

The M. A. C. Record.

VOL. 3.

LANSING, MICHIGAN, TUESDAY, OCTOBER 5, 1897.

No. 4.

Notice.

We intended that the first issue of the RECORD should get into the hands of every person connected with the College, either as student or employe; but possibly some were missed. We therefore send this copy to all such, and desire to call attention to the arrangement regarding subscriptions. By resolution of the Board of Agriculture the subscription price of the RECORD has been made 50c per year to all who wish to receive the paper regularly.

Students subscribing will have a copy of the paper sent to their parents, or guardians, regularly, free.

Subscribers may have the RECORD sent to their friends, not at the College, regularly, for 10c per year, extra.

We hope and expect that every one on the grounds will feel it not only a privilege but a duty to subscribe to the RECORD. The paper is published by the College and must be made as nearly self-sustaining as possible. To that end a fine line of advertising from Lansing merchants has been secured, and we have already obtained a large number of subscriptions from the faculty and students, although we have been unable to make a complete canvass of the College.

Please leave your subscription, as soon as possible, with Mr. F. C. Kenney, the cashier in the secretary's office. We are prepared to supply the first three numbers of the year to those who subscribe now.

A Model Cold Storage Building.

M. A. C. now has one of the best small cold storage buildings in the country. In general plan and dimensions our building is the same as the one at the Geneva, N. Y., Experiment Station, but the outer wall construction of the two differs much.

The building stands facing the north about midway between the "Hort" barn and the grain barn. There are two natural temperature rooms, each 25 feet by 20 feet, one on the ground floor and the other in the basement directly beneath, in which it is designed to store the bulk of the fruit crop. Air enters these rooms through a 10 inch tile flue extending to a point 100 feet from the building, and escapes through ventilating flues leading to the cupola.

In the north end of the basement is a room 25 feet by 10 feet, in which fruit will be preserved at a temperature of 35°. Cold air will descend from the ice room above and being slightly warmed by passing over the fruit will ascend from the other side of the room, pass again over the ice and down to the basement, thus keeping up a constant circulation.

In order that the bulk of the fruit may not be disturbed too frequently, a small show room has been provided on first floor, in which samples of each variety will be kept in slat bottomed trays convenient for examination.

The ice room is in the north east corner of the building. It is provided with a tinned floor, inclined

so that the drip will pass off readily and find exit through the tile air flue before mentioned, at the same time cooling the air that enters the large store room.

The outer walls of the building have been constructed with great care, the design being to secure as nearly as possible a wall that will be a perfect non-conductor of heat. The frame is constructed of 2 in. x 4 in. studding placed 16 inches apart. The air spaces between the studding is divided into longitudinal sections four feet high by cross-pieces. On the outside of the studding is a layer of heavy building paper, covered with matched hemlock flooring, outside of which is another layer of building paper. To this are nailed vertical strips one inch thick and two inches wide, sixteen inches apart; also similar strips placed longitudinally three feet apart. Against these strips is placed extra heavy building paper, thus forming cells 3 1/2 in. x 14 in. x 1 in. Then follows another series of strips and layer of building paper as before, forming another set of air chambers. Outside of all this is a layer of matched flooring. Then come more 2 in. x 1 in. vertical strips, forming, with the siding, vertical air chambers which extend from the water-table to the eaves. In summer these outer air chambers will be left open at the bottom, so that the heated air can pass into the attic and out through the cupola without heating the interior of the building. The inside wall is the same as the outside except that the second layer of flooring is replaced by ceiling. A cross-section of the wall would show one 4 inch air space, five 1 inch air spaces, five thickness of ceiling and siding and eight thicknesses of paper.

A part of the south wall has been arranged for experiment, some sections being packed with coal cinders, and others arranged with from one to five partitions in the air chambers. All windows are double, with shutters on the outside. The doors are somewhat similar in construction to the outer walls, and all connections are as nearly air tight as possible. The interior is finished in hemlock, except the show room, which is finished in Georgia pine.

It Was Our Game.

Last Saturday was the first time in years that an M. A. C. crowd has had opportunity to yell at an intercollegiate foot-ball game. It was a good day for the crowd and they came in large numbers. They came out expecting to yell, and were not disappointed by the sturdy boys who have been training so faithfully during the past three weeks, though the day was most too warm for the players.

At five minutes to three our boys trotted briskly to the center of the gridiron and began warming up. They were followed almost immediately by the supporters of the red. Promptly at three o'clock play was called. Olivet defended the south goal and M. A. C. had the kick-off. Becker sent the ball sailing forty yards into Olivet's territory. Olivet made several end gains, returning

the ball to her 35 yard line, when Woodworth broke through the line and captured the ball on a fumble. Several fumbles followed, and then the M. A. C. boys "struck their gait." Time after time they broke Olivet's line for long gains through center, guard and tackle, and in nine minutes from the call of time had pushed the ball over for the first touch-down. Russell kicked goal.

Olivet kicked off 25 yards and Price brought the ball back 10 yards. Olivet held M. A. C. for downs, but lost it almost immediately in the same way. Becker and Tate made long gains, and in nine minutes our boys had the ball over for the second touch-down. Russell failed in kicking for position.

It took just 12 minutes to get the third touch-down, to which Olivet contributed 15 yards by an off-side play. Russell kicked goal, and the first half ended with the score 16 to 0 in favor of M. A. C.

In the second half Olivet put Howe, a one-armed man, in center, who strengthened their line materially. Notwithstanding this our boys scored in eight minutes, but failed to kick goal.

Soon after the ball was again put in play Olivet lost 15 yards on another off-side play. M. A. C. rushed the ball to Olivet's 40 yard line, then Brainerd made a brilliant break through Olivet's line and a run of 40 yards for a touch-down. Goal was kicked by Russell.

The next inning was Olivet's. Baker at right end had weakened from an injury in the first half, Brainerd at left half was showing the result of 45 minutes of terrific work, and Fuller and Moore for Olivet made long gains around the ends. That they did not score much sooner was due to the brilliant tackles made by Smith of M. A. C. Olivet continued her fast work and finally pushed the ball over for her only touch-down, and kicked goal.

After this neither side scored. Bartholomew took Baker's place at right end. The ball was in M. A. C.'s territory most of the remaining time, although the game ended on Olivet's 35 yard line with M. A. C. in possession of the ball. Final score: M. A. C. 26, Olivet 6. Following is the line-up of the teams:

M. A. C.	Position.	Olivet.
Vanderstolpe	Center	Gage
Becker	Right Guard	Mackey
Woodworth	Right Tackle	Moore
Baker	Right End	Evans
Williams	Left Guard	North
Price	Left Tackle	Martin
Russell	Left End	Mills (Capt.)
Ranney	Quarter	Reynolds
Tate	Right Half	Ingram
Brainerd (Capt.)	Left Half	Fuller
Smith	Full Back	Rowley

Referee and umpire, Prof. L. D. Milliman and Henry Keep, alternating. Lineman and time keeper, W. J. Merkel.

The best of feeling prevailed throughout the game, the crowd cheering Olivet heartily for the plucky work that won a touch-down so near the end of the game.

Notes from the Farm.

Professor Mahan, dean of the Battle Creek College, came here Friday to investigate our system of

student labor, with a view of introducing it at Battle Creek.

Notwithstanding the intensely dry weather the wheat in Sixteen and Six is as green as a lawn.

Mr. F. H. Vandenboom, of Marquette, a prominent dairy farmer of that section visited the College on Friday and Saturday.

Mr. Alfred Mann, a lumberman and woodenware merchant of Milwaukee, visited the College Friday to make inquiries about fruit and live stock.

The Farm Department purchased ninety grade Shropshire lambs of Chas. Carl on Wednesday last, to be delivered in a couple of weeks, in time for the winter feeding.

The new dairy herd was moved into the new barn last Thursday. The new barn is not yet completed fully, but will be in the next few days, when a description of it will be given in the RECORD.

A new side track has been put in by the D., G. R. & W. R. R., at the end of the College lane for side tracking the College coal. The grading alongside of the track has now been completed, and hereafter the coal will be hauled up the lane instead of being drawn from Trowbridge.

M. A. C. Men in the Institute Societies.

By looking over the annual report of the Superintendent of Institutes we find that quite a number of M. A. C. men are active members of the local farmers' institute societies.

A. J. Bracelin, with '71 is president of the farmers' institute society in Allegan county and W. E. Bond, with '89, is secretary. E. O. Ladd, '78, Grand Traverse, is secretary in Grand Traverse county. Earl H. Dresser, with '84, Jonesville, occupies a similar position in Hillsdale county. John E. Taylor, '76, presides over the Montcalm county society, and James Y. Clark, '85, keeps the minutes of the Oakland county society. C. B. Cook, '88, Owosso, and W. W. Bemis, '76, Ionia, record proceedings in their respective county societies. Hon. Oscar Palmer, Grayling, at one time a student here and, later a member of the Board of Agriculture, is president of the Crawford county society.

Slips of the Tongue.

Professor Woodworth says there are two classes of people—those who will be good for pay, and those who are willing to be good for nothing.

Harry—"What beautiful teeth Miss K. has."

Miss G.—"Why, I always supposed she had false teeth."

Harry—"You mustn't think that because a girl has a falsetto voice she has a false set o' teeth also."

Professor Mumford had just told his class studying live stock about a famous breeder. One of the freshmen asked, "What is that man's address?" Prof. Mumford—"I can't give you his exact address; he died a few years ago."

THE M. A. C. RECORD.

PUBLISHED WEEKLY BY THE
MICHIGAN AGRICULTURAL COLLEGE.

EDITED BY THE FACULTY,
ASSISTED BY THE STUDENTS.

SUBSCRIPTIONS SHOULD BE SENT TO THE SEC-
RETARY, AGRICULTURAL COLLEGE, MICH.

SUBSCRIPTION, - - 50 CENTS PER YEAR.

Send money by P. O. Money Order, Draft, or
Registered Letter. Do not send stamps.

Business Office with THOMPSON & VANBUREN,
Printers and Binders, 122 Ottawa Street
East, Lansing, Mich.

Entered as second-class matter at Lansing, Mich.

For various reasons THE M. A. C. RECORD is
occasionally sent to those who have not sub-
scribed 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.

Mechanical Precision.

W. S. LEONARD.

There is a saying that "Trifles make
perfection, but perfection is no trifle." This
is true in many departments of life. It is
especially applicable to the mechanic arts
and often to the fine arts. Go into any
museum of art; you will observe that some
of the statues receive but a passing notice
while a real work of art is the inspiration
of an admiring throng. What is the differ-
ence in the two cases? From the material
standpoint the difference is often inappreci-
able. The merest touches of the chisel give
that finish and perfection which distinguish
the masterpiece from the commonplace. So
with painting; only an expert can discover
the technical difference between a Michel-
angelo's Madonna and a work of less fame,
but in the former the personality, the very
soul of the subject, speaks from the canvas,
while the latter may have but little moral
force.

If now we turn our attention to the
mechanic arts, we find the same principle
holds good. Take for instance a simple 1"
metal cube. It may be filed to within half
a hundredth of an inch of the correct size
and angle in a comparatively short time,
but if we attempt to file it so close that
the best instruments will not detect any
inaccuracy the cube may cost fifty times
as much as the less accurate one. The
time, the money, the skill is required to
give the trifling touches that make the
perfect cube.

A screw two inches long and half an
inch in diameter, good enough for general
work, can be bought for a few cents; but
if you stipulate that the screw must be
accurate in diameter and pitch to a quarter
thousandth of an inch, it will have to be
made to order in one of the few establish-
ments prepared to do such fine work, and
will cost many times the price of the stock
screw. The screw is probably used more
than any other device known in engineering,
and it is fortunate that perfection in its
pitch is seldom required. However, extreme
accuracy is sometimes indispensable, as will
presently be shown in reference to the
dividing engine built by Professor Rogers
of Harvard College. There is in the Stand-
ards office in the Tower of London a bar
of metal having upon it two lines exactly
three feet apart. These lines are not made
directly upon the bar but upon gold studs
sunk into the bar, so that the defining lines are

in the neutral axis of the bar. This
precaution is taken to obviate difficul-
ties from flexure, notwithstanding the
bar rests upon a suitable support. It
should be stated that the temperature
is an important consideration in estab-
lishing standards. Comparisons with the
British standard are made in a tempera-
ture of 62 F., but it has been suggested
that a higher temperature should have
been chosen as being less likely to be
affected by heat from the body of the
person making the comparison. A copy
of the "imperial yard" is kept in Wash-
ington, and these two yard sticks con-
stitute the standard of length for all
who use the English system. To con-
struct a machine capable of accurately
dividing this yard was the task Prof.
Rogers essayed to accomplish.

Many creditable efforts had previous-
ly been made in this direction. Sir
Joseph Whitworth, of England, had estab-
lished a reputation for work of this
character, and Brown & Sharpe, of
Providence, R. I., had a secret process
which produced very fine results. To
say that Prof. Rogers sought a closer
degree of accuracy than had been ob-
tained by Brown & Sharpe is to indi-
cate the exacting character of the work
required. As intimated, an extremely
accurate screw was an indispensable
requirement in the proposed dividing
engine, and the Waltham Watch Works
was selected as the establishment best
equipped in tools and talent in which
to conduct the experiments.

The work was begun in January,
1887. In designing the first machine
Prof. Rogers was assisted by Superin-
tendent Vanderwoerd, a man of wide
reputation in connection with astro-
nomical clocks and other fine work.
This machine was constructed some-
what on the same principle as a metal
shaper. The tool for making the lines
was carried by a reciprocating ram and
the work to be divided was moved by
the screw previously mentioned. To
make this screw sufficiently accurate
was the greatest problem in connection
with the machine.

In threading a screw in the lathe the
blank on which the thread is to be cut
revolves with the lathe spindle, and
the carriage carrying the cutting tool
is automatically moved forward a dis-
tance equal to the pitch of the thread
for each revolution of the lathe. This
movement of the lathe carriage is ef-
fected by a screw running in fixed
bearings in the lathe bed or frame, and
in a nut fixed to the carriage. It will
readily be understood that in order to
cut a perfect screw this lathe screw
itself must be perfect, as well as other
accompanying parts of the lathe. Prof.
Rogers could find no lathe having a
lead screw sufficiently accurate, so that
the problem involved cutting a perfect
screw with an imperfect lead screw.
An old mechanic would suggest that
having threaded the screw as nearly
right as possible the remaining errors
could be ground out by means of a nut,
emery and oil. Never was this lap-
ping process tried so persistently as
was done by Prof. Rogers and his
workmen. After months, and even
years of this grinding they had failed
to make a "perfect" screw, and they
finally concluded that while grinding
would correct short inaccuracies, it
would not remove errors of gradual
increase, extending over six inches or
more. They had now spent about five
years on this experimental machine,
the most of the time being consumed
in threading and grinding different
screws; and, while they had done some
excellent work, the "perfect" screw
was still the unsolved problem.

But these years of patient labor
were not wasted. Prof. Rogers had
learned "how not to do it," in refer-
ence to the screw, which was a valu-
able lesson; and the other experiments
had enabled him to settle upon an im-
proved design of machine which would
eliminate other sources of error. At
this juncture the experiments were
stopped for a time, and when the work
was resumed again it was in Prof.
Rogers' own shop in Boston. He took
with him Mr. Ballou, one of the me-
chanics who had assisted him from the
beginning. Philosophizing on their
experiments and failures, they con-
ceived a better plan of making the
screw. In this latter plan the blank to
be threaded was mounted in the lathe
as before, and by means of a micro-
scope and other apparatus the errors
were noted and corrected for each
half inch travel of the lathe carriage.
That is to say, that if the tool had tra-
versed a fraction too far or too short
it was by means of the compound rest
brought to a correct position for each
half inch. This still left minute errors
which were corrected by grinding, and
when finished the screw was correct
to the one twenty-fifth of one one-thou-
sandth of an inch.

In less than seven months after
starting in the Boston shops Prof.
Rogers had built a new machine and
was doing practically perfect work.
The experiments in the Waltham shops
had demonstrated that the shaper de-
sign introduced errors due to deflection
of the ram, and the new machine was
constructed after the design of a planer
in which the table reciprocates and the
marking tool has only the screw move-
ment. In this final form, the machine
will accurately mark off the standard
yard into the finest microscopic divi-
sions. As thus constructed it is known
as the "Cornell Dividing Engine," the
machine having been sent to Cornell
University, where it remains a monu-
ment to the persevering genius of Prof.
Rogers and Mr. Ballou.

New Students.

The following list contains the
names and addresses of the new
students at the Agricultural College
this term:

AGRICULTURALS.

Bach, Franklin A.,	Sebewaing
Baker, Hugh P.,	St. Croix Falls, Wis.
Beebe, Channing B.,	Tipton
Bass, Chas.,	Grand Rapids
Bishop, Chas. A.,	Kalamazoo
Bowman, Clare A.,	Adamsville
Bos, William,	Forest Grove
Bradford, Howard,	Ionian
Brown, Roy,	Monterey
Brower, C. Ernest,	Saranac
Burcham, O. S.,	Agr'l College
Burr, Fred,	Linden
Case, Everett,	Pentecost
Chadsey, G. E.,	Thompsonville
Chambers, Milton,	Brice
Clement, Arlo,	Church
Curtis, Wm. E.,	White Pigeon
Cook, Walter,	Okemos
Cryderman, Geo. E.,	Armada
Cuthbertson, Allan W.,	Pontiac
Dail, Ernest I.,	Holt
DeKleine, Abraham,	Forest Grove
Dyer, John A.,	Crystal
Edgar, Oliver,	Lakeview
Eustace, Harry J.,	Rochester, N. Y.
Foster, J. Lee,	Saginaw
Foster, Lewis Erwin,	Saginaw
Foster, Floyd O.,	Cascade
Gale, Lawrence R.,	Cleveland, O.
Gingrich, Irving,	South Bend, Ind.
Gutekunst, Gustave,	Grass Lake
Hawley, Chas. A.,	Rochester
Hart, L. Jay,	Tuscola
Haven, Clare W.,	Lansing
Hayden, Wm. A.,	Jackson
Hepburn, R. P.,	Evart
Hillman, Max G.,	Ortonville

Jones, Emory C.,	Middleville
Karkau, August,	Lansing
Kennedy, S. J.,	Pinckney
Kerns, Willis J.,	Charlevoix
Kaylor, Chas. W.,	Harbor Springs
Kendrick, J. L. S.,	Saginaw
Leng, B. A.,	Wayne
Luce, Ransom W.,	Grand Rapids
McBean, Archie,	Grand Marais
McCune, N. A.,	Petoskey
McCue, Chas. A.,	Cass City
Mitchell, Frank H.,	Owosso
Martin, Ned,	Lansing
Niebling, Wm.,	Okemos
Olsen, Franklin,	St. Joseph
Parker, Harold O.,	Howell
Parnag, Hrand Y.,	Turkey
Parsons, Cassen E.,	Grand Blanc
Patriarche, Herbert K.,	Saginaw
Pierce, Leon F.,	Lansing
Pentecost, Floyd W.,	Tipton
Phillips, Frank J.,	Grandville
Rankin, John M.,	St. Clair
Kendrick, Eugene C.,	Marsland, Neb.
Rochester, Sidney,	Eaton Rapids
Towner, Kirk,	Haslett Park
Tower, G. E.,	Otisco
Sanford, Geo. D., Jr.,	Grand Haven
Seeley, Chas.,	Belding
Schwartz, Walter,	Saginaw, E. S.,
Schreiber, J. H. A.,	Lansing
Severance, Howard,	Walled Lake
Severance, Geo.,	Walled Lake
Scott, Guy F.,	Lansing
Shepard, Phil,	Owosso
Shoesmith, Vernon M.,	Leslie
Skinner, J. Hackley,	Cooper
Smith, Robert D.,	Corning
Snook, Burton D.,	Rochester
Southwick, Roger,	Houseman
Stark, Geo. R.,	Cascade
Stewart, John B.,	Hayes
Strange, John B.,	Lansing
Stringham, Claud C.,	Eaton Rapids
Stringham, Clifford D.,	Eaton Rapids
Walter, Sam'l J.,	Clarkston
Warner, John Wm.,	Dowling
Whitney, Roswell A.,	Jamestown
Williams, Arthur C.,	Church
Willmarth, Hugh C.,	Lansing
Willmarth, Mark S.,	Lansing
White, Geo. D.,	Hayes
Wright, Winfred R.,	Three Oaks

MECHANICALS.

Agnew, T. G.,	Corunna
Aldrich, J. G.,	Edwardsburg
Babo, Kurt,	Lansing
Babington, Carl S.,	Corunna
Bailey, Will J.,	Lansing
Ball, Joseph,	Flint
Bohn, Edward A.,	Lime Ridge, Wis.
Bartholomew, F.,	Charlevoix
Baumler, J. L.,	Saginaw
Boals, Harry,	New Buffalo
Brown, Earl A.,	Coldwater
Bohn, Rupert,	Charlotte
Brunger, Harry L.,	Grand Ledge
Carr, Robert R.,	St. Ignace
Champion, Will C.,	Joyfield
Cornell, C. E.,	Lansing
Cowley, Louis K.,	Three Rivers
Cowling, Harry G.,	Algonac
Crocker, Ronald M.,	Grayling
Eickhoff, Winfield L.,	Chesaning
Eldred, Ralph N.,	Fowlerville
Dunston, Wayne E.,	Swartz Creek
Fay, Homer D.,	Tecumseh
Finch, Delmar B.,	Vassar
Green, James C.,	Lansing
Havens, Chas. E.,	Lansing
Hasty, Ralph G.,	Traverse City
Hastings, Ralph S.,	Homer
Hayes, Arthur H.,	Lansing
Hatch, Roger C.,	Detroit
Gibson, Chas. C.,	Galien
Ingles, D. Earl,	Chesaning
Ireland, Mark L.,	Agr'l College
Krentel, Geo.,	Corunna
Leavitt, T. J.,	Carson City
Lester, B. H.,	Pittsford
Lickly, R. M.,	Orion
Littell, L. Bayard	Chicago, Ill.
Maddougall, Dougall,	Cassopolis
Mansfield, Frank W.,	Kalamazoo
Mead, Oscar F.,	H., Linden
Middlesworth, Clyde H.,	South Haven
Millar, Phelps,	Richmond
Norton, Roy M.,	Saginaw
Perrin, James L.,	Montvernon
Pike, Ollie E.,	Schoolcraft
Pursel, Evert W.,	Speaker
Putney, Herbert S.,	

Radford, Fred L., Pine Creek
 Rosenberry, Harry L., Fulton
 Russell, Wm. B., Benton Harbor
 Smith, Carl H., Lansing
 Smith, Earl I., Lansing
 Slocum, Edward John, Grand Rapids
 Strobel, Chas. W., Dimondale
 Tate, Chas. G., Altoona, Pa.
 Taylor, Lawrence H., Climax
 Thompson, John Roy, Grand Rapids
 Townsend, Ira D., Orangeville
 Townsend, Vern, Lansing
 Trumley, Elmer N., Grayling
 Vannier, Raoul W., Marquette
 Van Riper, G. A., Cassopolis
 Wall, Ralph E., Rockford
 Weatherwax, Harry C., Grand Rapids
 Wells, Walter W., Oak Grove
 Westover, J. Brock, Mt. Morris
 Williams, G. S., Charlevoix

WOMEN.

Aseltine, Alice, Mason
 Banghart, Bessie, Lansing
 Bach, Emma, Sebawaing
 Bohn, Mabel Eva, Charlotte
 Broughton, Libbie, Middleville
 Carpenter, Jennette C., Orion
 Cimner, Allie M., Highland
 Clute, Marion M., Agr'l College.
 Cobb, Matie A., Edwardsburg
 Dean, Clare, Mt. Pleasant
 Felker, Ruth, Riley Center
 Garfield, Deborah, Grand Rapids
 Graham, Caroline, Edwardsburg
 Graham, Miriam, Edwardsburg
 Harrison, Celia A., Milford
 Kuhn, E. Blanche, Saranac
 Kramer, Mary, Lansing
 Lane, Anna, Mason
 Lane, Emma, Mason
 Lowe, S. Gertrude, Jackson
 Melton, Grace, Mason
 Merrill, Edith, St. Louis
 McLeod, Maud, Ionia
 Ohland, Clara D., Saginaw
 Paddock, Fleta, Agr'l College
 Plant, Nellie, Milbank, S. Dak.
 Sattler, Nellie, Grand Ledge
 Schooley, Elizabeth, Lansing
 Spencer, Josephine A., Kibbie
 Vaughan, Sarah, Lansing
 Van Loo, Cornelia S., Zeeland
 Woodbury, Vesta, St. Johns

SPECIALS.

Brown, Mattie M., Grand Rapids
 Bulkeley, J. A., Sidney, New South Wales
 Chapin, Mary Bogardus, Lansing
 Davis, June Louise, Lansing
 Hedges, Florence, Lansing
 Hopkins, Georgetta B., Lansing
 Keep, Henry, Detroit
 Lewis, Harry W., Otsego
 Northrop, Robert, Lansing
 Reynolds, A. W., Cassopolis
 Smith, Lottie, Lansing
 Swift, A. Thorne, Harbor Springs
 Thomas, H. T., South Ryegate, Vt.
 Tripp, M. O., Bass River
 Taylor, Emma Russell, Almont

At the College.

John Severance, '98, returned to M. A. C. last week.

Prof. H. W. Mumford attended the Hillsdale county fair Thursday.

Found, on the lawn near Station Terrace, a two-foot rule. Owner may get the same at room 6.

Miss McDermott is gaining in health and will probably be able to resume class work in a few days.

Lost, between College and Abbot Halls, an essay. Finder please return the same to E. R. Russell, room 6.

Mrs. G. A. Waterman has arrived in Lansing, where she and Dr. Waterman will reside at 714 Capitol Avenue south.

The King's Daughters will meet with Mrs. Elderkin, Wednesday at 2:30 P. M. Leader Mrs. Woodworth. Subject, "The Letter and the Spirit."

Miss Ella Lockwood, '00, returned to College last week. She

was prevented from returning at the opening of the term by being injured in a runaway.

Miss Irene McDermott, private secretary to Taylor Sons, wholesale dealers, Pittsburg, Pa., has been spending a week with her sister, Prof. Edith McDermott.

Mr. and Mrs. C. H. Ruppel, of Detroit, Mr. Theodore Poillion and Miss Helena Hillman called at M. A. C. recently to see their friend and brother, M. G. Hillman, '01.

Dr. and Mrs. Irwin F. Smith, of Washington, D. C., dined with Prof. and Mrs. Wheeler last Wednesday. Dr. Smith is bacteriologist in the U. S. Department of Agriculture.

The Congregational Society of Christian Endeavor, of Lansing, entertained about forty students of the College of Congregational affiliation at the home of Rev. C. F. Swift last Friday evening.

The young women of the freshman class began work in the wood shop last Friday afternoon under the instruction of Mrs. Hayner. Your reporter will vouch for the fact that they are straight up and down sawyers.

Owing to the increased attendance this year the College authorities have applied to the war department for more rifles. An effort is also being made to have our old Springfield rifles replaced by the new Krag-Jorgensen rifles.

At a recent meeting of the senior class the following officers were elected for the ensuing year: President, Dewey A. Seeley; vice-president, Miss Bertha Baker; secretary, Homer C. Skeels; treasurer, Miss Catherine Watkins; marshal, Miss Clara Steele.

The young people of the Epworth League of Central Methodist Church extend a cordial invitation to all M. A. C. students to attend a reception given in their honor at the Central M. E. Church Lansing, Friday evening October 8th, from 7:30 to 10 o'clock.

Already applications are coming in for admission to the short course in cheese making, which will open November 29 and run to the close of the regular fall term. The estimated necessary expense of the course is about \$17; \$2.50 for incidental fee, \$12 for board, and \$2.40 for street car fare. As only 20 can be accommodated those who apply first will stand the best chance for admission.



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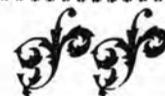
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Glass of '01—Greeting!

We take pleasure in extending to the Class of '01 a hearty welcome to our city. We feel justly proud of the foremost position which our M. A. C. holds among such institutions of the world, and we are pleased that so many representative young men and women have shown their appreciation of its many advantages. We wish you abundant success.

Sometimes known as the M. A. C. Shoe Store.

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News from Graduates and Students.

A. R. Waterbury, with '99, is at the Normal this year.

H. Z. Ward, '91, was at the College Saturday, September 25.

The best orchestra in Lansing is the one managed by R. C. Bristol, '93.

A. S. Osborne, with '83, is one of the proprietors of the Rochester Business University.

L. A. Bregger, '88, attended the recent meeting of superintendents of cemeteries in Cincinnati, Ohio.

Frank Yebina, '95, has sent several excellent photographs of Japanese groups to Mr. G. H. True.

John Goodrich, with '97, and George M. Houk, with '00, came up from Detroit with an excursion September 26.

Prof. William J. Meyers, '90m, is now located at 209 South Thayer St., Ann Arbor, Mich., where he enters upon a course in law this year.

Our old students would hardly recognize our little short-stop of '90 and '91, who is now Dr. Joseph Foster and tips the scales at 190 pounds.

John W. Rigterink, '97, spent Wednesday night and a part of Thursday at M. A. C. He was on his way to Ann Arbor to enter upon the study of medicine.

V. H. Lowe, '91, and his father were at the College a short time Thursday calling on Miss Gertrude Lowe. Mr. and Mrs. Lowe return to Geneva, N. Y. this week.

Russel A. Clark, '76, of Pittsburg, Pa., called at the College September 24 on his way from the meeting of the National Association of Life Insurance men at Milwaukee.

Dr. Joseph B. Griswold, who was at one time a student here, is president of recently organized Grand Rapids Medical College. Fred W. Kramer, with '97, is instructor in chemistry in the same institution.

A. M. Meyers, with '93m, stopped at M. A. C. Saturday evening, Sept. 25, to see his old friends, and spent the night with his brother-in-law, E. C. Jones, '01. He was on a wheel trip from Ovid to Homer.

Mr. F. E. Skeels '78 has assumed the duties of the position to which he was recently appointed by the Board, assistant secretary of the College. Mr. Skeels will reside on Michigan Avenue east, having rented the Weed property, which he will occupy about the 15th of this month.

On June 28, at the residence of the bride's mother in Alma, occurred the marriage of John E. Mayes, with '99m, of Carson City, to Miss Effie M. Whipple. Mr. Mayes left college at the close of last winter term and is at work in Alma. He expects a position with the Alma electric lighting company soon. His many friends at M. A. C. unite in wishing the young couple a prosperous and happy future.

Much Credit Due Our Graduates and Students.

Some very interesting facts are developing as a result of a census now being taken among the new students. To each new student has been sent a blank upon which are a number of questions to be answered,

the purpose being to ascertain what influences were most potent in bringing the student to M. A. C.

The census is far from complete as yet, but from an examination of answers from 108 students it is learned that great credit is due our graduates, former students and present students for the large class that entered this fall. Over 59 per cent of those who have sent in answers say that they were influenced in their decision to come to M. A. C. by graduates and students of the College, and over 39 per cent of the whole number give more credit for their coming to graduates and students than to any other influence. That those who left College without completing the course are still loyal to the institution is shown by the fact that 45 per cent of those who used their influence toward sending students here were non-graduates.

Other interesting figures might be given, but it is thought best to wait until the census is complete. It is no more than fair to say in this connection, however, that farmers' institutes and farmers' clubs, granges, excursions to the College, the M. A. C. RECORD, the College catalog, the Michigan Farmer and other papers, and personal letters from President Snyder have all exerted an influence toward the advancement of College interests. One student says he came here as a result of reading a short biographical sketch of one of our graduates, Prof. Liberty H. Bailey.

We should be considered ungrateful indeed if we did not freely acknowledge our indebtedness to that numerous throng of loyal supporters, the graduates and students of M. A. C., who have always worked so unselfishly for the best interests of their alma mater. We feel deeply our obligation to them and hope to be worthy of their continued hearty support.

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DRUGGISTS.

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C. M. WATSON, M. D.—Hours, 2 to 4 and 7 to 8 P. M.; Sundays 12 to 2 P. M. 419 Washington Avenue S. Both Phones.

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