

The M. A. C. Record.

VOL. 3.

LANSING, MICHIGAN, TUESDAY, MAY 24, 1898.

No. 36

Freshmen Harness and Drive the Water.

Almost any afternoon the past week you would have found in the physical Laboratory two groups of four boys each, assembled about a small iron box connected with the water pipes. Each iron box is a small water motor and the boys have the interesting task of finding what horse power they can get out of the motor. Each student is furnished with directions and a blank to record results.

One student fastens a regular pressure gauge in the water pipe and all note the water pressure; another takes a pail and finds the quantity of water used by the motor each minute, by holding the pail under the exhaust for a fixed length of time. Then from the product of head of water, as indicated by the gauge, times the pounds of water used, a calculation is made of the horsepower expended in the motor. While two students are finding the quantity of water and the horse power, the other two are finding how fast the motor runs. With a small speed counter and a watch the speed is taken when the motor runs wild, and is recorded in revolutions per minute. Next the motor is made to pull so that the pulley runs at one-half the

full or wild speed. The horse power the water motor will deliver is determined by finding the distance the motor will elevate a weight in one minute. Now two horse power have been found. One is recorded as work spent, one as work utilized; and in this, as in all machines, the work spent exceeds the work utilized. The work with the water motor usually keeps each group hustling for their two hours. Usually the students have acquired some knowledge of practical physics, have learned some things about water motors in particular, and have observed points not recorded on the blanks.

A Chalk Talk.

Sunday morning exercises were led by Mr. Rollo K. Bryan, of Lansing, who illustrated his talk with crayon sketches. Mr. Bryan speaks of his talent in drawing as a compensation for lack of words to express the truths he would convey. His talk was certainly very entertaining. The best thing about it is its optimistic tone. However dark

and discouraging his first view of truth may be, it always brightens, always "truth rises."

Lieut. Bandholtz Called to the Front.

Thursday, Lieut. Bandholtz received orders to join his regiment at once, and Friday morning, accompanied by Mrs. Bandholtz and Cleveland, he left for Tampa, via Chicago, where Mrs. Bandholtz will remain during his absence. The College battalion—four companies and band—escorted him to the depot, where the parting of commandant and cadets was sorrowful in the extreme. He shook hands with the captain of each company, saying he would have shaken hands with each cadet had time permitted.



SUMMER

As the train pulled out, the boys, drawn up in battalion front, at port arms, gave three rousing cheers for their commander, and the band struck up "America." The last seen of the Lieutenant was his waving cap as the rear platform disappeared around the curve.

Drill will go on as usual and will be in charge of Charles Johnson, '00, who, before coming to M. A. C., spent five years in the regular army.

Union Society Meeting.

Friday evening in the College Armory the College societies and fraternity held their annual union meeting. Miss Harriet Robson presided, and the following program was rendered:

Music—College orchestra.
"The Weather at M. A. C."—F. R. Crane, Olympic society.
Parody—"Roseabella at M. A. C."—R. E. Morrow, Columbian.
Piano Solo—"Spring Song"—Miss Pearl Kedzie, Feronian.
Symposium—"Is co-education desirable in the higher institutions

of learning?"—Affirmative, Miss Florence Hedges, Feronian society; Negative, Miss Irma Thompson, Themian society.

Music—College orchestra.
Essay—"Capital Punishment"—J. L. Kendrick, Phi Delta Theta fraternity.

College Paper—C. H. Smith, Hesperian society.

Reverie—Paul Thayer, Union Literary society.

Song—"Samantha's Hollow Tooth"—Olympic quartette.

The program throughout was excellent. Seldom have we listened to a program at an entertainment of this sort in which there were so few things to criticise, so few objectionable features. This was especially noticeable in the "College paper," which so frequently descends to

full—some. The members of the Board inspected the kitchen and sewing rooms, and expressed themselves as greatly pleased with the practical work offered young ladies at this College.

Greenhouse Management.

Prof. Taft's new book of 400 pages on Greenhouse Management has just been put out by the Orange Judd Company. It treats of all the plants commonly cultivated by florists and amateurs, and explains in a thorough manner the methods that have been found most successful in growing them. Particular attention is paid to the growing of cut flowers, entire chapters being devoted to each of the leading crops, such as roses, violets, bulbs, smilax, ferns, orchids, etc.

The growing of fruit under glass is attracting the attention of commercial florists as well as amateurs, and the reader will find separate chapters devoted to the forcing of grapes, strawberries, peaches and other fruits. The forcing of vegetables also receives the attention it deserves, and the raising of lettuce, radishes, cucumbers, tomatoes, mushrooms, etc., is explained at length.

The care of house plants is also treated quite fully, with detailed directions for pro-

pagating, preparing the soil, potting, watering and every part of their proper management. A chapter is also given on bedding plants, as well as on ornamental grasses, flowering and foliage plants. Other chapters are devoted to the propagation of plants from seeds, cuttings, layers and by grafting and budding. Of special value to many will be the directions for treating plants when attacked by insects and fungi. The preparation of the soil, the use of various manures, composts and fertilizers, watering, ventilating, heating, and in fact every detail of the subject to which the work is devoted, receives careful and minute attention.

The American Florist for April 30 says of the work: "It should be in the hands of every beginner and even the wise ones, who are not too old to learn, while there is of course much of an elementary nature, will find in it many new and valuable points."

A woman's life-long scheme of rest is ultimately realized when she has nothing to do and won't do it.

stinging personalities but which Mr. Smith kept on a much higher plane.

After the literary program Mr. Bristol and Miss Meech furnished music for an informal hop which was enjoyed by about forty couples.

As Guests of the College.

A session of the Board of State Auditors, of a character which Land Commissioner French declared to be regular with the Board, was held in the Abbot Hall dining room last Tuesday noon. The Board were on that occasion the guests of the College, at a dinner served by the Domestic Science Department in its usual appetite-satisfying manner. Covers were laid for ten, and the following gentlemen honored the efforts of the young ladies: Secretary of State Washington Gardner; State Treasurer Geo. A. Steele; Land Commissioner Wm. A. French; President Snyder; Secretary Butterfield; Profs. Smith, Edwards, Taft, Weil, and Mr. K. L. Butterfield. Praises of the dinner, like the guests, were doubtless

THE M. A. C. RECORD.

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For various reasons THE M. A. C. RECORD is occasionally sent to those who have not subscribed for the paper. Such persons need have no hesitation about taking the paper from the postoffice, for no charge will be made for it. The only way, however, to secure THE RECORD regularly is to subscribe.

Our Relation to the War.

Passing as we are through such stirring times, we as college students should make a careful study of the situation. To be contented with merely "skimming" through the papers when there is a war, involving our own nation, in progress, does not show the proper spirit. We should aim at least, to follow the policy of the government in all its workings, throughout the struggle; should inform ourselves of the strength of our land and our naval forces; and should accurately locate on the map each important battle, and other place of interest or importance.

Access to a map should be continually had, perhaps a pocket map is the best. An excellent map by Rand McNally & Co. may be had at Lansing for fifteen cents, containing a map of the world, one of the West Indies, an enlarged map of Cuba, and one of the coast defenses of Havana.

Something in the way of a diary would if carefully kept be of interest in after years—perhaps of real historical value. An accurate and a reliable understanding of the situation will in this way be acquired, and to miss such an opportunity for recording the events of an important historical period is a mistake which we should not make.

Our daily papers should be preserved for future reference, and all matter which has any direct bearing on the war question should be carefully saved. Our patriotic duty is to keep in touch with the exciting events at the front, and to co-operate in sympathy as well as in thought with our brave men there.—C. P.

The Educated Farmer in Public Life.

HON. JASON WOODMAN, '81, PAW PAW.

It is often said that the aim in life of the average American is the accumulation of wealth, nevertheless, many thousand of our young men come on the stage of action each year with ambitions above mere money making; young men who desire to be known for what they are, and not simply for what they have. As a rule the learned professions, so-called, absorb most of these men. As the highest honors that can be conferred by the Ameri-

can people are political honors, such men sooner or later work their way into public life.

In the past, agriculture has been considered a calling that relegated those engaged in it to obscurity and mediocrity. To a considerable extent that idea has been dissipated.

Governors Luce, Winans and Rich, three "Michigan farmers" in succession, have filled the gubernatorial chair. In point of ability and knowledge of public affairs, they are much above the average of Michigan's chief executives.

The two best known governors Wisconsin has ever had, Hoard and Rusk, were farmers; and Governor Mount of Indiana came from a country home. These are a few of the farmers who in recent years have risen to positions of honor and trust in this country, and who have not been handicapped by their occupation.

Agriculture today offers as good opportunities for young men ambitious of distinction as any other calling.

One of two things a man must have who would succeed in public life, money or brains. A farmer cannot in the nature of things accumulate enough of wealth to contribute large sums to campaign funds, and secure for "value received" important public office in return; he is not able to pay the campaign expense of legislative candidates who in turn will elect him to the United States senate; nor has he the means to construct a political machine that will, when the button is pressed, bring about a desired nomination and election. But in spite of some people's belief to the contrary, in a great majority of instances such honors are given to men of brains, rather than to men of boodle; and the man of brains may and often does come from the farm, as well as from the law office, editorial sanctum, or place of business.

It must not be forgotten that the farmer who is to cope successfully in public life with business and professional men, must be in all respects their equal; he must have the same mental equipment and knowledge of men and affairs; his schooling in youth and his use of opportunities for mental growth in after life must be equal to theirs.

Josh Billings once said "Clothes don't make a man but they add mightily to him after he is made." A college training won't put brains into a man's head, but it will improve greatly the quality of the gray matter already there if it be of the right kind.

The young man who intends to spend his life on the farm and who has an ambition to achieve honorable distinction cannot today do without a college course, and especially such a training as our Agricultural College gives. It disciplines admirably his perceptive faculties; it teaches him to think logically and consecutively; it develops what most Americans lack in this newspaper reading age, the ability for painstaking and thorough study and analysis, and it aids in the development of that most necessary faculty, "the power of expression." This training the farmer must have if he expects to meet men of other callings on equal terms.

The educated young man who goes on the farm today has one great advantage over the young farmer of thirty years ago. The various farmer's organizations scattered thickly over the country meet-

ing weekly or semi-monthly in connection with county, state and national organizations of similar character, furnish admirable opportunities to young men who would become proficient in parliamentary practice, and the art of public speaking. There public questions are studied and discussed and a much needed stimulus is given farmers to become familiar with public matters.

Taking these things all together, certainly the bright, brainy, ambitious young man from the country for home, with a love for the soil and for a clean, pure, wholesome country life, need not desert the calling of his fathers. The time has come when he can go back to the farm and make for himself an honorable place among men.

Report of the Afternoon Session of the State Farmers' Institute Held in Charlotte on January 28, 1898.

SECOND PREMIUM, ERLE STONER, CHARLOTTE.

The afternoon session of Friday's institute was well attended. Even after proceedings had commenced people kept arriving until nearly all available standing room was in use.

Hon. L. J. Post, of Lowell, began at 1:15 with "Commercial Fertilizers," a subject which he proved to be of more than passing value to farmers. After explaining the nature and origin of soil, he said: "There are three elements needful for plant life,—nitrogen, potash, and phosphoric acid. The absence of a due amount of either of these three will result in a deficient plant growth. To find out what the soil needs, farmers should experiment. Fertilizers sometimes fail because they do not furnish what the soil lacks." Then with a number of samples at hand, he proceeded to give a short sketch of the production and cost of the various substances needed to produce a hearty plant growth. Nitrogen is the most expensive of the three chief elements. Potash and phosphoric acid are contained in sufficient amounts in common fertilizers to lessen their cost. Speaking of yard manure he said its chief fault was its insoluble form. Commercial fertilizers are ready for the plant. Yard manure must pass through a period of decomposition. The use of clover he advocated as a land replenisher. Plaster is not good. It is only a stimulant, and like all stimulants looses in time its power to produce its first effect. In the discussion following, he was asked the amount of ashes to apply to land. Twenty to fifty bushels he thought was the average. It would depend wholly upon the soil. The subject of orchard cultivation was brought up. Orchards should be cultivated and ashes applied freely, but with care.

On the program the next subject was "Taxation without representation" by Supervisor Estelle, of Brookfield, but, he not being present, Hon. C. P. Goodrich, of Ft. Atkinson, Wisconsin, followed, talking upon "The making and selling of butter." The first thing he deemed necessary was to find just what would suit the consumer. Study his likes and dislikes. Work up a trade and keep it by serving the best butter you can make. You will then deserve and get the highest market price for it. Now, to make good butter, good milk is nec-

essary, and good milk comes only from good healthy cows, kept in clean stables, rightly cared for and fed. Careful handling of milk is of utmost importance because of the damaging results of its being exposed to the numerous bacteria. The next step is cream getting. Here has always been a loss to the dairyman. By the common way of removing cream from the milk there is a loss of $\frac{3}{4}$ per cent. to one hundred pounds of milk. The only way to get all the cream is to use a separator. Milk should be skimmed when just souring and should be kept in a clean room, free from all kitchen or cellar odors. Churning should be at as low a temperature as possible, that is, the lowest that brings the most butter. This varies with the milk of different cows. A tester can here be used with good results. If care is taken there need be but very little butter left in the milk. The salting of butter is of importance. Spotted butter is caused by the salt not being properly mixed into the butter. An ounce of salt was recommended to each pound of butter. Can be mixed afterwards until it has the desired flavor. Coloring was advised in winter. It was asked what kind of salt was best. Any good dairy salt will give satisfaction.

When Mr. Goodrich closed, the questions from the question box were read, and a very spirited discussion upon some of them followed. Do we need a law to compel teachers to teach beyond the eighth grade in district schools? What is the best grass for pasture lands? How to get rid of June grass? was also asked. Mr. Goodrich said that in Wisconsin they did not want to get rid of it. June grass furnishes the best and earliest feed in the spring and the latest in the fall. Somebody wanted to know how to overcome the squash bug. The only way suggested was to "catch 'em."

Following this discussion, Mr. Estelle, who had now arrived, proceeded to give a very emphatic protest against present taxation. Of late, he said, the rate of taxation has steadily increased, while the valuation of real estate has as steadily decreased. If all property in the state was justly taxed, the farmer would have no tax to pay; the burden would be borne by the large trusts and corporations. Our county tax is too high. Local officers and institutions are an unnecessary expense. They are made so by those in control of them. The taxpayer is worked by one and then the other, and then all together. Touching upon the question of woman suffrage, he thought that women, holding property and being taxed alike with men, should be represented in our legislative halls. Theirs is a case of "taxation without representation."

The subject of taxes called out an animated discussion, especially the reference to our jail as an unnecessary expense. How could it be otherwise? Do not make confinement there so pleasant, was the answer. Get a yard, fence it, fill it with stones and jail inmates and let war be waged. Make the tramp work. This met with some opposition from the more humane. There are evidently two sides to the tramp question.

At the close of this debate, in which a number took part, the meeting was adjourned until evening.

Good management is better than a good income.

At College.

Mrs. Pierce and son have been visiting Miss Lucy Pierce.

Miss Emma Bach, '01, has been entertaining her mother and sister several days.

G. H. True has gone to Chicago and the cheese regions of the Northwest to spend his vacation.

The oats treated with formalin came up much better than those treated with hot water and sowed right beside them.

R. Hastings, '01, left early last week for Island Lake, where he passed examination and enlisted in the regular army.

Last week Mrs. Taft received a visit from her two nephews and Mrs. J. V. Willson, of Rockford, Ill., who were on their way to Boston.

Mr. Alvord will lead the Y. W. and Y. M. C. A. meeting next Sunday evening. Subject, "A good education: What it is, and how to get it."

The regular meeting of the "Try and Trust" circle of King's Daughters will be held at the home of Mrs. Weil Wednesday afternoon. Lesson, Luke 18:34-43. Text, "Light." Ladies are requested to come prepared for sewing.

In Lansing Thursday evening the "Lansing Cadets," a military company numbering 68 members, organized with Charles Johnson, '00, as captain. J. L. Baumber, a member of the freshman class and a regular army man, was elected second lieutenant.

Baseball—Lost and Won.

Monday afternoon of last week we helped Hillsdale to score her first victory. The nine scores secured in the first three innings while Warren was in the box and every member of the team seemed to be anxious to make as many errors as possible, were too much to overcome by the good playing that followed. During the six innings that Millar was in the box Hillsdale secured but two hits, one base on balls, and one score. Hillsdale played a steady game all through. Score:

Innings	1	2	3	4	5	6	7	8	9
Hillsdale	2	3	4	0	0	1	0	0	0
M. A. C.	0	0	1	1	0	0	1	1	5

Home-run—Gibson. Three-base hit—Clark. Two base hits—Clark; Widrig, Hillsdale. Double plays—Ranney, unassisted; Holmes and Parker, Hillsdale. Batteries—Folks and Widrig; Warren, Millar and Krentel.

The game with Albion Friday afternoon was sensational from start to finish. In the first inning M. A. C. started out with an evident desire to win and Albion helped her along until six scores were registered. After that both teams settled down to good work until the fourth when there was strong evidence of a conspiracy to give the game to Albion. The inning ended with Albion in the lead, the score, 9 to 7. Then both teams worked hard. M. A. C. scored one in the fifth; and a single by Gibson and home run by Adams in the seventh put them again in the lead. Albion spoiled this in the eighth by scoring two, and increased her lead one more in the first half of the ninth. In the last half of the ninth our boys came to bat with the score 12 to 10 in Albion's favor. Millar

stepped to the plate and drove the first ball nearly to the Armory—a foul; the next he put just over shortstop for a single. Adams drove a neat single over second. Warren got to first on an error. Ranney at bat! Can he hit it? "Ball one!" "Strike—no a hit! Away skyward it goes, and drops easily down in the tops of the evergreens in front of the Armory. A home-run—four scores—the game is ours. As Ranney crosses the plate a howling, dancing, crazy mob mount him to their shoulders and bear him away. He is the hero of the day, not for his home-run alone but for the superb game he has put up in the field. Seven put-outs and two assists, some of them very difficult chances, are not so bad for one game. The score:

Innings	1	2	3	4	5	6	7	8	9
M. A. C.	6	1	0	0	1	0	2	0	4
Albion	0	1	0	8	0	0	0	2	12

Home-runs—Adams and Ranney. Two-base hits—Warren; Miller, Albion. Bases on balls—Off Millar, 9; off Davis, 2; off Miller, 3. Struck out—By Millar, 3; by Miller, 3. Hits—Off Millar, 6; off Davis 2; off Miller, 10. Batteries—Millar and Krentel; Davis, Miller and Hamblen. Umpire, Brackett.

Saturday afternoon our reserves defeated the Charlotte high school nine, the second time this season, by a score of 13 to 7. The Charlotte boys have some good players but were clearly outclassed.

OTHER COLLEGE GAMES.

Ypsilanti, May 16—Albion, 30; Normal, 16.

Kalamazoo, May 20—Kalamazoo, 10; Normal, 5.

Albion, May 21—Albion, 13; Normal 10.

Olivet, May 21—Kalamazoo defeated Olivet.

M. I. A. A. STANDING.

	Played	Won	Per Cent
Kalamazoo.....	7	6	.857
Olivet.....	7	5	.714
M. A. C.....	8	5	.625
Albion.....	8	3	.375
Normal.....	8	2	.250
Hillsdale.....	7	1	.143

Our Societies.**COLUMBIAN SOCIETY.**

The Columbians rendered the following program May 14:

Roll Call—Responded to by quotations from Napoleon Bonaparte. Declamation—R. A. Whitney.

Life and Character of Napoleon Bonaparte—H. Severance.

Declamation—B. Barlow.

Talk—Mr. E. C. Green.

O. S. Groner, '94, is principal of the St. Ignace schools.

John G. Veldhuis, '95, will graduate from the Detroit College of Medicine with '98.

GEO. SEVERANCE.

Memorial Day.

Memorial exercises will be held in the College Armory next Monday at 10:30 a. m. The cadet battalion will attend in uniform, and the following program will be presented:

Music, College Band; Prayer, Rev. F. G. Cadwell; Music, "Prayer for Our Country," Double Quartette: Introductory Remarks, Rev. F. G. Cadwell; Music, "Memorial Day," Double Quartette; Address, Hon. S. B. Daboll; Music, "Star Spangled Banner," by the audience; Music, College Band.



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G. D. WOODBURY.

News from Graduates and Students.

W. J. Glasgow, '00, who visited at the College several days last week, has just enlisted in the regular army as cook for the officers of the fourth infantry.

Warren Maxfield, '93, and Miss Flo. Jones, both of Coopersville, were married May 10, and now live at Hudsonville, where Dr. Maxfield is practicing medicine.

We have received for the alumni library the annual report of the Colorado Experiment Station for 1897, which contains an article on meteorology and irrigation engineering by Prof. L. G. Carpenter, '79.

Dwight S. Cole, '93m, has prevailed upon his brother, F. J. Cole, of Lansing, to procure and man a Tribune racing tandem or triplet or both, for pace-making at the races in the intercollegiate field-day to be held in Lansing June 3 and 4.

E. M. McElroy, '93, principal of Calumet schools writes: "I note with a great deal of pleasure the increased attendance in your freshman class. Good for M. A. C. May she ever prosper as she most truly deserves. When is commencement?" [Commencement day will be on June 17.]

Prof. A. A. Crozier, '79, writes from San Francisco under date of May 11, saying that he received no permanent benefit in Hawaii. Life at sea agrees with him about the best but he does not feel strong enough to take another voyage at present. He will probably go to Colorado a few weeks and then return to Michigan for the summer.

Kolia S. Thabue, '91, in a letter to Mrs. John Fulton, Highland Park, Mich., says that he is married and has a little boy 18 months old named Agricola. Mr. Thabue has been engaged in farming and photography since leaving his position as head teacher in the Bassein school two years ago. His farm and also his house are fitted out and conducted after American ideas and are intended as object lessons for his countrymen.

What the Freshmen Do on the Farm in the Spring Term.

The term opens before the ground is in condition to plow or vegetation far enough advanced to study. The work, in the farm department, for the first four weeks, therefore, is given in the class room and consists of a series of talks on farm crops, and another on the history of soil formation and methods of culture. The principal crops of the State are taken up in order and discussed as to soil requirements, geographical distribution, place in the rotation, adaptability to Michigan conditions, relative merits as to financial profit and methods of growing. The different classes of soils are studied as to source, history of production, physical peculiarities and principles of culture.

By the first of May the characteristic work of the term begins. The class is divided into two sections, one working from one until three, the other from three to five. Each section is divided into three subsections. One subsection will be found on a given day studying bee keeping. Beginning with the handling of bees in the winter the boys study, in the yard, the introduction of queens, the construction of hives, the peculiarities of the

worker, drone and queen cells, and the details of the handling of an apiary for the production of honey.

At the same time the second subsection is studying poultry judging. The many varieties of chickens owned by the College are brought into requisition for this work. The Mediterranean, Asiatic and American classes are taken up in turn until the student is familiar with the characteristics of each breed; then follows work with incubators, instruction in feeding young chickens and caring for mature fowls.

The third sub-section may be either at fence building or general farm work. If the former, the attention is directed to the best styles of wire fences, the way to fasten down and brace end and corner posts, the different styles of stays, how to stretch the wire and how to build the fence generally. If the work is on the farm the student may be set at one of a dozen different jobs that are to be done on the farm at this season.

Each Friday afternoon the three subsections meet together to study the most important features of the farm operations of the week. It may be a study of the weeds which have blossomed during the week or the grasses and useful plants that have reached the stage where they can be best examined. Then, too, are talked over the reasons for the various steps taken in farm work.

A knowledge of how to care for horses, how to drive teams, and how to do general farm work is presupposed and no attempt is made to teach the boy how to plow, drag or drill. He must get this knowledge in vacation and outside of College hours. Skill in these matters is, however, required as a condition of graduation.—C. D. S.

The Wandering Singer and His Songs.

One of the handsomest College souvenirs ever published is the book of poems by Frank Hodgeman, '62, of Climax, entitled "The Wandering Singer and His Songs and Other Poems." The book is bound in pebbled white cloth with blue and gilt trimmings, contains 185 pages, and is printed on excellent paper with full gilt edges. It is beautifully illustrated with half-tones of College and other scenes and with sketches by Prof. W. S. Holdsworth, '78, and E. N. Thayer, '93. In that part of the book devoted to College poems there is hardly a page that does not suggest sweet memories of days gone by, not only for the student of the sixties but for the student of the nineties as well. Everybody who has seen the work is delighted with it.—M. A. C. RECORD, Feb. 8, 1898.

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