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The MAC. RECORD.

Michigan Agricultural College Association Publishers # East Lansing Vol. XXVIII Feb. 26, 1923 No. 20



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THE M. A. C. RECORD

Vol. XXVIII. No. 20

EAST LANSING, MICHIGAN

FEB 26, 1923

REQUIRED CREDITS REDUCED

Faculty Votes to Make 192 Necessary for Graduation Instead of 240; Recommendations Are Made Regarding Changes in Courses

By action of the faculty on February 12 the number of credits required for graduation was reduced to 192 from the 240 total formerly demanded. This provides for a 16 credit schedule for each term and maintains the scholastic standard of the college upon the same plane for which it has been recognized.

It is specified that each credit allowed will be the result of three hours of work. Thus, two hours in the laboratory will entail one hour in preparation of reports on the outside and a lecture period of one hour, giving a credit of that amount will require two hours of outside work. In short the theoretical amount of work which the student will do to earn his 16 credits per term will be 48 hours per week, excluding military science and physical educa-tion which will be required as before but for which no credits will be granted.

Fundamental courses are to be arranged so that a student may transfer from one depart-ment to another without sacrificing so much of his time as has been necessary in the past. A general broadening influence is being introduced, with the consent of the department heads, to provide for more choice in electives.

A recommendation to the faculty which was voted down limited to three credit hours per term the amount of purely technical work which a student could be required to do in any course during his first two years. Another provided for electives during the first two years and another had to do with the last two years recommending that each student select a major and a minor in his course upon which he would start work about his junior

The faculty provisions, which will go into effect beginning next fall, follow:

1. A student shall be held for one hundred and ninety-two academic credits—exclusive of military drill and physical training-for graduation. Credit hours may vary in the successive terms and years at the discretion of the respective divisions.

2. The value of the credit shall be three hours of effort, including such combination of lecture, laboratory, quiz, or preparation as de-partments and divisional course committees

may fix.
3. The first two years of each course shall comprise basic science-including English-in preparation for specialization in the last two years.

4. Continuity of subject matter in the two courses of each of the first two years is desirable. Such arrangement prevails in some measure, but the plan may well be given more complete recognition.

5. Junior college credit shall be accepted to the extent of two years. In order that such preparation may be acceptable, it is desirable that steps be taken by the college to correlate junior college courses with those of M. A. C.

6. All courses in the process of readjustment to the new hour basis should be carefully revised in accordance with the stipulation found in paragraph two above. Details are left to course committees.

Overlapping courses should be eliminated and the subject matter safeguarded in the appropriate division.

8. Courses in the same subject in various divisions should be arranged as far as feasible in content, credits, etc., in such manner as to make transfer from division to division easy, and exchange of sections feasible.

9. Physical training should be placed upon a no credit basis with grades of passing and no passing.

10. Due to the overlapping of high school and college courses in agriculture and home economics, this committee recommends that the department of agricultural education act in co-operation with the State Department of Public Instruction with the view of standardizing the instruction in these subjects in the high schools.

E. H. Ryder, E. T. Hallman, R. K. Steward, V. R. Gardner, L. C. Plant, C. P. Halligan, Committee.

The Lansing section of the Society of American Bacteriologists held its thirteenth annual meeting at the Wildwood Inn in East Lansing on February 19. The organization is composed almost exclusively of members of the staff of the becteriology department or persons closely associated with the work. Short talks on the work of Pasteur, noted scientist, were given by practically all who attended the meeting. Dr. Ward Giltner presided.

4

ELLIS SUBMITS LIST OF HIS ACHIEVEMENTS

Dear Sirs: You ask us on the blue slip to tell all about ourselves, and emphasize "Don't hide your light under a bushel," so here goes: I am an alumnus of the Preparatory School

I am an alumnus of the Preparatory School at Alma, Mich., 1903, alumnus of the Michigan Agricultural College, B. S. 1907, C. E. 1912, associate member Am. Soc. C. E., since Sep-

tember, 1914.

I have written: Hydraulic Functions of Circular and Horseshoe, Tables, Engineering News, Vol. 73, Page 1182, reprinted by Lafax, Sheet Nos. 6-64, reprinted, condensed, in the U. S. R. S. Hydraulic and Excavation Tables, 4th Edition, page 48; Hydraulic and Excavation Diagrams, Western Engineering, 1916, pages 77, 113, 195, 314, 359, 401, and 439 (part), reprinted, in part, by Lafax, sheet 10-447; The Flow of Water in Irrigation Channels, Paper Am. Soc. C. E. Transactions, Vol. LXXX, page 1644; Car for Current-Meter Gaging Stations, Engineering News-Record, Vol. 84, page 80; Hydraulics of the Intake to a Pipe Drop, Engineering News-Record, Vol. 85, page 565; Is There a Moisture Cycle? The Western Tourist October, 1921, page 43.

Vol. 84, page 80; Hydraulics of the Intake to a Pipe Drop, Engineering News-Record, Vol. 85, page 565; Is There a Moisture Cycle? The Western Tourist, October, 1921, page 43.

Also the following poems: "Ode to the Small Pox," The Great Falls Leader, March 22, 1918; "Farewell to the Pest House;" "A Stake in the War," The Reclamation Record, Vol. 9, page 325, The M. A. C. Record, page 6, of Nov. 1, 1918; "On the Work on Greenfields Bench, Summer of 1918;" "The Reason;" "The Corner Hound," The Monad, April 1919, page 14; "Just a Little Bovine Salve," The Monad, November 1919, page 20; "Just Blame it on the Engineer," "On the Work from Camp No. 10," "To My Sweetheart," "Jack Snipe," "Tm Married Now," "The Pestiferous Bedbug," "Ode to the West," "A Prayer," "How to Beat the High Cost of Living," "The Sagebrush Orchestra," "On the Great Northern Ry, Tunnels," "Ode to a Prospect Hole," "A Mathematical Stunt," "On Church Unity," "My Spring Poem," Montana Record-Herald, April 19, 1922; "Irrigation a la mode," Read Dec. 14, 1922, at Mont. Irrig. & Drain. Institute; "Ode to a Deserted Claim Shack."

Experience: For 13 years, June 15, 1907, to

Experience: For 13 years, June 15, 1907, to June 15, 1920, with the U. S. Reclamation Service, rising to position of assistant engineer, and doing most everything, engineering, from preliminary reconnoisance to operation.

Since June 15, 1920, hydrographer for the state engineers office, Montana, under the direction of the U. S. Geological Survey; everything connected with stream measurement from making the original measurements to preparing the data for publication.

Geo. Henry Ellis.

Helena, Mont.

Members of the legislature were entertained by the State Board at a luncheon around the pool in the gymnasium on February 15.

WEATHER AND WRECK FAIL TO DAUNT OPERA

Unusually severe weather followed the "Campus Days" company on its journey about the state and reduced the net receipts by a large sum. Owosso greeted the troupe with a sleet storm, Lansing contributed a small but lively blizzard, Grand Rapids was more or less in the path of the same storm and Jackson had not recovered from the effects of the disturbance sufficiently to give whole hearted attention to the theatricals from M. A. C.

Added to this feat of the weather man the electric car carrying the members of the company to Grand Rapids on the afternoon of February 15 crashed into the read end of a stalled freight car and several of the cast were slightly injured. This caused a delay at Grand Rapids of more than an hour but when the company arrived it was ready to enter into the spirit of the play to such an extent that the state of mind of the players was not

noticed from the audience.

College night at the Gladmer was the most successful, from a financial standpoint, of any performance for the theater was filled to the last seat. The previous night saw most of the house sold out but weather conditions were such that support was not as general as had been experienced during the first two years of the productions. Special efforts were made to draw out the crowds in Grand Rapids and Jackson, the alumni in both cities working with the managing board of the opera to interest the citizens.

What it lacked in financial support "Campus Nights" made up in the generous comments of the dramatic critics. All of the larger cities saw in the opera an exceptional college production. Jack Owen, '23', of Highland Park, who portrayed the eccentric professor, was acclaimed for his acting and "Bugs, Bugs, Bugs," his song, was rendered with an effect that brought repeated applause from all audiences. Rowena Hicks, '26, as the aspiring widow, also drew commendation for her efforts. Marion Larkworthy, '24, as the college vamp and B. R. Crane, '24, as the male type of the species, carried off their parts with professional ease. Kenneth Bingham, '23, as the old alumnus, now a famous singer, had a chance to display a splendid voice. Others in the cast and chorus acquitted themselves in exceptional style.

style.

The third annual M. A. C. opera was another argument for the continuation of these efforts.

Speaking before the Michigan Allied Dairy association in Kalamazoo on February 21, President Friday predicted a general rise in farm prices as a result of the trend the rural population is showing of deserting the farms for the cities. He also saw a labor shortage appearing before the farmers and better business for the industrial concerns due to more purchasing by the producers as their incomes mounted.

BRODY SELECTED FOR ATHLETIC BOARD

Clark Brody, 'o.i, manager of the state farm bureau and member of the State Board, has been appointed the representative of the latter body on the new board in control of athletics and has accepted the appointment. Brody is one of the constructive forces among the alumni and has long been active in the interest



CLARK L. BRODY, '05

of the college. On February 21 he was renominated for his position on the State Board and will undoubtedly be returned to that body for another term of six years.

Herbert Gowdy, a fruit raiser living in Berrien county, was the other nominee for the State Board. He will enter the election for the position now held by Jason Woodman, '82, who has announced he will not be a candidate for another term.

The M. A. C. Veterinary Medical Associa-tion entertained the alumni of the veterinary division at a luncheon at the Wildwood Inn during the recent meeting of the M. S. V. M. A. Those in attendance were L. A. Wile-M. A. Those in attendance were L. A. Wileden, '13, Mason; O. A. Taylor, '15, East Lansing; E. K. Sales, '16, East Lansing; R. A. Runnells, '16, East Lansing; H. J. Stafseth, '17, East Lansing; B. D. Robbins, '19, Grand Ledge; C. F. LaBar, '19, Camden; A. R. Dunn, '19, Lansing; S. G. Colby, '19, Plymouth; L. R. Pless, '20, Detroit; A. J. Gregg, '20, Saline; A. F. George, '20, Perry; H. P. Conrad, '21, Owosso; X. B. Shaffer, '21, Vicksburg.

BAND AND GLEE CLUB ANNOUNCE ITINERARY

On its first tour of the state the M. A. C. band will join the glee club in presenting concerts in ten cities. A tentative schedule has been drawn up which includes a long trip, taking the musicians from Lansing through Saginaw, Bay City, Port Huron, Battle Creek and Jackson, among the principal points. Where the committee in charge expresses a desire the band will play for dance after the

regular program.

All of the spring vacation will be given to this journey by the members of the two organizations and preparations are being made to present the best variety of entertainment ever given by any M. A. C. group of this sort. The band practices daily under the expert direction of Professor Clark and Professor Taylor is keeping the members of the glee club at top form. Both groups have given concerts in cities and towns near the college and have been well received. Alumni support will be relied upon to make the venture a paying one and the advertising given the college should be of such a nature that the institution will benefit largely through the efforts of the or-

About seventy men will make the trip, some of them taking part with the glee club as well as the band. Specialty numbers have been arranged and novel musical numbers are on the program as a diversion from the standard selections. The journey as now contemplated will include the following schedule:

Lansing, Friday, March 16; Saginaw, Friday, March 23; Bay City, Saturday, March 24; Midland, Sunday, March 25; Flink Monday, March 26; Popting Transfer March 27 day, March 26; Pontiac, Tuesday, March 27; Royal Oak, Wednesday, March 28; Port Huron, Thursday, March 29; Adrian, Friday, March 30; Jackson, Saturday, March 31; Bat-tle Creek, Sunday, April 1.

GRAND RAPIDS READY FOR UNION CAMPAIGN

Grand Rapids will start its campaign for the Union Memorial building on Friday night of this week when Secretary Halladay and probably another speaker from the college will adably another speaker from the college will address the members of the association in and around the Furniture town and explain to them what the structure will mean to the college. A committee of prominent alumni has been at work preparing for this meeting and F. H. Mueller, president of the group, says that enthusiasm is at a high point since the presentation of the Union opera and that he presentation of the Union opera and that he expects a large representation at the session which will be first since December when officers were elected.



VIEWS AND COMMENT



A reduction in the number of class hours required of M. A. C., a change for which there has been agitation among the alumni and supporters of the college, has been approved by the faculty and will go into effect next fall. For some years the standard of time which a student must spend under the direct supervision of members of the faculty or instructional force has been deemed too high and many efforts have been made to have it lowered but hitherto they have met with dis-

approval.

This change in the curriculum will not reduce the standing of the college in the academic world, it will not lower the value of an education at M. A. C. when work done here is offered for credit at other institutions and in the final analysis it will not require less actual work on the part of the student to complete his work for a degree. It will, however, allow him more latitude in the employment of his time; it will also give the brighter student a chance to use more of his time according to his own dictates rather than force him to spend hours in class with those slower to grasp the objects of a course.

M. A. C. has needed more of an opportunity for its students to use the library. It will soon have accommodations for a large amount of this work and the new regulations will undoubtedly increase the need for reference books and facilities for study. This will promote beneficial reading. It will add an influence of general culture to the most technical course, through association if not directly, and will put in the path of students the proper

environment for academic pursuits.

Very often the college student finds when he has partly completed a course that it does not offer him the rewards in money, pleasure or satisfaction which he had anticipated. He finds that the technical application of his efforts does not return to him the feeling of accomplishments which he believes it should. In the new regime there will be more of an opportunity for him to look around and discover his particular sphere, if that be possible, or at least to obtain the rudiments of an education which will fit him for general usefulness.

This action by the faculty seems to be a distinct step forward. It has gathered weight through long consideration and its influence promises to be for the general good of the institution. Without doubt M. A. C. has outgrown as the rest of the collegiate world has

outgrown the need for so much direct supervision of a student's time as was demanded by the old curriculum. It needs to leave the class of institutions where time spent in the class room is regarded as the criterion of an education. Well directed thought produces better men and women than routine work can ever shape. Great minds were never moulded in a factory; they were the result of interior growth with the proper amount of stimula-tion and material upon which to grow.

The purpose of M. A. C. is not to turn out agriculturists, engineers, foresters, veterinarians or specialists in home economics, it is to produce useful citizens. The altered curriculum seems to point in the direction of most general usefulness, therefore it comes closer to fulfilling the ideals of the institution.

Adequate hospital accommodations for an institution as large as this should be provided. With nearly two thousand people gathered into a comparatively small area there is so much opportunity for the spread of contagion that the lack of sufficient personnel and housing facilities places a great burden of responsibility upon the state. Hitherto the small cottages at the rear of the bacteriology building have proved sufficient but their limitations were demonstrated during the recent epidemic of scarlet fever which accompanied a wave of colds and grip. A serious epidemic would find the college badly handicapped in its efforts to control the situation.

M. A. C.'s co-ed debaters will enter the formal argument field when a picked team will discuss "Resolved, that the United States government should own and operate coal mines within a period of five years," with the fair representatives of Western State normal at East Lansing on March 7. It will be a home and home engagement with the battle in progress at both colleges on the same night ress at both colleges on the same night. ress at both colleges on the same night. Dorothy Snyder, '25, Mason; Marion Harper, '25, Middleville; Elsie Gelinas, '23, Saginaw; Mrs. Emshwiller, '26; Alberta Bates, '25, Benzonia; Corlan Lyman, '25, Kibbie; Marion Stein, '24, Fenton, and Lillian Lewton, '24, Takoma Park, D. C., comprise the squad which will handle the M. A. C. end of the argument.

The money you invest in the Union Memorial building will not be used to finance the campaign; all of it will be used to erect the building.

"Close Beside The Winding Cedar"

James G. Hayes, '11, is working as district dairy specialist in the extension division,

"Doc" Heasley's freshman team defeated the Grand Rapids Junior college five on the home floor of the latter organization 25 to 12 on February 16.

Oliver Crosby, who died recently in St. Paul, Minn., left a bequest of \$100,000 to the University of Maine, of which he was a graduate, for the erection of an engineering building.

Zia Bey, who was to have spoken last Tuesday on the Near East question as one of the numbers on the Liberal Arts course, found it impossible to fill his engagement because of sickness.

East Lansing's housing accommodations were increased during 1922 by a total of 107 dwellings. Seven new stores were also added to the equipment of the city. The present property valuation of the municipality is \$3,5000,000. The population is estimated at 2400, with a prediction that this figure will be increased by 20 per cent at the end of 1923.

APPOINTED BY GOVERNOR



L. Whitney Watkins, '93, named state commissioner of agriculture. He is also president of the State Board.

The prevalence of scarlet fever among the student body caused the cancellation of the basketball game with Alma, the track meet with Kalamazoo normal and all other intercollegiate events scheduled for the campus Saturday, February 17.

Peter V. Ross, '95, an accredited lecturer for the Christian Science church, who makes his headquarters in San Francisco, will speak at the Masonic temple in East Lansing at 8 o'clock on the evening of March 1. Students and East Lansing residents are invited.

H. W. McCoy, who has been in charge of th evocational guidance school for war veterans at the college since the summer of 1921, has been appointed agricultural director and farm manager at Mooseheart, the national home of the Loyal Ofder of Moose in Illinois.

The appropriation bills have been introduced in the legislature, if you have not already written your representative and senator about the merits of the college and how much it needs the building and equipment funds asked there is still time to do it.

Motion pictures of M. A. C. activities are being made by the state department of education. The college nursery was the first object to catch the attention of the photographers and during the spring reels will be made of the maple sugar industry as carried out by the forestry department.

Professor J. F. Cox, of the farm crops department, was called to several agricultural colleges to explain the program under which his department is working to improve the varieties of seed in common use among Michigan farmers and the other methods M. A. C. is employing along the lines of scientific agriculture. He spoke at meetings at the University of Minnesota, the University of Virginia and Iowa State.

The outstanding social event of the college year, the J-Hop, occupied the attention of the members of the class of 1924 while the rest of the campus enviously stood on the sidelines. The gymnasium was turned into a section of ancient Greece for the occasion on Friday night, a special orchestra played into the early hours of Saturday and inviting tables under the running track on the main floor of the gym provided refreshments and an opportunity for the after-dinner speakers to display their wares. T. E. Frank, Detroit, president of the class, led the grand march. No flowers were allowed but all attending the party were given valuable favors.

BARDEN, '08, HAS MODEL ORCHARDS

Floyd Barden, 'o8, is attracting the attention of the press for the success he is having as a fruit grower near South Haven. The following article appeared recently in a newspaper circulating widely in the fruit district:

For thirty-five years the Barden orchards west of Pullman have been sturdy, prolific orchards, bearing hundreds of bushels of peaches, apples, and bears every year, besides crate upon

pears every year, besides crate upon crate of cherries. Year by year the orcrate of cherries. chards on this farm have been increased in size until now, owned and cultivated by Floyd Barden, they cover sixty acres and contain over 4,500 bearing trees, be-sides many young trees not yet bearing

The principal fruit grown by Bar-den is peaches. He has over 3,300 bearing peach trees, ranging in age from one year to fifteen. Over 100,000 bushels of peaches were shipped this season from the Barden orchards, about 6,000 bushels going to a canning factory at Holland, and the remaining 4,000 to Chicago by boat from South Haven. Barden has several varieties of peach trees in his orchard, selected so as to afford a bearing season continuous from the middle of August to the middle of October.

As the peaches are taken from the trees during the bearing season they are put on trucks and hauled to South Haven and loaded on boats, if they are to go to Chicago, or straight on by truck to Holland if intended for the canning factory. In three days this fall, says Barden, 2,300 bushels were shipped from

the farm.

Barden also shipped over 500 barrels of apples this fall. He has about 1,000 apple trees, besides 150 cherry trees, and

400 pear trees.

Clean cultivation is a part of Barden's creed, with the use of cover crops. Constant pruning, especially with the peaches, keeps his trees in shape and increases productivity. The trees are sprayed once in the dormant stage and once with a dust spray in the summer. Barden is a graduate of M. A. C.

L. Whitney Watkins, '93, state commissioner of agriculture, President Friday, Secretary Halladay and Clark Brody, '05, of the Michigan Farm Bureau, will represent Michigan at the conference on agricultural prices called by the governor of Minnesota for February 27 at Minneapolis, according to an announcement made by Governor Groesbeck.

Bernard M. Proulx, '22, is now in charge of the vocational guidance department at the college.

COMMITTEE REQUESTS DECISION ON SITE

Work on the Memorial building campaign was considered by the executive committee of the M. A. C. association which met at the alumni office on February 17. Problems con-cerning the financing of the building and the conduct of the campaign throughout the state were discussed and provisions were made for handling the situation so that the plans of the association may be carried out to the best ad-

The part the association is to play in handling the affairs of the Union through its membership on the board of directors of that hody was discussed and the general plans for the building were put before the committee. W. O. Hedrick, '91, reported he had inter-viewed President Friday and Secretary Halla-day concerning the action of the State Board to provide a site for the Union building and had been informed that early results could be expected. He also reported that Pond & Ponw, the architects, had informed him that their part of the work would necessarily be delayed until the site was selected by the Board. He was continued as a committee to see that a decision was reached by the Board as soon as possible.

Those who attended the meeting were E. W. Ranney, 'oo, F. F. Rogers, '83, Henry T. Ross, 'o4, Sherman Coryell, '20, W. O. Hedrick, '91, Harris Thomas, '85, and R. V. Tanner, 'o9. Adjournment was taken to March 17 at 2

DETROITERS SCHEDULE SMOKER FOR MARCH 2

Detroit alumni are preparing for the biggest smoker and entertainment for the bunch the city has ever witnessed for the evening of March 2. Vaudeville acts, music and other features will be provided for the amusement of the crowd and the prospects are that a large proportion of the alumni in the metropolitan district will attend the gathering.

Details concerning the affair are meager but it is announced that a member of the faculty will be on hand to aid in the merrymaking and that business will be discarded for the evening. "Dutch" Keydel has been working nights in anticipation of the event so that refreshments of the proper sort may be available and "Octy" Barron is rehearsing a new speech for the occasion. G. V. Branch, president of the Detroit club, promises that all events for that date are in the bonds of a president that date are in the hands of a special committee which is counted on to deliver the required elements for a regular jamboree.

M. A. C. wrestlers will meet Ohio State matmen in Columbus on Friday, March 2. The Buckeyes will return the compliment next season.

BLAIR FINDS ALUMNI IN TWO LARGE GROUPS

Mansfield, Ohio, 2-14-23

Dear Mac:

As you may know I am on the road doing dealer service work for the advertising department of the California Fruit Growers' Exchange. The above address is my home office, in name only, as I am at present touring Ohio, Pennsylvania, and Indiana in a Sunkist and mud-kist Ford.

I meet quite a few M. A. C. folk in my rambles. Those that are live, are very live. Live to the need of a Union building, live to the athletic and scholastic situation of the school, and live to the duty they owe the

college as alumni.

But I meet far too many that are best described by saying that "after leaving M. A. C. and taking everything they could with them, they got married." Not that I am slamming the married alumnus, but why do some of them think that this important step in life excuses them from all but matter-of-fact connection with their Alma Mater?

It is with much pride that I meet M. A. C. people and find that we all belong to a great fraternity, and that local literary society lines are forgotten. While in some schools the fact is oft true that fraternity comes first, college

second.

I wish that you might blast loose more news items from the class of 21 and allied classes. The last several Records seem to lose us in the mass of interseting news from older classes.

On reading this letter over it seems quite critical in tone. But as I have but recently had two lengthy visits to the college, and can honestly say that never have I seen it in such good shape—aside from athletics—I am certain that my critical yein will be pardoned.

Very truly yours, T. S. Blair, '21.

Chicago, Ill.

HORT SOCIETY WILL HEAR COLLEGE MEN

President Friday will speak before the members of the state horticultural society at the meeting of that organization in Paw Paw on February 28. He will explain the plans of the college for increasing the value of the department relating to the industry.

Jason Woodman, '82, member of the State Board, N. L. Partridge, member of the horticultural department at the college and G. V. Branch, '12, are others on the program. Branch will discuss marketing problems as he has observed them and will show how the market system of Detroit operates.

SPURWAY DISCOVERS NEW ACIDITY TEST

Charles H. Spurway, '09, a member of the faculty of the soils department, has discovered a new method for testing the relative acidity of soils which Dr. McCool, head of the department, predicts will revolutionize methods now in usc. The new scheme provides for a solution which is passed through the sample of soil and then drained into a waxed paper, the color determining the amount of acid in the soil.

Spurway has been connected with the soils department much of the time since he was graduated and in 1914 was given the degree.

of M. Agr.

NEW REGISTRATION PLAN PUT IN FORCE

A new ruling which takes effect at the end of this term requires that all students register and pay their fees before leaving college. March 12 to 17 has been set aside for this purpose, giving the force in the secretary's office an opportunity to handle the business of the term without the usual rush which has always characterized registration days.

The first attempt at carrying out this plan was tried at the end of the fall tearm when students were allowed but not forced to registre and pay dues before the end of the term. This resulted in some delays and misunderstandings but the main idea worked so well that the college decided to put the scheme into

force this spring.

Did you receive your booklet describing the Union Memorial building? If your M. A. C. acquaintances report they were not on the list send us their names and we will forward all you believe will be placed advantageously.

Michigan will present the opposition to Rauch's swimmers at Ann Arbor on March 2.

Tonight the basketball team meets the five representing St. Mary's college at the gymnasium. Wednesday night Walker takes his team to South Bend for the second of two clashes with Notre Dame, Friday night St. Ignatius, a victor over the Green and White before the baske eers had attained their present state of proficiency, will take on the team at Cleveland and Saturday night Oberlin will be played at Oberlin. That will conclude the season for the squad with the exception of the game against "Fat" Taylor's All Americans who will invade the gymnasium on March 17 for a life and death struggle.

Eddie Gilkey, '22, is now living in Los Angeles, Cal.

ALMA FAILS TO MATCH VARSITY

Walker's Five Shows Speed and Team Work in Dropping M. I. A. A. Leaders; Most of Squad Has Chance to Play

Alma, the team which defeated Kalamazoo college after the latter five had stopped M. A. C. by a two point margin, came to the gym-nasium on February 21 and played an undefeatable team. Substitutes allowed the visitors to run up 21 points while the total the home-team scored was but 27 but that did not represent the relative strength of the two organizations. Out weighed and out reached the battling M. A. C. squad gave an exhibition of speedy team work on the basketball floor which would rquire more opposition than most teams have offered this year to entirely offset. Nuttila and McMillan had the Alma guards

in a state of dizziness before the first half was concluded. Perfect team play with a dazzling speed kept the invaders on the defensive and then they had little opportunity to display their wares along that line for the attack was too fast for them to follow. Robinson worked well at center and in the floor play with Eva and Fessenden taking care of the guarding in

excellent fashion.

A string of substitutes entered the game during the late parts of the first and second halves but the opposition failed to do much during these changes to give themselves hope of winning. Early in the first half a total of 16 to 4 was registered by the M. A. C. shooters. This was brought up to 17 to 8 at half time. In the second period there was more rough playing than seemed necessary, both teams indulged freely in methods not countenanced by the rules but the visitors erred most often and flagrantly, suffering accordingly.

At the present speed exhibited by the squad it stands a fair show of evening matters with Notre Dame and would show Michigan a bit of basketball on any floor. Not only in speed but in team play is the squad especially strong. It has an assortment of tactics for almost any opponent, it is in good shape to take on any of the teams which defeated it early in the season and give a good accounting over the regular route of a basketball game.

The summary of the Alma game follows:

M. A. C.		Alma
McMillan	R. F	Kirker
Nuttila	L.F.	Carty
Robinson	C	Johnston
Fessenden	R. G	Shaver
Eva	L. G	Welhoelter

Score first half-M. A. C. 17, Alma 8. Goals —McMillan 5, Beeuwkes, Robinson 2, Nuttila, Carty 4, Hickerson 3, Welhoelter 2, Kirker, Goals from fouls—McMillan 3 in 8. Kirker 1 in 1. Referee—Whittaker (Indiana). Substitutions—Hickerson for Kirker; Macdonald

for Johnston; Beeuwkes for Robinson; Ralston for Nuttila; Catherman for Carty; John-ston for Macdonald; Nuttila for Ralston; Robinson for Beeuwkes; Wright for John-ston; Cutler for McMillan; Kuhn for Fessenden; Hultman for Eva; Mason for Robinson.

"FAT" LETS DOWN BARS FOR BENEDICTS

No new stars have appeared on the horizon for the alumni-varsity basketball game on March 17. "Fat" Taylor is again in despair. He is trying to rout out the local talent in order that his charges may have the advantages of practice before this important clash and has announced that he will accept in his lineup married men who can get away from home for the evening as well as the bachelors. It is not necessary that the former class be provided with excuses from their class offi-cers if they can reach the door of the gym safely.

The latest reports from the front indicate a heavy battle in progress. It comes to our ears that "Fat" favors Camels as the ammunition for the smoker while Frim says no successful affair of that sort was ever carried out in the wilds of the U. P. without regular corncobs. There were no casualties.

In rounding his squad into form "Fat" is stealthily taking advantage of the opportunities he has had to study the fine points of the game from the vantage point of a seat in the bleachers at the gymnasium. Walker's strategy will find its match when the alumni five learns all the details of the campaign as planned by the leader in the enterprise. Seeing so many of these things from the sidelines has given Taylor an advantage which he asserts he in-tends to employ. The big day is not far away. March 17 will find the foemen at grips.

The swimming meet scheduled with the Detroit Junior college squad was cancelled by the latter school because of the inroads of in-eligibility. The co-ed swimmers may yet have an opportunity to display their prowess in intercollegiate competition.

Your pride in being a graduate of M. A. C. will increase greatly if you come back with the crowd for the reunions on June 16. There will be week-end activities enough to keep you busy and there will be events of enough interest to make the visit profitable.

BACTERIOLOGY AN INFLUENCE ON LIFE

Giltner Sees Need for Wide-spread Information; Should be Taught as Basic Science; Department Well Equipped for Students.

A humanitarian service to the people of the state is the service offered and carried out by the department of bacteriology. Through a staff of trained men and women it tears the veil of ignorance from the facts concerning disease, it provides expert knowledge concerning the elements of everyday life, it puts into practical language the scientific data recorded by eminent specialists and spreads broadcast the fruits of the close application of its staff to the problems of com-

merce, hygiene and agriculture. Not the least of its achievements, in fact the value of the department would be realized through this phase of work alone, is the interpretation of important discoveries which is carried on by the organization. An announcement is made by one of the leaders in the science of prevention of disease, a paper is read before a scientific society outlining a new process which means prolonging life or at least making it more enjoyable and the staff is set at work to look into the possibilities of the find and explain them to the public. Through the publication of circulars and bulletins, of which more are sent out by this department than any other at the college, this knowledge is disseminated throughout the state.

Thousands of inquiries from men in charge of preserving the general health of cities, indi-viduals in laboratories connected with great industries, the ordinary citizen are received and they are answered from the combined knowledge and experience of the best technicians available. In this respect the bacteriology department at M. A. C. is unique. It is located under one roof instead of being spread around among the different departments and as a result draws to the aid of each worker the knowledge of all others. M. A. C. stands at the head of all state institutions in this regard and few if any institutions for public education present the facilities for study and the advantage of expert guidance in any branch of the science as does the one at the college.

In an educational way bacteriology may be studied at M. A. C. through its various aspects as it can be covered in no other college. close cooperation of all units in the organization acting under one head gives the student an opportunity unexcelled. He or she stays in one laboratory and continues the work through its different branches under one through its different director but with various specialists. The same atmosphere permeates each of the entire series of laboratories, the same environment with the same ideals obtains no matter what the seeker for knowledge follows in his course in bacteriology. Diseases of men and animals, micro organisms valuable and undesirable in

soils, the "bugs" which are employed to make the best vinegar—and at one time champagne and wines, those which contribute to the edibility or poisonous qualities of foods all are investigated in the same laboratories with the combined experience and knowledge of a large

staff as a guide to the student.

"Primarily bacteriology is a subject through which one element of a general education is provided," said Professor Giltner. "It is a comparatively new subject not generally taught but its close application to all factors of should make it a basic science such as chemistry and physics and it is rapidly assuming the importance of those studies in the minds of the educators. It has a distinct cultural value aside from its scientific importance and useful to the individual as well as fitting him to be a valuable member of society for it touches the very foundations of his daily life and that of the community.

"Every human being should have a knowledge of the fundamentals of this science. Upon its researches, its teachings hangs often the matter of life or death. Its mission is to dissipate superstition and ignorance relative to hygiene, habits of living, and the organisms which cause disease. It should have the interest of parents, school teachers, and children, in fact all citizens for its work has a direct

bearing on all living things.

"Because of the fascination of this humanitarian work it is no trouble for us to find students who wish to follow it after leaving col-We are in a position where we can select the best. Only those who are deeply interested follow the work after the fundamental course in which members of all divisions participate. All phases of the science, all of its ramifications, are now represented in the list of people we have working in our labora-From the Atlantic to the Pacific graduates of this department are carrying forward the work they have undertaken to make the world better for its inhabitants. This department is the best equipped of that in any institution to handle the various types of work required. We have sent out experts who are doing important work in the diseases of men and animals, in industrial plants where a knowledge of this science is essential, in soils, water supply, milk and foods.

"The purpose of this department aside from educational work is to teach the entire state. Although we have no extension workers the members of this department are constantly being called upon to aid municipalities, industrial concerns and groups of citizens in solving their problems. In addition to the work done here in research this department has the dis12

tinction of preparing the first text book in English, during the period when Dr. C. E. Marshall had charge, on bacteriology. Since then we have added a laboratory manual which is considered a standard work. Much of this has been possible because of the cooperation of all who have been employed here. We also have the college to thank for generous support for all our projects and having the foresight to realize the value of this work before most institutions thought its importance great enough to merit special consideration.

"Some of the work started here has spread far. The campaign for the eradication of bovine tuberculosis began in this department and is now being carried on on a wide scale by the state department of agriculture. Work is progressing on abortion in cattle which it is hoped may reach as great an influence as has the other efforts of the department. Dr. Stafseth is spending much of his time now on poultry diseases which have become very

serious.

"Food poisoning of all kinds is another matter which often comes to this department for solution. I recall the case of a farmer who purchased a large amount of oats and bran, only to have 150 sheep die. He sent us samples and we found the feed contained B. Botulinus, which causes much of the poisoning from the foods used by humans. In connection with this there is a large amount of work in food preservation, concerning methods of effective storing of materials in various ways. This involves research on decomposition and its results. We are doing the same thing with milk. L. H. Cooledge has recently perfected a new method of determining the keeping qualities of milk which has attracted so much attention that the University of British Columbia has sent a man here from Vancouver, B. C., to study the process.

"We are always working on vinegar cultures and have been successful in producing one of the best now in use which we ship out in large quantities. The refuse from sugar beets, a form of molasses, was used for a long time as repairing material for automobile radiators and other circulating systems. Its decomposition resulted in disagreeable odors and we were asked to investigate the cause and recommend a remedy. Yeast manufacturers ask our help in solving their problems and we have done a great amount of work on fermented milk drinks for which we have found a new form of culture which is considered

much better than B. Bulgaricum.

"On water supply our workers have been sent out to all of the important muncipalities and we have had an opportunity to use this means of spreading knowledge concerning protection and hygienic principles. This, however, is not a free service competing with commercial concerns who make such work their business.

"One of the spectacular features of our work is the dispensing of cultures of nodule forming bacteria used on alfalfa, clover and other legumes. In 1922 we sent out 30,000 of these and have had uniformly good results re-

ported

"In Michigan there are vast areas of peat land which is not arable but which we believe can be made available for agricultural use. Dr. Robert Snyder, '14, is working on this problem with the object in view of having a process ready when this land is needed for food production although we realize that there is no need for such development now, we believe it will be necessary before long and we

must be ready.

"Because of the large number of laboratory technicians we have produced in this depart ment and the ever increasing number we are preparing we are interested that the act now before the legislature requiring the licensing of these people be approved. The person in the laboratory is actually the most important factor in controlling disease. He or she should be well trained and as reliable as a physician for upon the work done there depends the value of the efforts of the doctor to diagnose the case he observes and to treat

it according to its nature.

"We are doing our best to aid the state educational authorities to spread the truths of science, we are endeavoring to uncover some of those truths, we are working with the industries of the state, with the municipalities and with the individual, the unit of society, to solve their problems. We spread the results of our investigations as far as the people will receive them and attempt to counteract the false impressions of life which have grown up This dethrough ignorance of our science. partment is primarily one for the betterment of human life. As such it receives the support of the college, draws earnest workers and produces useful citizens who are equipped and who demonstrate their ability to aid in the task of making the world a better place for its inhabitants.

CLASS NOTES

Good snapshots of yourself at work, at play, or with your family will be used in the Record if they are suitable for making cuts. Let your friends see you as you are. In sending pictures be sure they are fully identified as to names and places and are as clear as possible.

'69

James Satterlee writes from 913 W. Ottawa street, Lansing, "I am still a 'retired farmer.' Expect to have a fine garden though when the spring comes. Have to keep in touch with the dirt and watch things grow in order to keep well and smiling."

'87

E. A. Burnett may still be addressed at 3256 Holdredge street, Lincoln, Nebraska.

'89 William Lightbody has changed house numbers on Atkinson avenue, Detroit, to 1689.

Will Curtis, St. James, Minnesota, tells us: Will Curtis, St. James, Minnesota, tells us: "On January 1, 1923, I took my oldest son, J. Harold Curtis, into partnership with me on publishing the St. James Plaindealer. Harold served 16 months in France during World war. Was ambulance driver through all the fighting from May to November, 1918. Graduate of Hamline University and Columbia School of Journalism."

M. A. Crosby resigned his position with the Bureau of Agricultural Economics to accept a position as special expert with the U.S. Tariff Commission. He is living in Washington, at 1424 K Estreet, N. W.

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H. L. Brunger sends his blue slip in from 153 Western avenue, Mansfield, Ohio.

'03

George Tryon is still with the Anaconda Copper Mining Company at Great Falls, Montana, as mechanical superintendent of the Great Falls Reduction Works.

05

R. J. West reads THE RECORD at Springport

Michigan.

Harry C. Oven is specializing in gladioli, dahlias, garden seeds and Poland China hogs at Ovid, Michigan. He reports that they are the largest growers of gladioli in the world. They will plant about 150 acres this season.

06

Here's this from Mary Tingley, Manitou Beach, Michigan. "I read THE RECORD with interest. It sounds as if next Commencement would be in the lead of all efforts of the past."

07

George Ellis is hydrographer for the Montana State Engineer's office under the direction of the U. S. Geological Survey. He lives in Helena, at 18 Chaucer street.

Emil C. and Ida Pokorny are still addressed at 849 Edison avenue, Detroit. Emil has just finished up a thirty-one apartment building and has started on another of the same size.

Mrs. Pokorny is busy looking after Helen and
Inez. Next commencement will see them on
the campus.

We hear from Floyd Barden, South Haven, Michigan, "Still engaged in fruitgrowing. The past season was the best year ever experienced. I am still supervisor of the township. Myrta Severance Barden, '09, is the most important partner in the business and is very busy in attending to the wants of the four children.

17

Ralph Morgan has changed his address to Tennessee Farm Bureau, Jackson, Tennessee. E. B. and Alice Kuenzli ('16) Benson announce the arrival of Emily Anne on Februaary 10, 1923. The Bensons live in Nevada, Ohio.

A. L. Turner writes from 1465 Madison avenue, Apartment 3, Memphis, Tennessee, "Mrs. Turner (Susan Black '19) and I read The Record regularly. There is no one from M. A. C. in this vicinity that we know of so we keep in touch with things through The Record. I am still doing public accounting work with L. L. Bland, accountants and auditors. We make a specialty of accounting service for the hardwood lumber industry."



Cast and Chorus of "Campus Nights," the Union Opera

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HERE IS ONE WAY

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The M. A. C. RECORD

Established 1896

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ROBERT J. McCARTHY, '14, edior

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