THE FOOTBALL SQUAD

Left to right—Top row: Oviatt, Childs, Brownfield, O'Callaghan, McClelland, White, McWilliams, Loveland.


Third row: Hutton, Vandervoort, Smith, Julian, Blacklock, Henning, Peterson.

Bottom row: Straight, DePrato, Vaughn, H. Miller, B. Miller, "Dutch" Miller, Chaddock.

Published by

© MICHIGAN AGRICULTURAL COLLEGE ASSOCIATION
East Lansing, Michigan
THE M. A. C. RECORD.

DIRECTORY
Lansing Business and Professional Men

The names in this Directory, as well as those of all other advertisers, are of reliable parties. We hope the faculty and students will patronize those who patronize us.

A. M. EMERY
116 Washington Ave., N.
Books, Fine Stationery, Engraved Calling Cards, Fountain Pens, Pictures, Frames, Fine Framing a Specialty. Calling cards printed promptly. $1.00 per 100.

CROTTY BROS.
28 No. Washington Ave.
Stationery, Books, Bibles, Fountain Pens, Diaries, for 1915, I. P. Note Books.

BLUEDAE & SIEBERT

LOUIS BECK COMPANY
112 No. Washington Ave.
Correct Clothes, Up-to-date Hats and Caps, Classy Furnishings.

H. H. LARNED
CHINA, GLASS AND LAMPS
109 Washington Ave., S.

J. E. STOFFER, D. D. S.
Office 203-5 City National Bank Bldg.
Automatic Phone 2861. Bell Phone 61.

NORTON'S HARDWARE
General Hardware, Tinware, Graniteware, Cutlery, Stoves, Etc.

MRS. O. T. CASE
Manufacturing all styles of Hair Goods to order, and Hair Goods Shop. Old switches enlarged, colored and renovated to look as good as new.
The Franco-American Hygienic Toilet Reembalts a specialty.
Automatic phone, No. 361. 214 Washington Ave., S.

DR. OSCAR H. BRUEGEL
Cor. Michigan Ave. and Grand River Ave., East Lansing.
Hours: 7 to 8:30 a.m., 1 to 4 and 7 to 8 p.m. Sundays, 12 to 1 and 5 to 6 p.m. Citizens' phone 1414: Bell 656.

DR. H. W. LANDON
East Lansing, Mich.
Office hours: 7 to 8:30 a.m., 1 to 4 and 7 to 8 p.m. Sundays, 12 to 1 and 5 to 6 p.m. Citizens' phone 3028.

DR. J. S. OWEN
EYE, EAR, NOSE AND THROAT

ALLEN & DE KLEINE PRINTING CO.
128-149 Ionia St., west
Printing, Typewriters, Adding Machines, Office Supplies, Programs, Engraved cards, Calling cards, Sectional Book Cases, Automatic 326. Special care given to M. A. C. and its students.

A. E. OWEN, M. D.
128 W. Allegan St., Lansing, Mich.
EYE, EAR, NOSE AND THROAT.

DR. C. A. GRIFFIN, Osteopath

CAPITOL ELECTRIC SUPPLY CO.
Electric Supplies of All Kinds
Latest Improvements in Reading Lamps, Tungsten Lamps, Shades, etc., Motors and Generators.
117 Michigan Ave., E.

Alumni Business and Professional Directory

PAGELS\N & SPENCER
PATENTS, PATENT LAW, TRADEMARKS
1107-10 Chamber of Commerce Bldg., Detroit, Michigan
E. N. Pagelsen, '89 - L. M. Spencer, '06
Formerly Examiners U. S. Patent Office.

DR. E. A. SEELYE, Osteopathic Physician
300 Prudden Bldg., Lansing. Hours: 9 to 11:30 and 12 to 5.
Special attention given to rectal diseases.

KUMBOSS! KUMBOSS! KUMBOSS!
Holsteins, of course.
KUMBOSS HOLSTEIN FARM, Howell, Michigan
J. G. Hays, '91, Proprietor.

GOODELL, ZELIN C. (Forestry, M. A. C.'11)
INSURANCE AND BONDS OF EVERY KIND
If you haven't insured your salary, better see or write
Goodell about a good proposition.

PAINT MADE BY AN M. A. C. MAN.
Sold only direct to you from his factory at wholesale price. Made up fresh as you order, and is the very best quality that can be made. Address
THE WEST CHEMICAL & PAINT CO., Mgrs., SPRINGPORT, MICHIGAN West pays the freight.

Invitations, Programs, Cards, Announcements
Personal Stationery
Engraved or Printed
Always a selection of the latest styles and the newest features conforming to correct social usage
Orders sent in by mail receive our most careful attention

Robert Smith Printing Co.
Lansing, Michigan
EXPERIMENT STATION WORK.

Up until now, winter barley has not been a success north of the Ohio river, as all previous existing varieties were killed by hard winters. The Michigan Experiment Station has three winter barley strains that successfully passed the severe winter of '11-'12, and one of these is being increased at the U. P. Station at Champion, and its performance there seems to indicate that the winter barley belt will be extended to Lake Superior.

The average production of barley in Michigan is set at 25 bushels per acre. Two of the strains mentioned above, grown at the station here this last year, averaged 55.4 bushels. If generally grown, these winter barley strains may double the average yield of barley in the state. Compared with oats on the basis of pounds of grain per acre, 55.4 bushels of barley equals 83.1 bushels of oats.

The station also has a Rosen rye that is proving very good. Rosen, a graduate of this institution in '89, had several samples of seed sent from Russia. From these one strain was increased until the fall of 1912, when ten bushels were sold out to six different farmers. Only one of these replied. He sowed the one bushel sent him on one acre and harvested 25. This was sold to neighbors, and one man in Hillsdale county got hold of five bushels, which he sowed on seven acres, and harvested 411 bushels, or 58.8 bushels per acre. Horton, of Albion, had 500 bushels of this rye this year, and his neighbors had enough to make up 1,500 bushels. This was sold locally very largely, only one-tenth of it passing through the Michigan Experiment Association. Orders for 145 bushels more were received at this station after the supply was exhausted. This looks as if the farmers of the state were beginning to make use of the Experiment Station that is their due.

THE TWO YEAR SHORT COURSE.

Next Monday, October 26th, sees the beginning of the second year of the two-year course in agriculture. Last year there was an enrollment of 121 and the indications are at present that this year's enrollment will easily pass the 200 mark. Twelve thousand bulletins regarding this have been sent out and also large circulars to the farmers' clubs, granges, and like organizations. Many calls have been received at the president's office and several men have already secured their rooms. One of the first year men in last year's enrollment is reported to have written to all members of his class with the result that over 50 of the 90 are going to return for the second year's work. This speaks volumes for the work in which this new work is being received and we believe that M. A. C. is filling a long felt want throughout the state by the introduction of this course.

HISTORY AND PRESENT STATUS OF ADVANCED DEGREES.

At the present the advanced degrees that are granted at this institution are as follows: M. S., M. Agr., M. Hort., M. For., M. H. E., C. E., M. E., and E. E. The degree of M. S. has been granted since 1864; M. Agr., M. Hort., since 1894, and M. For. since 1908, and M. H. E. since 1912. The technical engineering degrees of C. E., M. E., and E. E. have been provided for since the spring of '08. The present requirement for a master's degree are that this degree may be granted to any graduate of this institution or other institution of like character and standard, who spends one year in residence study and presents an acceptable thesis at the end of this post-graduate work. The degrees of C. E., M. E., E. E., M. Agr., M. Hort., M. For., M. H. E. may be received if, after five years' successful work in the various lines, an acceptable thesis is presented.

The department of education at Washington is very much interested in what the various institutions of this kind are doing relative to graduate work and no doubt the present status of this college will be received very favorably. Between the years 1894 and 1899 the degree of M. S. was granted to 42 individuals. From '81-'95, 12 received this degree; from '86-'90, 20; from '91-'95, 16; '96-'00, 11; '01-'05, 8; '06-'10, 4; '11-'14, 8. From the study of these four-year periods it will be seen, however, that the degree of M. S. seems to be falling off in popularity, although just at present there seems to be an increased interest. The degree of M. Agr. has been granted to 13 individuals since '94; M. Hort. to 9 since '06; M. For. to 4 since '11; M. H. E. to 6 since '96; M. E. to 12 since '08, and E. E. to one.

It is the policy of this institution to limit the number of graduate students to such number that will not make the work unwieldy to handle for the teaching force nor increase the expense to the college to such an extent that it would be an enormous burden, as many institutions have done. The program is conservative. At present there are about 18 students doing graduate work, while 50 could be accommodated with expectation of good results. There are four or five departments here that could offer work for a doctor's degree, which show that we are forging ahead in a sane and sure way. Any inquiries regarding graduate work will be gladly received by the committee on graduate study.
MORE NEWS.

This is the call that comes in from the various alumni throughout the country: "We want more news of the graduates." Certainly it is a very legitimate request and one that we would like to satisfy to the limit. The editor would like to say in comment of this that in overhearing conversation by the old boys and girls at the alumni dinner, more news items came to his attention than could have possibly been listed in a whole day. Even many marriages were spoken of that the alumnus so that they will come to his attention.

We implore you to send in news items. In order to facilitate this, some stamped, addressed envelopes will be sent to any one requesting them with the hope that they will be left around in the way of the alumni.

EXPERIMENT WORK.

In another column will be found an account of some work and actual results that the experiment station here has accomplished. We publish this primarily so that some of our readers may take advantage of an opportunity to better their farming profits, and of course, this appeals directly to the agricultural readers. Many methods of increasing crop yields have been advocated, but many have been built upon fallacious theories. If investigation is made, it will be found that some of these do not take into account the extra labor necessary to increase the crop per acre. There can be no argument against the use of more productive strains on this score, and certainly the experiment station has done a great good if it can give to the farmers of the state certain tested strains of grains that will yield twice or three times as much, as in the case of the rye cited, or other strains that will better fit the climatic conditions.

This work is cited secondarily to give the loyal graduates of this institution, both engineer and ag., some definite data upon which they can back up the legitimate request and one that we would like to satisfy to the limit. The editor would like to say that when such good fortune comes to an M. A. C. alumni, "Dinner will be served," the alumni register are as follows:


We wish that we had the names of all, but the above are all that is registered. It is estimated that there were very nearly 400 M. A. C. men back for the great game.

GRAND RAPIDS MEETING.

The Grand Rapids M. A. C. Association held a get-together meeting last Wednesday night, which was very successful from the standpoint of numbers and enthusiasm. About 40 local alumni were present, and the guest of the evening was Prof. W. O. Hedrick, from the College. Besides his talk, Charles F. Schneider made a strong appeal for more vital interest on the part of alumni, and Robert D. Graham explained the features of general interest at College at present. Colby’s orchestra furnished music, and coffee, sandwiches and doughnuts were served.

The following new officers were elected: President—W. K. Clute, 711 Michigan Trust Bldg; Vice President—J. W. Knecht, 1128 Ionia S. W.; Secretary and Treasurer—Mrs. Herbert Dutchie (Winnie Felton), 569 Turner Ave.

Plans are going forward for a roasting meeting and banquet early in the winter.

Fannie E. Beal, '08, is teaching in the Westtown Boarding School, at Westtown, Pa.
The death of George W. Mitchell, of the class of 1874, which occurred at his farm home, near Corvallis, Oregon, on October 1st, caused a shock of sincere regret among his surviving classmates, college associates and friends. He was a very highly esteemed and useful man in his community. The local newspaper of his town, the Corvallis Gazette-Times, in its issue of Oct. 2d last, speaks of him in the highest terms as “a useful member of the Friends Church, an honest, upright, honorable citizen, beloved by all his neighbors and acquaintances, and sincerely mourned by all who called him friend. His bereaved children have the sympathy of all in their hour of deep sorrow.” A classmate of Mr. Mitchell sends the following tribute to his memory: “There was one man in our class who stood apart and above the rest in respect of the obedience willingly rendered by his classmates, and that was “Dad” Mitchell. It was not because he was better or wiser or more masterful than the rest. Certainly not because of greater brilliancy. He made no claim to any superiority. But he was older than the others, and so matter-of-fact, so plain and rugged, so honest and sincere, so just, commonly good and kind, that we all respected him, loved him, called him “Dad,” and minded him—no one ever reasoned why! ‘Dad says so, and that ends it,’ was the frequent conclusion of our youthful arguments, and the expression meant volumes for the inherent goodness of character of the older boy of whom it was conceded by the half hundred enthusiasts, none without notions of their own.

“Yes, Mitchell was easily a leader among us, though he probably never knew it, and the rest never questioned it. He went his ways on graduation, moved to the far west, became a prosperous farmer in Oregon, married happily, raised a useful family, won the respect and esteem of his community, and now dies at fair age, though all untimely, beloved and sincerely mourned—to quote his local paper—‘by his neighbors and by all who called him friend.’

“His career, as careers go, was a success, not brilliant nor dazzling, but better than either, the success of honest, earnest, useful, upright, honorable living, which makes up the fiber of our best American tradition.”

“It was Mitchell’s regret that he had not visited his alma mater. He had planned on coming, and wanted to grasp again the eager hands of early friendship. In this he was disappointed. We shall never see him again. But we shall think of him, none the less kindly, and our memory of him will always be comforting and good.”

HUNTER HAMMOND.

Hunter Hammond, ’12, died in Dr. Flinn’s Sanitorium, at Prescott, Arizona, on August 14th. Hunter had been in the west for two years, seeking relief from tuberculosis. His mother was with him all the last year, and her many friends among the student body will extend their deepest sympathy upon learning of her bereavement. His body was brought back to Michigan and interred in the home cemetery, near Haslett.

GEORGE ALEXANDER FARR.

George Alexander Farr, ’70, died at his home, in Grand Haven, August 4th, after a long illness. Mr. Farr was a veteran of the Civil War, served as a regent of the University of Michigan for six years, and has been, until his illness, a prominent man in the affairs of western Michigan. He is survived by his widow and seven children.

DAMON SPENCER.

Damon Spencer, ’12, is an instructor in the animal husbandry department of the Oklahoma A. M. College. W. E. J. Edwards, of Guelph, takes Mr. Spencer’s position here.
AGGIES GAIN MOST GROUND, BUT LOSE THE COUNT TO MICHIGAN.

In one of the most hotly contested games ever seen on the College field, Michigan won from the Aggies by a score of 3 to 0, before a crowd of over 10,000 spirited spectators. A forward pass by DePrato in the last quarter, bringing the ball to M. A. C.'s 15-yard line, made an easy chance for a drop kick by Splawn, and the trick was turned that decided the game. It was the fourth down, and previous experience had taught the Yost men that they could not make more downs, so the renowned drop kicker was called for.

From the spectators' standpoint the game was unsatisfactory, since the final score did not show the relative strength of the two teams. Statistics show that M. A. C. gained 98 yards on line plunges against Michigan's 91, and this in spite of the much-talked of plunging ability of Maulbetsch. Captain Julian was much the more consistent ground-gainer in this department, while the rest of the backfield did about equally well on both sides. End runs netted the Aggies a total of 155 yards, while Michigan earned but 18. In running back punts Macklin's men also excelled, returning the oval a total of 140 yards, while Yost's warriors made little gain, and for the most part signaled for fair catches rather than be downed in their tracks and take a chance of fumbling the ball. A more complete mastery of forward passing must be credited to the visitors, and their only count came as the result of a forward pass, which advanced the ball 25 yards.

There were two very disagreeable features of the game. One of these was the severe penalizing metered out by the officials. M. A. C. was penalized a total of 85 yards, and Michigan 65. Near the end of the first half the ball was in Michigan territory all of the time, and it was at this time that M. A. C. was most severely penalized. In spite of this, the ball was advanced to Michigan's 5-yard line on a series of consistent ground-gaining plays. With two more downs to make their gains, and momentum that would surely have carried the ball over, the whistle blew to end the first half, and M. A. C.'s best chance to put the ball over was gone. A half more minute to play and the losers now would have been the victors, and the real strength of the team would be more clearly shown. In one other department did the home boys excel, and this was shown in the condition of the men, since not one substitution was made by Macklin, while only three of Yost's men played the whole game through. Only twice was time taken out for the M. A. C. men, and Michigan men were out repeatedely. There is only praise for the way "Dutch" Miller handled the team.

In the punting department DePrato easily equalled Splawn, and with the excellent running down under punts by the ends, Miller and Chaddock, the farmers, were able to gain much ground. However, DePrato twice attempted a place kick and failed. Smith, on the line, played a stellar game for the Aggies, and Cochran, opposite, was easily Michigan's best lineman. Hewitt Miller made the only long run of the game, carrying the ball for a 30-yard gain on a long end run, near the end of the first half. Blacklock made several fine gains through the line. Blake Miller was almost entirely responsible for the splendid return of punts on the part of the Farmers. He is a wizard at dodging, and is very efficient in following his interference. It was late in the last quarter when Michigan received her severest blow, when Splawn's drop kick, when Catlett punted to Blake and he dodged two men, but a flying tackle by Hughitt brought him down. It was soon found that Michigan's general was very severely injured, his elbow being completely dislocated, which injury
will probably mean that he has played his last game for the Maize and Blue. This will appreciably lessen Michigan's chances in the Harvard game, and M. A. C. very much regrets that such an accident has befallen this veteran.

The day saw little of the open sensational play, the Aggies gaining in but two of the nine trials. Michigan used this pass less often, but were successful about half the time, and their ability to use it in a crisis stood them in good stead. Each side used a delayed pass once or twice to advantage.

The rivalry between the two colleges is in no way lessened by Saturday's game, and loyal supporters of each will look forward to next year's battle with as much eagerness and anticipation as this contest provided.

Summary:

M. A. C.
B. Miller L. E. Staatz
Smith L. T. Reinmann
Straight L. G. Rehor
Vaughn C. Raynsford
Vandervoot R. G. McHale
Blacklock R. T. Cochran
Chaddock R. E. Lyons
D. Miller Q. Hughiit
DePrato L. H. Maulbetsch
Judah P. B. Splawn
Bushnell R. H. Miller

Goals from field—Splawn, 1. Substitutions—Michigan: Roehm for Bushnell, Benton for Staatz; Huebel for Hughiit; Hughiit for Huebel; Watson for Reinmann; Catlett for Roehm; James for Lyons; Reinmann for Benton; Watson for McHale; Roehm for Catlett; Catlett for Splawn; Huebel for Hughiit.


Time of quarters—15 minutes.

ALUMNI NOTES.

C. S. Emery, '77, is bookkeeper, State Highway Dept., Lansing.

G. A. Bignell, '09, is with the Belding Delivery Co., Belding, Mich.

T. P. Chase, '03, is now chief engineer of the King Motor Car Co., Detroit, Mich.

H. C. Hilton, '11, is forest examiner in the Colorado National Forest, and makes his headquarters at Fort Collins, Col.

R. A. Murdoch, '09, is engaged in general civil engineering and surveying in Detroit and has his offices in the Free Press Bldg.

Miss Catherine Benham, '10, is working in the bacteriological laboratory of Dr. G. H. Sherman, Detroit, and is living at 572 1/2 Drake Ave.

Robert S. Newton, '05, has moved from Schenectady, N. Y., and is now superintendent of the water and electric light department at Mason, Mich.

NORTHEASTERN TEACHERS' AGENCY

We are greatly in need of teachers for emergency vacancies of the early autumn, which offer the best opportunity for promotion. The leading Agency for the entire West and Alaska. BOISE, IDAHO.
ALUMNI NOTES.

R. A. Brown, '13, is farming at Hope, Arkansas.

Harry D. Ingalls, '90, has recently bought a farm near Plymouth.

R. M. Agnew, '90, is now doing engineering work in Norrie, Colo.

R. L. Jeffery, with '16, is now studying medicine at Northwestern University.

Henry E. Ardich, '14, is a drifter with the Wickes Boder Co. of Saginaw.

Word has been received from J. A. Smith, '10, of the arrival of Mary Jane Smith.

Thomas Burt, '10, is superintendent of the Wayne County Poor Farm at Eloise, Mich.

Joe Hamilton, '13, is now doing practical work at the Annalidale Farm, near Grand Rapids.

Francis C. Gilbert, '14, will be listed in the next catalog as farm manager at Pontiac, Mich.

M. A. Russell, '13, is teaching agriculture at Ives penning. Meri was married last summer.

E. C. Voltz, '14, instructor in horticulture at Ames, is also planning on the Nebraska game.

C. C. Grogan, '15, is still at Sitka, Alaska, as special agent in charge of Alaska investigations.

H. B. Cannon, '88, is now Farm Management Extension Agent and is located at Rozena, Montana.

Prof. Thomas Gunson and Lottie Robinson, '12, were married on August 5th, and are at home in East Lansing.

C. B. Olney, '13, is in Minnesota, Minn., teaching agriculture half the time and doing extension work the other half.

R. B. Buck, '96, has been in Burlingame, Kansas, for the past five weeks, subject to the very severe illness of his mother.

Wm. Rider, '08, is professor of animal husbandry and dairying at the Joseph Slocum College of Agriculture, Syracuse University.

R. K. Pullthorpe, '13, assistant horticulturist at Delaware experiment station at Newark, is planning to see M. A. C. beat Penn. State.

W. C. Bagley, '95, director of the school of education at the Univ. of Ill., was one of the principal speakers at the U. P. Teachers' meeting.

B. C. Porter, '11, was here for the game. He is having great success with poultry and fruit raising at Grand Rapids, and spends his spare time in the South Grand Rapids bank.

J. J. Woodin, '13, row in charge of the No. 1 American Fruit Exchange branch in Kansas City, writes to say that he is surely going to see that Nebraska game. We want to hear from more of like mind.

THE M. A. C. RECORD.

O'CONNOR
Sells the Famous
Kuppenheimer and Steinbloch
Smart Clothes
Manhattan Shirts, and
Stetson Hats

EVERYTHING THE BEST IN TOGGERY

Lawrence & Van Buren
Printing Company
210-212 Grand Ave. North

THE Volunte, from the University of South Dakota speaks in very enthusiastic terms of the work of coach J. J. Carpenter, and we know that "C" has added a very favorable impression to his name in Phoenix. Arizona, relative to the success of the Lewis Vanderbilt, '91, who was making his home in Phoenix, Arizona, and who wishes to be listed in the next catalog as a farmer in Michigan. It seems that he has fully recovered.

R. E. Allen, '13, is teaching domestic science in the public schools of Indianapolis.

Frank L. Barrows and Lucile Hawkinson, both of Nebraska, were married in August, at Pecos, Texas, and are now living at Van Dyke Ave. Detroit. Frank is employed by the Detroit Edison Co.

H. W. Norton, '03, former instructor in this institution, is having great success building the Holsteins. "Hol" is now secretary of the Michigan Sales Association for advertising and selling Michigan Holstein cattle.

M. H. Lapian, '09, is with the U.S. Dept. of Agriculture as Inspector of Western Division of Soil Survey. He reports that his has just come in from a month's trip through the big woods and sage bush of the northwest.

Walter S. Fields, '13, teaching plant pathology in the College of Agriculture at Fayetteville, Ark., writes of the marriage of Harold Truax to Miss La Harresson, of that place. Truax is teaching horticulture in that institution.

Associate-Editor of the Gleaner and Business Manager, R. G. Kirby, '12, called at the office the past week. Kirby has moved his office from Port Huron to the Houghton-Jacobsen Bldg., Detroit, and in addition to his other duties Ralph is also secretary of the Kirby Orchard Co., located at Covert, Mich.

N. W. Mogge, '14, writes a very interesting letter from Rutherford, N. J. Mogge is a by Atlantic Division manager's office of the C. L. I. in Fruit Grower's Exchange. He has been working of late in the auction market, and says that in the last five months nearly four thousand cases of deciduous fruits from California and the northwest have been sold at public auction.

They're not short-lived The Jerseys

In 1913 eighteen Jersey cows were officially tested which averaged 12 years and 7 months of age. Their average milk production was 2870 pounds. Average butter fat was 407 pounds. One of these cows was over 18 years old. Longevity, Constitution, and Economic Production are Jersey characteristics. THE AMERICAN JERSEY CATTLE CLUB 324 W. 23rd St., New York City