures measured. In this case the hot-water house

was somewhat more than eight degrees warmer than the steam-heated house.

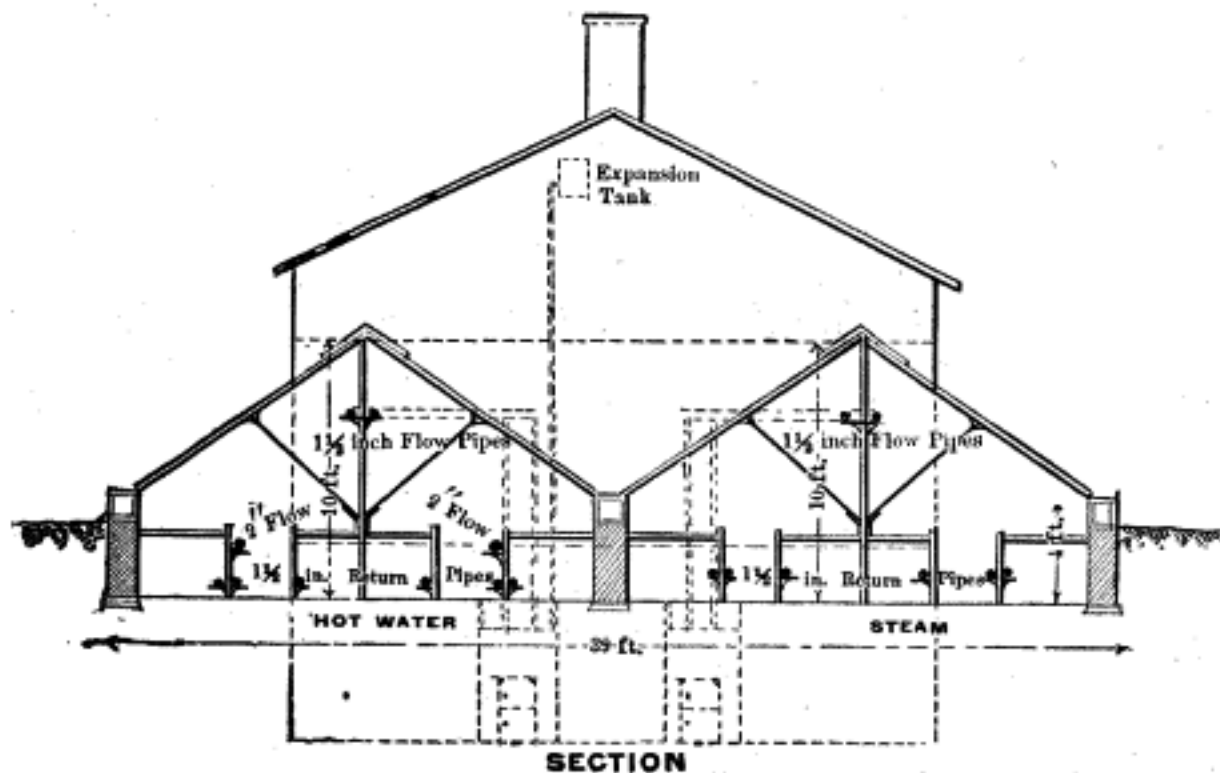
This experiment was fair in every way to both systems of heating; yet it would hardly do to generalize from this alone that hot water gives fifteen to twenty-five per cent better results for the coal consumed than steam, as shown in this trial.

A reason for this can, however, be pointed out, which, no doubt, accounts for the higher economy of the water-heater.

It was found by measurement that the highest temperature of the hot water used in heating was 160 degrees, while that of the steam was about 215 degrees. Now, then,



View of interior of west house.



heat is taken up in proportion to the difference of temperatures, in accordance with the physical laws for the transmission of heat. If the average temperature of the interior were 500 degrees, the amount absorbed by the hot-water heater, compared with that absorbed by the steam heater, would be in proportion of 340 to 285, or about twenty per cent more. This would indicate a greater waste in the steam system, and such a waste was actually detected by measuring the temperatures of the escaping gases.

The second paper gave the result of a series of tests of steam engines, made during the past winter vacation, to determine the relative economy of the various types in use.

These tests showed the coal and steam consumption for these various engines, as follows:

Kind of Engine.	Size of Engine.	No. Revolutions.	Pounds of Steam per Horse Power.	Pounds of Coal per Horse Power.	Lbs. Combustible per Horse Power.
Simple Automatic.....	14 x 20	171.5	30.3	5.34	4.76
Corliss Condensing.....	14 x 36	95	26.87	4.63	3.61
Compound Non-Condensing.....	14 x 20	149.8	32.8	5.2	4.2
ing.....	21 x 20				
Compound Condensing—Throttling Governor.....	14 x 20	184	27.5	4.52	3.24
Compound Condensing—Automatic.....	9 1/2 x 20	160.5	18.77	3.05	1.97
ing.....	21 x 20				
Compound Condensing—Automatic.....	14 x 20	172	16.57	1.96	1.69
ing.....	21 x 20				
Triple Expansion—Condensing.....	9 1/2 x 20	165	17.98	.303 gal. oil.	
	14 x 20				
	21 x 20				

The third paper merely gave a description of the method used in removing scale from the boilers in the steam-heating plant at the college, which consisted in applying about one-half gallon of kerosene oil each week.

### Mechanical Club.

AGRICULTURAL COLLEGE, May 2, 1890.

At the regular meeting of the Mechanical Club J. H. F. Mullett gave a talk on the original solar compass. In 1836 an attachment to the ordinary compass was invented by William A. Burt and John Mullett, of Detroit. By this attachment (knowing the declination of the sun and the latitude of the place) a true north and south line may be obtained without reference to the needle. The alterations since made in the original attachment have been solely for convenience in working. The principles first embodied remain the same.

W. J. Breese followed with an article on stone cutting by means of the revolving cutter. By revolving the work rapidly in the lathe and having the tool held at an angle of 25 degrees to the work, and free to revolve when pressed against it, an inch and a half cut can be taken off by two cutters at one traverse. The cutters can do in one day the work of a fortnight for a man with the common mallet and chisel. For the



softer stones chilled cutters are used, but for granite and limestone hardened steel.

L. C. Brooks read a selection, "Struck Gas," describing the process of oil and gas well boring, and the immense power of the gas, when struck, sometimes being so great as to force the drilling apparatus of several tons from the well.

The process of making shingles was described by F. Bauerle, through the various operations of sawing the bolt from the log, setting it at the shingle saw, edging the shingle at the pointer, and finally culling and packing them.

The rifling of large guns was discussed by B. Holmes. The gun is securely fastened in the lathe carriage, which is fed toward the tool. The spiral groove is obtained by a revolving cutter bar.

Mr. Petrie next exhibited a drawing of the Firth of Forth bridge. The plans for the present cantilever bridge were submitted and adopted in 1879. The bridge proper consists of three double cantilevers and is 5,330 feet long. In addition to these are, at the south end, four granite arches and ten girdle spans, total length being 1,998 feet, making the bridge 7,328 feet independent of the approaches. The total expenditure on the bridge up to January, 1890, was £3,177,206. In the bridge there are 1,000,000,000 pounds of steel.

C. A. Hathaway presented an article on wood turning. For very soft wood the turning tool should be ground a small angle, while with harder woods the angle should be greater varying from 25 to 80 degrees.

Mr. W. Van Devort spoke for a few moments upon the shops connected with some of the eastern colleges. At Sibley College, Cornell University, they have large shops and good machinery. The work in the shops consist principally in copying models. At the Washburn Institute of Technology, Worcester, Massachusetts, they have large, well equipped shops. In the shops are several workmen, who aid the students in building regular machinery, to

be sold. This makes the mechanical department almost self supporting. Great interest is taken in the work. The shops at the Massachusetts Institute of Technology are organized on a system similar to the one at Cornell. At the Stevens Institute the shops are small, the machinery old, and the tool-room poorly kept. The work is done entirely from models. The course at that institution being so good, more is expected of the shops. At the Pratt Institute the shops are well equipped with good, new machinery. The "model" system is used, but is changing to practical manufacture of machinery.

Our shops here are as large as most of those spoken of, but not so well equipped with machinery. The work turned out compares very favorably with that of any other college.

## THE SPECULUM.

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AGRICULTURAL COLLEGE, JUNE 10, 1890.

It has been thought best to hold this issue of the SPECULUM till after field day. We confidently believe that the added interesting matter in the Athletic Department will compensate our readers for the delay.

It is a matter to be deplored that college field days cannot be held without being marred by prize-ring-like brutality in the boxing matches. Most people fail to enjoy the unscientific pounding that characterized the middle weight sparring (?) at the University's contests on May 24. The smaller institutions of learning look to the University for good examples commensurate with her greatness, but M. A. C. freely confesses that she sees nothing worthy of emulation in the U. of M.'s last public boxing contests.

THOSE who contemplate the purchasing of a dictionary will do well to proceed carefully, and see that they are receiving just such a book as they need. A new dictionary, known as "Webster's Original Edition," has lately appeared and is being sold in great numbers and at astonishingly low rates. We have had no opportunity to examine the book, but from newspaper notices we gather that the dictionary is worthless, except as indicating to what extent some publishers and book agents may develop cheek. Let each examine carefully and judge for himself.

WE wish to direct the attention of the students to the efficient manner in which our library is being managed by our librarian, Miss Sinclair. The quiet seclusion of the alcoves, the orderly arrangement of the volumes and the reference lists, and the prompt and willing manner in which assistance is always rendered call for the gratitude of all.

It is natural to suppose that this effort on the part of the librarian to please and to assist us would be met by each student with courtesy and cheerful compliance with the rules, but, unfortunately, a few fail to appreciate the kindness extended to them. There has always been a greater or less number who have failed at the end of the term to return books promptly at the time appointed by the librarian, but at the close of the last term a degree of negligence was reached that should operate to deprive a few young

men of some of the privileges of the library. A general notice to the whole college should be sufficient, and when a student ignores a personal letter which informs him of his delinquency, it is about time that fellow's sensibilities were given a severe shock. It is to be hoped that hereafter the librarian will be spared the trouble of spurring up delinquents during the closing week of the term. Let all books be returned on or before the time designated by the librarian.

THERE exists among M. A. C. students a rapidly growing conviction, and in many cases bitter complaint, that they are paying an exorbitant price for college text books. In one or two instances the cost of a book has leaped upward forty or fifty cents, much to the discontent of those who are obliged to buy it. The reason for these advances in price is shrouded in mystery, so we will not attempt to point out the cause, but will compare, briefly, the prices here with those at another institution, the University. We have before us a catalogue of prices of Sheehan & Co., of Ann Arbor, Michigan. While in some instances striking differences appear, in others we find a remarkable agreement. We give a short table of the notable cases of differences, also a few in which the prices are nearly or quite alike:

	M. A. C. Price.	Sheehan & Co.'s Prc.
Bowser's Mechanics,	\$2 50	\$1 98
Davies's Surveying,	2 00	1 92
Wentworth's Analytic Geometry,	1 40	1 10
Bloxam's Chemistry,	3 85	4 05
Ganot's Physics,	4 00	4 40
Gray's Manual,	1 75	1 78
Whitney's Essentials,	85	83
Hale's Longer English Poems,	1 25	1 21
Le Row's Reader,	65	65
Sprague's Milton,	50	50

A list of books costing \$32.60 at the college can be purchased for \$1.49<sup>less</sup> of the Ann Arbor firm just referred to.

Since the field investigated is far too limited, it cannot be claimed that this comparison shows conclusively the position of our text book dealers, yet the facts pointed

out may be taken as an indication that, to a greater or less extent, we are paying more for our text books than is paid in some other places, though the difference is not so enormous as many of us have imagined. THE SPECULUM will have something further to say on this subject in a future issue.

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### COLLEGE NEWS.

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Seniors vs. orations.

Bite—slap—dead mosquito.

The astronomy classes go star gazing.

J. N. Estabrook paid a visit to his home in Saginaw.

The mechanical seniors are each working on a thesis.

The juniors will recreate in a class day at Grand Ledge, July 18.

Mrs. Mayo, of Battle Creek, lectures here next Friday evening.

Shelves and cases are being put up in the agricultural laboratory.

Miss Lucy Clute visited her uncle, L. Clute, at Ionia, during vacation.

Rev. Mr. Beale's sermon on the 1st inst. was an exceedingly fine one.

Our cadets formed part of the procession in Lansing on Memorial Day.

The prospects for the summer school are favorable for a large attendance.

The Grayling experiment station was visited by Dr. Kedzie during vacation.

Dr. Grange recently went to Cadillac to investigate contagion among stock there.

Together with his family, Prof. Carpenter spent part of the vacation at his old home.

Prof. Beal, of Albion, gave a series of readings before the college here, May 10.

Considerable painting and calcimining has been done in the Mechanical building.

Books purchased for the library last month are 38; donated 38. Visitors, last month, 46.

A. B. Cordley and his mother were at their old home in Livingston county during vacation.

The ground is broken and the foundation wall laid for the Union Literary Society building.

Prof. Cook recently went to Howell to investigate the Goldsmith beetles, so abundant there.

Club "A" was in operation during vacation, with as high as seventy boarders part of the time.

The plats are doing remarkably well this spring. Stroll down that way some time and view them.

The Eclectic Society and Phi Delta Theta Fraternity are making some improvements in their rooms.

Professor and Mrs. Davenport spent part of the vacation at their old home at Woodland, Michigan.

L. H. Dewey visited Chicago during vacation and returned with Mrs. Dewey, who had been visiting there.

Prof. Carpenter attended the Society of Engineers at Cincinnati during vacation, where he read two papers.

The goat of the Grange doesn't lack for exercise. H. A. Stewart and J. W. Toumey cast their lot with him recently.

We regret that ex President Hayes cannot give us the commencement address. It is not known yet who will be obtained.

The flowers of the greenhouse are numerous and beautiful. The lawns, where mowed, present a green, neat appearance.

About two hundred and fifteen have paid the dues this term. Not counting summer students there are probably in all about two hundred and fifty.

The electric lights in the library commenced their actual illuminating work the 27th ult. They add much to the library as a resort for evening reading and study.

The varieties of potatoes being experimented with in the horticultural department are 90 in number; beans, 75; radishes, 62; lettuce, 55; tomatoes, 98; sweet corn, 40; peas, 85; strawberries, 100.

Oscar Clute, son of President Clute, spent a few days at the college. He comes from Keokuk, Iowa, where he has been in the wholesale hardware business, and goes soon to Galveston, Texas, to engage in a similar occupation.

We simply note here Prof. Carpenter's acceptance of the professorship of engineering at Cornell University, as a more extended item will be inserted next issue. Though we regret to lose Prof. Carpenter, we congratulate him on his accession to this higher position.

Senator Justin S. Morrill, of Vermont, has recently introduced a bill to appropriate yearly \$15,000 to each agricultural college, with a yearly increase of \$1,000 to be made until the limit of \$25,000 is reached; the money to be used for experimental purposes, etc. The passage of the bill would affect us beneficially.

Miss Ida Benfey, who entertained the college about a year ago by a fine program of readings, will very probably visit Prof. Cook soon. Miss Benfey spent about four months in California, meeting with extraordinary success with her readings and recitations. Her spare time she has spent in preparing George Eliot's "The Mill on the Floss" for a one evening entertainment, the rendering of which has brought upon her praise and public note at Columbia, Yale and Harvard Colleges. We hope, with the assurance of a good house, she may be induced to entertain our college while here.

President G. F. Fairchild, of the Iowa Agricultural College, so long a professor at this college, intends visiting here shortly. President Fairchild is a fine lecturer and we notice he recently gave a fine discourse before his own college on the Yellowstone Park. It is hoped he may be prevailed upon to lecture to us on this, or some other topic, while here.

The amount of rain fall at the college for May was 4.38 inches. The heaviest fall was on the 9th, 1.16 inches falling; or from the 8th to the 10th, inclusive, 2.56 inches fell. Seven days were cloudless, thirteen partly cloudy, and eleven wholly so; while on nineteen days it rained. The mean temperature for the month was 53.8 degrees, this being about 2.3 degrees below the normal.

### PERSONALS.

We desire the earnest co-operation of every person who has ever been connected with the college in trying to make this department an interesting one. Let every alumnus and every person who has been with classes here send in news to the editor of this department, often, thus making his work much easier and the department more interesting to all.

'62.

E. M. Preston, of Nevada City, Cal., recently lectured on "Toys," to a large audience, in his home town. According to newspaper reports it was a brilliant effort.

'64.

S. M. Millard of Chicago is talking of sending his eldest son to the M. A. C. next fall.

'69.

Chas. E. Bessey is acting Chancellor of the Nebraska State University. He says that President Clute will do a great and good work in the preparation of a history of the college.

'70.

Chas. W. Garfield has recently become identified with a company known as the Grand Rapids, Chicago and St. Louis Railroad Company. He is one of the directors and secretary. We received a copy of his article on Asparagus, read before the State Horticultural Society last year, and it is excellent to say the least.

'71.

J. J. Kerr is on the editor's staff of *The Keystone*, the organ of the jewelry trade at Philadelphia. He writes: "I am glad that a graduate of the college is now at its head. So may it always be in the future," and finishes his communication with a patriotic "long live the college."

'74.

C. L. Ingersoll is enthusiastic over the project of the college history. Would there were many more like him.

WITH '77.

Frank Barnett is at Ogden, Utah. He expects to visit the M. A. C. sometime this summer.

'78.

Fremont E. Skeels is one of the busiest of men. As a civil engineer he has all that he can attend to. He is also school director, and is serving his second term as surveyor, and makes an excellent official in township affairs.

F. W. Hastings has been reinstated in the railway mail service, and has moved to St. Louis, Mich. He has a farm of eighty acres, and intends moving on the farm soon.

A. A. Robinson, general manager of the Detroit motor cars, writes us expressing great interest in his Alma Mater.

'79.

C. P. Cronk is observer in the U. S. signal service at Baltimore, Md.

WITH '79.

M. P. Graham died at Marengo, Mich., on April 2, 1890. He left the college three months before graduating, and his life since that time has been spent in a persistent search for health, which he never found.

'81.

Byron S. Palmer is clinical instructor, dental department, Northwestern University. He is thoroughly engrossed with his work and has a brilliant future before him. He writes: "I know of no profession that gives promise of a brighter future to-day than that of dentistry—to the qualified man."

'82.

T. F. Millspaugh, to the great surprise of all, is a genuine farmer, at Ovid, Mich., where he tills a large farm. He would like to show the boys his babies, a girl of three summers and an infant son.

Lincoln Avery is a promising young lawyer at Port Huron, and when he comes down to Lansing to appear before the Supreme Court he gives the college a call.

Jeff H. Irish and G. W. Thompson are lawyers in the west. J. L. McClear laws it in northern Michigan, while J. W. Beaumont is located in Detroit.

H. E. Martin, '82's great poet, has experienced various ups and downs, but has never despaired of becoming a celebrated muse. He appeared before the last legislature and had his name replaced by another of poetical fancy.

Lucius W. Hoyt graduated from the law department of Columbia College in 1889, and is now located and practicing his profession at Denver, Colorado. Mr. Hoyt was one of the committee that drafted the original SPECULUM constitution, and was editor and business manager of the first board. In August, 1889, Mr. Hoyt was married to Miss Catherine Potter, of Elora, Ontario, a sister of J. L. Potter. '91.

John Everts is superintendent of the Mendon schools, at a salary of \$900, and is also a member of the county board of examiners. Has been married about a year.

L. B. Hall, the ball catcher of '82, has distinguished himself in the pedagogic world, and is at present superintendent of schools at the silk city of Belding.

E. N. Ball is still on the farm at Hamburg, Mich., where he is distinguishing himself as a breeder of fine sheep and cattle. He is secretary of the Merino Sheep Breeders' Association.

E. A. Murphy is superintendent of the Muir public schools, chairman of the county board of school examiners, and manages a three hundred acre farm. Unmarried.

L. H. Bailey, the coming scientist, is doing grand work at Cornell where he holds a \$3,000 professorship.

'83.

O. C. Howe is secretary of the Mutual Fire Insurance Association of Berrien and Cass Counties.

WITH '83.

A clipping from the *Adrian Times*, of April, reads as follows: "A large circle of friends gathered at the residence of Mr. Samuel Brown, of Raisin Valley, to attend the wedding of Mr. Geo. Willits and Miss Susie Brown, the elder daughter of the host. A most enjoyable time was the result." Mr. Willits was at M. A. C. in '81.

'84.

W. C. Stryker, who for several years has been a druggist at Los Angeles, California, returned in March to take charge of the old homestead near Dayton, Mich.

Colon C. Lillie, who was chairman of the committee which first divided the students into clubs, and was steward of club "D" for the first three terms, is pedagogy at Coopersville.

'85.

We are pleased to announce the marriage of J. D. Tower and Miss H. L. Proseus, on May 28, 1890, at Sodus, New York.

In the bulletin of the Oregon Experiment Station we notice by the *Pacific Rural Press* that Prof. E. R. Lake, '85, horticulturist, gives a full report of the garden and orchard work and the ornamental and forestry plantings of the station.

WITH '85.

G. C. Northrup paid Lansing a visit during the past winter, and is now traveling in the Southern States for the benefit of his health, and is at the same time working up the subject of electricity.

'86.

Geo. W. Park, '86, is prospering in the seed business, having all he can attend to.

W. E. Clemons is engaged in selling agricultural implements at Durand, Mich. He visits the college occasionally.

WITH '86.

G. Hancorne has returned to college to take a B. S. with the class of '90.

'87.

C. L. Himebaugh and Fred Sheldon have taken up their abode with the Mormons of Salt Lake City.

The Redmond brothers are both working in the office of city engineer at Grand Rapids.

While lounging at the Michigan Central depot during last vacation, who should step from one of the south bound trains but H. L. Chapin. The genial, good fellow was going to the southern part of the State to do some work in civil engineering. Hasn't changed a particle.

'88.

W. A. Taylor is editor of the fruit department of *The Douglas Sentinel*.

WITH '88.

Don P. Yerkes, '88's famous base ball pitcher, has entered the matrimonial box.

'89.

John R. O'Bannon is rapidly recovering from his long illness. He says: "Tell the boys I am still on earth and hope to meet all the fellows next August."

Will Curtis is teaching at Bee Town, Wisconsin. He talks of returning to M. A. C. to take a post graduate course in agriculture.

W. Rossman has been visiting at the college for a few days.

E. A. Holden started out in the book agency business this spring, but has since gone back to hard labor on the farm.

WITH '89.

Willis E. Gilbert died of heart disease about midnight on May 30, at the residence of his parents in Howell. He became a skillful draughtsman under the instruction of Prof. Carpenter at M. A. C., and won success in the Iron and Engine Works at Lansing, at Canton, Ohio, and at Johnstown, Pennsylvania. He also did much of the fine work on the plans of the new court house at Howell. His memory will be cherished by all who knew him at the college.

WITH '89.

Ex-President Willits writes a very friendly letter, expressing gratification that a history of the college is being prepared. He was a member of the Board of Education and made the motion which transferred the control of M. A. C. to the Board of Agriculture.

Ernest E. Graham is with the Beaumont Lumber Co., Beaumont, Texas. He expects to remain with the company for some time.

A. L. Free is in the law department, instead of the literary department, at the University. Merely an oversight in personals of last number of THE SPECULUM.

H. N. Bartmess is assistant engineer on a Pacific Ocean steamer.

G. L. Foote, '89's great hustler, sports a baby carriage. Loomis is a genuine farmer; a tendency developed at M. A. C.

WITH '90.

Karl Pray is taking the classical course at Olivet.

D. W. Bradford is draughtsman for the Detroit Electrical Company. Dan is married and doing well.

WITH '91.

Harry Doty surprised the natives the other day by driving across the campus on his bicycle. He had ridden from Detroit in a little more than a day. In company with another gentleman he went to Grand Rapids and thence returns to Detroit.

Jason Stebbins is in company with his father, in Coldwater, running a shoe store.

John R. Frank has struck a rich lead in the Upper Peninsula, and left college to return some time in the future.

ADDITIONAL COLLEGE NEWS.

At a meeting of the State Board of Agriculture held June 9, a new department, known as The Department of History and Political Economy, was created. The department was placed under charge of an assistant professor and Mr. N. D. Corbin was appointed to that place. Prof. Corbin's efficiency as an instructor has already been demonstrated, and all friends of the college are well pleased with his appointment.

June 10 four companies of the M. A. C. cadets, under command of Lieut. Simpson gave an exhibition battalion drill in front of the State Capitol, before the members of the Legislative Reunion. After the battalion drill Companies "A" and "B," commanded by Captains Bentley and Waters respectively, went through the movements of company drill.

COLLEGES.

The National University at Tokio, Japan, enrolls 50,000 students.—*Ex.*

The Boston Institute of Technology has increased its roll from twenty-seven to over a thousand in less than twenty-five years.

Thirty-two Williams seniors out of a class of eighty will speak at commencement. An average of 82½ per cent. on all studies was required.

In the last fifty years only 4,468 students out of 6,669 appointments have been admitted to West Point, and of these only 2,305 have graduated.

Prof. C. F. Wright, of Oberlin, has recently come into possession of a small clay image that is attracting considerable interest among scientific men. It was brought up from an artesian well near Boise City Idaho, from a depth of 320 ft. The image is about an inch and a half high and is well carved. There seems to be no doubt of its genuineness, though the question is being thoroughly investigated by the Professor. The material of which it is made is the same as the clay balls that are found in the same deposit as the image was found in, which was a coarse sand. Should it be genuine, it puts the antiquity of man on this continent farther back than any paleolithic implements yet found.

At Rutgers three hours work in the gymnasium is required of freshmen and sophomores, and all the students are tested and special lines of work recommended.

Considerable attention has been attracted by Cornell's "Congress." One of the professors is elected "President of the United States," and the students compose a congress which holds weekly meetings.—*The Northwestern.*

Cranks can sometimes be tolerated in society, for the epithet is frequently applied to those who are reformers in advance of society about them, but the crank in college is an inexcusable and unmitigated nuisance. The regular college work gives scope for all the energies one may have and there is no excuse for any one devoting himself to any side interest, however important it may appear to him.

ATHLETICS.

The athletics at the College, as far as base ball is concerned, did not make a very early start this spring. The ball team's struggle for success has been given a few bad setbacks, due to the unfeeling action of a few rival clubs. The first game this season was with Charlotte, May 30; the game was poorly played, especially by the M. A. C. team. The complete score was not taken.

The second game was with the U. of M. team, May 31. The features of the game were the poor playing of Rittinger at second base, Wilson's fine catching and throwing, the general team work of the University boys, and the excellent pitching of Bannon, the University team's kid pitcher. Bannon's good work was especially noticeable at critical moments. The score:

Ann Arbor.	AB	R	BH	PO	A	E	M. A. C.	AB	R	BH	PO	A	E
Marker, c f.....	5	1	3	2	0	0	Hall, c f.....	3	1	0	2	0	0
Higley, 1b.....	5	1	1	4	0	0	Cordley, r f....	3	1	0	2	0	0
Wilkinson, l f. 5	2	1	3	0	0	Rittinger, 2b..	4	3	3	6	0	5	
Abbott, c.....	5	4	2	7	1	0	Wheaton, p....	3	0	0	0	3	0
Gray, 2b.....	3	3	2	3	2	0	Gardner, 1b....	3	0	0	4	0	1
Bauer, ss.....	4	0	0	1	2	1	Wilson, c.....	4	0	1	4	0	0
Todd, 3b.....	4	3	3	0	1	2	Foster, s s.....	4	0	0	0	6	2
Lewis, r f. ....	3	2	1	0	0	0	McArthur, l f.	3	0	0	3	0	0
Bannon, p. ....	4	3	2	1	2	1	Gibbs, 3b.....	3	0	0	0	1	0
Totals.....	38	19	15	21	8	4	Totals.....	30	5	4	21	10	8

Stolen bases—Hall, Rittinger 2, Wilson, Abbott 2, Bannon. Passed balls—Wilson 1, Abbott 1. Wild pitches—Bannon 1. Hit by pitched ball—Foster. Struck out by Bannon, 7; by Wheaton, 2. Umpire—Harrison.

The foot ball team has been doing good work, and though they have won no games, they have not become discouraged, and as most of their players are under-classmen there are very good prospects that the team will hold together and strengthen itself, so by next year we may expect to have an eleven that will be able to cope with those from other colleges. The first foot-ball game this season was with a second eleven from Albion College. The score was 12 to 0 in favor of Albion.

FIELD DAY.

The third annual field day of the Michigan Inter-collegiate Athletic Association has come and gone, and, thanks to the good management of our directors, was a complete success. On Thursday afternoon, June 5, at one o'clock, the special train conveying the M. A. C. students started from the Lake Shore depot. The number on the train was one hundred and ninety, including seventeen ladies, our president, and Prof. Cook. The run to Albion was quickly made, and we were met at the station by an enthusiastic crowd of Albion students, who immediately escorted us to the fair grounds where the sports were to take place. The first event was a base ball game between Albion and M. A. C. The game was close and exciting throughout, the winning run being scored by Albion in the ninth inning. The features of the game were the fine pitching by Bartley, holding the opposing team down to four hits and striking out nine men, Wilson's catching, and a remarkable catch of a fly by Foster, he catching the ball while lying at full length on his back. The score was as follows:

Albion.	AB	R	BH	PO	A	E	M. A. C.	AB	R	BH	PO	A	E
Anderson, 3b.	5	0	0	2	2	1	Burnett, p.	4	1	1	2	3	0
Fow, 1b.	4	1	2	8	0	0	Cordley, r f.	4	1	1	1	0	0
Snell, c.	4	1	2	9	2	0	Rittinger, 3b.	4	0	0	2	1	2
Austin, s s.	3	0	2	0	4	0	Wilson, c.	4	1	1	6	0	0
Bartley, p.	5	1	2	1	9	3	Hall, c f.	4	0	0	4	1	1
Van Loo, c f.	4	0	1	2	0	0	Gardner, 1b.	4	1	1	3	1	1
Eslow, r f.	4	0	0	0	0	0	Weideman, 2b.	4	0	0	5	1	1
Allen, l f.	4	1	1	1	0	0	McArthur, l f.	4	0	0	2	0	0
London, 2b.	3	2	1	4	1	0	Foster, s s.	4	1	0	2	4	1
Totals	36	6	11	27	17	4	Totals	36	5	4	27	11	6

Stolen bases—Fow, Burnett, Cordley, Wilson, Gardner, Foster. Double plays—Hall to Weideman, Weideman to Gardner, London to Austin. Wild pitches—Bartley, 2. Struck out—Bartley 9, Burnett 6. Umpire—Meyers.

The next event was a foot-ball game between Olivet and M. A. C., which Olivet won by a score of 24 to 2; umpire, Scoville. This finished the sports on Thursday.

In the evening a reception was given to the visiting students, which was thoroughly enjoyed by all. The program was music by the various colleges represented, all of which was well rendered, the singing of the Albion ladies' quartette being especially fine.

Friday, beginning at 8 A. M., the following contests took place:

Contest.	Winner.	Record.
Lawn Tennis.	Winners.	Score.
Hillsdale.....	McLouth and Macomber	against Albion, 2-1
Olivet.....	Kester and Daniels	against M. A. C., 2-0
Base Ball Throw.	1. Gibbs of M. A. C.	307 feet.
	2. Williams of Hillsdale	304 "
Throwing 16 Pound Hammer.	1. Burnett of M. A. C.	65 ft. 7 in.
	2. Rittinger of M. A. C.	60 ft. 10 in.
Putting 16 Pound Shot.	1. Burnett of M. A. C.	31 ft. 2 in.
Standing Hop, Step and Jump.	1. Burnett of M. A. C.	29 ft. 6 in.
	2. Ferry of Olivet	28 ft. 9 in.
Running Hop, Step and Jump.	1. Burnett of M. A. C.	39 ft. 3 in.
	2. Ferry of Olivet	37 ft. 8 in.
Standing High Jump.	1. Burnett of M. A. C.	4 ft. 8 in.
	2. Ferry of Olivet	4 ft. 7 in.
Running High Jump.	1. Cady of Olivet	5 ft. 3 in.
	2. Burnett of M. A. C.	4 ft. 11 in.
Broad Handspring Jump.	1. White of Albion	16 ft. 2 3/4 in.
	2. Devendorf of M. A. C.	15 ft. 11 1/2 in.
High Handspring Jump.	1. Hubbard of Albion	4 ft. 1/2 in.

After these events came a game of base ball between Olivet and Hillsdale, which Hillsdale forfeited by putting in a hired catcher; however the two teams played an exhibition game. The score by innings was:

	1	2	3	4	5	6	7	R.	BH.	E.
Olivet	0	0	0	1	1	1	6	9	7	7
Hillsdale	4	0	0	0	7	0	*	11	7	4

Batteries—Palmitier and Townsend, McLouth and Scofield. Umpire—Meyers.

FRIDAY AFTERNOON.

100 Yards Dash.	1. Ferry of Olivet	10 1/2 sec.
	2. Van Fleet of Hillsdale	
5 Yards Backward Run.	—Williams of Hillsdale	7 3/4 sec.
220 Yards Dash.	1. Spense of Albion	24 3/4 sec.
	2. Ferry of Olivet	24 sec.
One-half Mile Run.	1. Ward of Hillsdale	2 min. 52.5 sec.
	2. Frost of Olivet	
Lawn Tennis, Singles—		
Hillsdale vs. Albion	McLouth, Hillsdale	2-1
Olivet vs. M. A. C.	Kester, Olivet	2-0
Standing Broad Jump.	1. Burnett of M. A. C.	11 ft. 11 1/2 in.
	2. McArthur of M. A. C.	11 ft. 9 in.
Running Broad Jump.	1. Burnett of M. A. C.	16 ft. 9 3/4 in.
	2. McArthur, M. A. C.	15 ft. 11 in.
Backward Jump.	—Burnett of M. A. C.	8 ft. 3 3/4 in.
Standing Three Jumps.	1. Burnett of M. A. C.	34 ft. 5 in.
	2. Stine of Olivet	31 ft. 6 3/4 in.
Pole Vaulting.	—Cady of Olivet	No contest.
Running High Kick.	1. Stine of Olivet	8 ft. 2 1/4 in.
	2. Burnett of M. A. C.	8 ft. 2 in.
Hitch and Kick.	1. Burnett of M. A. C.	8 ft. 1/2 in.
	2. Monroe of M. A. C.	8 ft.

The next event was a game of base ball between Olivet and Albion, the winners of the previous contests. This game was for the pennant and was close and exciting. It was won by Albion. Immediately after the game a procession was formed with the Albion lady students at its head, followed by the ball team. The procession moved through the principal streets and halted in front of President Fisk's house, who made a short speech, followed by President Clute, of M. A. C. The score of the game is as follows:

	1	2	3	4	5	6	7	8	9	R.	BH.	E.
Albion	0	0	1	1	0	0	2	1	0	5	7	4
Olivet	2	0	0	1	0	1	0	0	0	4	6	4

Batteries—Austin, Bartley and Fow; Palmitier and Townsend. Umpire—Meyers.

In the evening the sports were continued at the Opera House, the boys from M. A. C. carrying off most of the prizes:

Club Swinging.	1. Alvord	Olivet.
	2. Williams	Hillsdale.
Horizontal Bar.	1. Devendorf	M. A. C.
	2. Lee	Olivet.
Wrestling—		
Catch-as-Catch-Can, Feather-Weight.	1. Wilson	M. A. C.
	2. Percival	"
Catch-as-Catch-Can, Light-Weight.	1. Sagendorf	"
	2. Hubbard	Albion.
Catch-as-Catch-Can, Middle-Weight.	1. Barlow	M. A. C.
	2. Brooks	Olivet.
Catch-as-Catch-Can, Heavy-Weight.	1. Collins	Hillsdale.
	2. Rittinger	M. A. C.
Side Hold, Middle-Weight.	1. McLouth	Hillsdale.
	2. Williams	"
Græco-Roman, Middle-Weight.	Woodmanse	Olivet.
	No contest.	
Collar-and-Elbow, Middle-Weight.	1. McLouth	Hillsdale.
	2. Williams	"
Collar-and-Elbow, Heavy-Weight.	1. Collins	Hillsdale.
	2. McLouth	"
Parallel Bar.	—Monroe	M. A. C. No contest.

Boxing—		
Feather-Weight.	{ 1. Devendorf .....	M. A. C.
	{ 2. Longman .....	Olivet.
Light-Weight.	{ 1. Mayo .....	M. A. C.
	{ 2. Loud .....	Albion.
Middle-Weight.	{ 1. Polhemus.....	M. A. C.
	{ 2. Brooks.....	Olivet.
Heavy-Weight.	{ 1. Polhemus.....	M. A. C.
	{ 2. Woodward.....	Hillsdale.

## SATURDAY'S SPORTS.

440 Yards	{ 1. Belcher of Olivet.....	45 sec.
Bicycle Race.	{ 2. Williams of Hillsdale.....	45½ sec.
Fancy Bicycle Riding.—Belcher.....	Olivet.	
Relay Race, { 1. ....	Hillsdale.	
Four Relays. { 2. ....	Olivet.	
Lawn Tennis, Double, winners of previous contests.—		
Hillsdale vs. Olivet, won by Olivet .....	2-0	
Tug-of-War, Albion vs. M. A. C., won by Albion.		
“ “ Albion vs. Olivet, won by Olivet.		
This is the second time Olivet has taken the cup for tug-of-war.		
Three Legged Race.—Won by Olivet. No contest.		
440 Yards Dash.	{ 1. Frost of Olivet.....	56 sec.
	{ 2. Ward of Hillsdale.....	57 sec.
Hurdle Race, 120 Yards, { 1. Ferry of Olivet.....	20 sec.	
Ten Hurdles. { 2. Townsend of Olivet.....	20½ sec.	
Lawn Tennis, Single, Olivet vs. Hillsdale, won by Olivet ...	2-0	
Passing Rugby. { 1. Wright of Olivet.....	130 ft. 11 in.	
	{ 2. Snell of Albion.....	129 ft.
Drop Kick Rugby. { 1. Brooks of Olivet.....	100 ft. 8 in.	
	{ 2. Snell of Albion.....	154 ft. 2 in.

These sports were followed by a game of foot-ball between Olivet and Albion, which was won by Albion by a score of 26 to 0. The features of the game were the fine playing of Anderson and Snell, of Albion, and the Albion's general team work.

The field day was in many respects the most successful one that the association has ever held; good weather having a great influence in making it a success. It was especially successful for M. A. C., as this year we have won the most prizes and have the champion all around athlete. Olivet also did well in winning prizes, and they have a number of very promising young athletes. M. A. C.'s boxers and wrestlers proved a surprise to both rivals and friends by their good work and as nearly all are under-classmen the college may have them to rely upon in coming field days. Devendorf was especially praised for his style in boxing and work on the horizontal bar. Sagen-dorph also deserves much credit as this was his first appearance in public and for downing his man after a struggle of more than an hour. Polhemus won many friends by his coolness and graceful carriage in the boxing contest. The main stay of our college in the athletic line is still Burnett, who won ten first prizes and two second prizes, gaining a place in all but one of the contests in which he was entered, making all together twenty-two points and winning the all round diamond medal. Saturday night the M. A. C. students returned, a noisy but happy and good natured crowd. The only thing to mar their happiness was the loss of the base ball pennant which has been held by M. A. C. for the two preceding years, but this can be overlooked when we consider our great success in the other sports.

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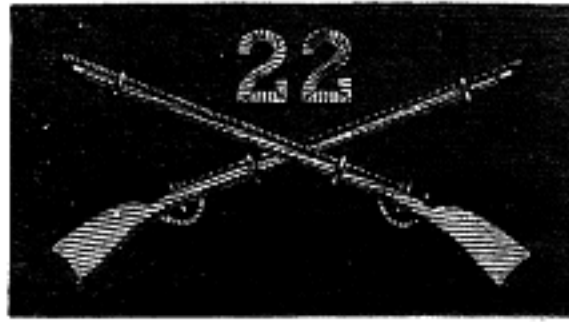
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