

The M. A. C. RECORD.

MICHIGAN STATE AGRICULTURAL COLLEGE.

VOL. 9.

LANSING, MICHIGAN, TUESDAY, NOV. 17, 1903.

No. 9

FOOTBALL.

M. A. C. 6, ALBION 6.

The best game of football played this fall resulted in a tie. Both teams played fast ball and fought every inch of the ground. Albion was particularly fortunate. She won the toss, the length of halves and profited by the costly fumble.

M. A. C. kicked off and Albion carried the ball by line plunges to the 28-yard line. The gains were slow but consistent. M. A. C. secured the ball but was forced to punt. Albion failed to gain and punted, in which she had a decided advantage. The ball changed sides several times. Finally M. A. C. carried the ball within two feet of the goal line but was held for downs. The ball was punted out of danger, but M. A. C. again advanced it and by line plunges and end runs finally pushed McKenna over for a touchdown. Referee Fishleigh called for M. A. C. to carry out the ball for a trial for goal. Bell picked up the ball and handed it to McKenna at the proper place. Albion claimed that this put the ball in play and blocked the kick. After a consultation Fishleigh allowed the kick, but decided to refer the final decision to Yost and Fitzpatrick. Both decided that M. A. C. was entitled to the point. Score M. A. C. 6, Albion 0.

Albion kicked off to Shaw who advanced it 12 yards. A fumble lost the ball and Albion carried it to the one-yard line where M. A. C. held for downs. Another fumble gave Albion the ball within a few feet of the goal line. Bliss was finally pushed over for a touchdown and Matthews kicked goal.

M. A. C. kicked off to Albion. A series of punts gave her the ball on M. A. C.'s 40-yard line. Here Knickerbocker tried a place kick for goal but failed. M. A. C. got the ball on her 6-yard line and in 6 minutes carried the ball to Albion's 8-yard line when time was called. Albion seemed unable to hold M. A. C. and time was the only thing that saved her from being scored on a second time.

Attendance, 1,200.

RECORD OF M. A. C. AND ALBION.

M. A. C. vs. Alma, 11 to 0.

" " Kazoo, 11 to 0.

" " All-fresh, 11 to 0.

" " Hillsdale, 43 to 0.

Albion vs. All-freshmen, 0 to 0.

" " Alma, 16 to 6.

" " Kazoo, 6 to 0.

" " Alma, 6 to 17.

M. A. C. has the better record and plays the stronger game. Until she is defeated, no other college has a claim to the state championship. Should Olivet defeat M. A. C. next Saturday, Albion and M. A. C. would be a tie. If M. A. C. wins, her title is clear.

Y. M. C. A.

Prayer meeting Thursday evening was led by Clem Ford. Theme for discussion was: "The bond of peace." As last week was the week

of prayer universally observed by all Christian students the world over, the above theme was not discussed, but instead the meeting was given over to prayer for greater success in winning men to Christ.

Rev. C. E. Thomas of Lansing conducted the morning chapel exercises. Text, 2 Sam. 12: 17. The gist of the sermon was the necessity of personal examination.

The Sunday evening meeting was conducted by Mr. C. E. Parsons, inland missionary enroute to China, from London, England, via., U. S. The speaker gave a short talk on the responsibility of the church in the evangelization of China.

The services were well attended.

Y. W. C. A.

Thursday evening Y. W. C. A. prayer meeting was led by Miss Kate Coad. The Bible lesson was from Acts 26. The necessity of obedience to the heavenly vision was particularly brought out.

Miss Gilchrist and eight of the girls attended the State Convention at Grand Rapids, November 12-15, and received much inspiration from it.

M. A. C. VS. OLIVET.

This game will be played at M. A. C. next Saturday. Olivet has the heaviest team in the intercollegiate. She was slow at first but plays first class now. She defeated Alma 11 to 0 last Saturday, just two weeks after that institution had defeated Albion 17 to 6. Lookout for her. Everybody should be out to support M. A. C. We can't afford to be tied and we must not lose.

DEBATING CLASS.

An interesting discussion followed the contention held by Prof. W. O. Hedrick and Mr. H. C. Owen last Thursday evening at the regular meeting of the Debating Club, when they defended the proposition, "Resolved, that the negro population of the U. S. should be segmented to some territory by themselves." Mr. Taylor and Mr. H. S. Severance spoke against the proposition. The judges agreed with the affirmative. Next Thursday night Messrs. Masselink and Fowler will meet Dr. Edwards and Mr. Dunks on the question, "Resolved, that the American negro has been unjustly treated since the Civil War."

LECTURE.

On Sunday evening, Nov. 22, W. N. Ferris of Big Rapids, will address the union meeting of the Y. W. and Y. M. C. A. in the armory. Mr. Ferris has very few equals on the lecture platform and is well known as a speaker throughout the northwest. Lately he has spoken a great deal in Pennsylvania and has everywhere met with decided success.

His subject at M. A. C. will be "Making the World Better." This is one of his best lectures and Mr. Ferris throws into it his entire personality. It has made men and women better in hundreds of places and no one should fail to hear it. The admission will be free to all and all are invited to attend.

MEMORIAL RESOLUTIONS.

WHEREAS, We are again reminded of the uncertainty of life and the certainty of death in that an all-wise Providence has called from our midst to Himself our companion, Rubie E. Light; be it

Resolved, That in the death of our sister our society is parted from a beloved and faithful member, who because of her sunny disposition, will long be missed.

Resolved, That we extend our deepest sympathy to relatives and friends.

Resolved, That a copy of these resolutions be placed on the records of the society, that one be sent to the M. A. C. RECORD and one to *The Saginaw Evening News*.

The funeral of the Light family was held on Thursday afternoon at 2:30. The services were simple and were conducted at the home. The pallbearers for Miss Light were selected from her classmates and were Messrs. Ferguson, Swales, Clark, Walker, Hahn and Wright. Miss Fleta Paddock, Miss Ethel Adams and Miss Gertrude Peters represented the Feronian society, and Miss Dora Skeels and Miss Katherine Slaght represented the senior class. Mrs. Landon also attended the funeral. The floral offerings for Mrs. and Miss Light were especially beautiful. The Feronians contributed an elegant spray of chrysanthemums bound with the society colors; the senior class, Thematic and Sororian societies also sent floral offerings for Miss Light. The interment was at Forest Lawn cemetery.

MEMORIAL RESOLUTIONS.

Whereas, God has seen best to call to her final Home, Ruby E. Light, a prominent and highly esteemed member of the Feronian Society, be it

Resolved, That we express our regret at the loss of one having a genial disposition and a beautiful character; also be it

Resolved, That we extend to her Society our heartfelt sympathy. Be it further

Resolved, That these resolutions be printed in the College paper.

THE THEMIAN SOCIETY.

'01.

H. P. Baker writes a very interesting letter from Yale University. He and his brother, Fred Baker, are enjoying their work very much. They rejoice at the growth M. A. C. is making and at the great success of the football team. They saw the Yale-Princeton game last Saturday.

ALUMNI.

'69.

Charles E. Bessey, professor of botany in the University of Nebraska has lately returned from a summer in Europe. He has been at the head of the botanical department in the university for nearly 20 years, is botanical editor of "Science," wrote the articles on botany in Johnson's Universal Encyclopedia and is the author of several botanical textbooks for high schools and colleges. His works are considered standard authority everywhere.

'71.

E. M. Shelton, president of The Bessie Gold Company, with office at Seattle, Washington, has just returned from an extended trip of inspection to the company's Alaskan properties.

'78.

C. C. Georgensen has charge of the Alaska experiment station at Sitka. He is special agent of the United States Department of Agriculture.

'83.

C. M. Weed, professor of Zoology and Entomology in the New Hampshire College of Agriculture and Mechanic Arts, is the author of *The Flower Beautiful*. He treats very exhaustively of the law of harmony.

'85.

The Adelaide Observer of Sept. 12 contains seven cuts illustrating the Roseworthy College Farm. One shows Prof. and Mrs. J. D. Towar seated in a carriage, ready for an inspection trip around the farm. Prof. Towar is making a success of his work and *The Observer* makes very favorable comment.

'86.

T. A. Stanley is producer and purveyor of fine dairy products, Cedar Hill Farm, New Britain, Conn. He has made a great success of the dairy business.

'88.

A. E. Bulson, Jr., is secretary of the Section on Ophthalmology of the American Medical Association, with offices at Ft. Wayne, Ind., where he is a practicing physician.

'89.

W. L. Rossman in addition to his numerous other business relations, is president of the Ideal Manufacturing Co. of Harbor Beach. The company manufactures the Ideal Clothes Rack.

Ray S. Baker has another interesting article in the November McClure. These articles are attracting universal attention. Mr. Baker has made careful investigations of the problem of labor and capital, strikes, etc.

B. K. Canfield has a large studio in New York and is giving himself up entirely to plastic art. He is a member of one of the leading art clubs and mingles in the social life of the artists.

THE M. A. C. RECORD.

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TUESDAY, NOV. 17, 1903.

FORESTRY TRIP.

In the senior year of the Forestry course is included a trip of inspection of the forest conditions and practices in northern Michigan. The time of the trip is arranged to suit the convenience of the class and the instructors. This year the opportune time came when, through the kindness of Mr. Wildey, of the State Land Office, we were given the opportunity of going to Oscoda county to work with the state estimators who are re-estimating the College timber lands, prior to their sale, November 12th.

Mr. G. F. Talladay and myself accepted the offer and began our trip to the north woods the next Saturday. We arrived at Roscommon the next morning at 3 o'clock. Sunday was spent very profitably in acquainting ourselves with the town and some of its inhabitants. The following day we began our 36 mile "cross country" ride through jackpine and scrub oak plains, arriving at our destination, Mio,—a little town in the center of the county—after 7 hours of almost continuous riding.

Before beginning our journey we were told that the first human habitation was 14 miles on our way, and it seemed to us more like twenty. I think that when we were 11½ miles out we saw a man, but I am not positive. The monotony of the trip, however was occasionally broken by the stories of an "Original" lumberman, who rode with us nearly the entire distance. Though some of his tales were rather on the fiction order, we listened to them attentively and learned a great deal about the lumberman and lumbering of 25 years ago in northern Michigan.

Especially interesting was his story of the settling of the country through which we passed. The pine upon it was mostly small, and when cut and taken away the land was easily cleared and put into condition for agricultural purposes. He told us, much to our surprise, that the whole region through which we were traveling was dotted with farms 20 years ago, and that the people were prosperous and happy, all of which we might readily believe for along the way we could distinguish

the boundaries of farms marked by rows of old rails or poles and with-in, instead of young and vigorous areas of wheat, were growing fine crops of jack pines with a few scrub oaks for variety.

Nothing further interested us until we arrived at Mio and found that we had to walk four miles to our headquarters. Here we found Mr. Shien, state trespass agent, and Mr. Belknap the surveyor of the party, who were waiting for us. We had a good place to stay and two of the state's best "cruisers" to work with, which, with ideal weather for working in the woods, made it possible to learn and observe to our utmost capacity. During our stay in the woods our knowledge of forest mensuration and surveying was thoroughly tested. The first day we were asked to estimate the B. M. in a large tall pine which was afterwards measured accurately by a system of triangles and the actual amount of timber computed. The results of the estimates were rather surprising but they gave us an idea and afterwards we did better.

Of the actual estimating and running of lines little can be written as it can only be learned by observation and experience.

While in the woods we looked over and estimated the timber on 1,000 acres of virgin forest, a part of one of the few tracts of virgin timber in the lower peninsula. The forest consists principally of hemlock, maple and beech, but on the lower lands are found also basswood, red and white elm, white and black ash, soft maple, cedar, and a few scattering tamaracks. The value of the forest, however, consists in the hemlock, maple and cedar it contains, the rest of the timber being scattering or of no value.

After four days of travel and experience in a real forest we began our return to M. A. C., arriving here Saturday evening, Oct. 31st.

The trip was highly profitable to us, and the only reason we have for regret is that we couldn't stay a month rather than a week.

GEO. C. MORBECK.

ALUMNI.

'90.

Joseph H. Freeman is having a very successful practice as patent attorney. He is the same big fellow as ever and can be found at Atlantic Building, 49 Wall St., New York.

'93.

D. J. Crosby, of the U. S. Department of Agriculture, recently spent ten days in Missouri lecturing before teachers' institutes on "Agriculture in the Public Schools." He addressed over 1400 teachers, many of whom had already introduced some phase of agriculture into their schools. Mr. Crosby has done a large amount of work along the line of improving rural school surroundings and introducing the elements of agriculture into our school system. He has a fine set of slides on school gardens, etc., and his stereopticon lectures are deservedly popular.

'93.

W. L. Cummings will spend the winter at 201 Wolvin Building, Duluth, Minnesota. He is still connected with a private geological surveying corps, and in that capacity made a two months' trip to Santiago Province, Cuba, this summer, examining iron mines.

Dwight S. Cole is doing mechanical specialty work in Brooklyn, New York. He perfects inventions, makes models, etc. He recently sent some work to Prof. Weil for inspection.

'95.

C. P. Close is horticulturist of the Delaware Agricultural College at Newark, Delaware. He writes that things are about as usual but adds that of the 40 who entered the freshman class this fall not a one enrolled for agriculture. This is certainly quite different from conditions at M. A. C. According to present information, M. A. C. ranks among the first in point of number of students who take agriculture.

With '96.

Dwight T. Randall has recently been elected Assistant Professor of Steam Engineering at the University of Illinois. M. A. C. is pretty well represented at that university.

'99.

Alex. Krentel has charge of the reports from the different health officers throughout the state and also of the distribution of printed matter on the various communicable diseases as issued by the state board of health.

'01.

J. W. Bailey & Son is the name of a real estate firm recently organized in Lansing. Wm. Bailey is junior member of the firm. He had to give up his position in Pennsylvania on account of ill health.

Harry J. Eustace speaks on fruit diseases at the Normal Institute which is to be held at Geneva, New York, from Nov. 21 to 25. These institutes are not intended for the general public but are intended to increase the efficiency of Farmers' Institute lectures. This is somewhat

of a novelty but promises to be very beneficial. The idea is to compare notes, explain theories, establish facts and secure uniformity of work. Much time is devoted to discussion. Prof. Bailey speaks on agricultural education at the Institute which will be held at Cornell University from Nov. 30 to Dec 3.

With '01.

E. C. Parsons, who talked to the Union meeting Sunday evening, is on his way to China as a missionary. He belongs to the China Inland Mission and international and inter-denominational organization founded by J. H. Taylor in 1867. This society has 732 foreign missionaries.

'02.

H. G. Driskel has been elected superintendent of the Cement Building Block Co. of Winnipeg, Canada.

This is a new firm and Mr. Driskel was elected to this important position in spite of severe competition.

Mamie Crosby has charge of dietetics in the University of Michigan hospital. Mr. Gunson writes that she served him a very sumptuous dinner the second day of his stay at the hospital.

W. R. Wright has been elected student assistant in the bacteriological laboratory. The position is a very desirable one from the standpoint of training. It is in fact much better than a postgraduate course and means a good position in a year or two.

Harry Henderson is cashier for O. F. Collier and Son, Detroit.

A. H. Case has entered Columbia University to take a course in Mining Engineering.

'03.

Fred Loop is drafting in the Oldsmotor Works in Detroit. His work is largely on automobiles.

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RADIUM.

For the past few years scientific papers and records have been notably full of matter pertaining to radio-active substances. The study of the peculiar properties of many of these has occupied the world's most eminent physicists and has bordered upon the realm of the chemist as well. Names, hitherto known only to the inner scientific circles, have been brought into almost universal recognition.

The statement is made that Radium emits radiations, that is, shoots off particles of itself into space, at such terrific speed that 92,500 miles a second is not considered a large estimate. Yet in spite of the fact that this waste goes on at such an enormous rate, the actual loss sustained by a square centimeter of Radium would not amount to more than a milligram in millions of years. It has been possible thus far to obtain it only in combination with other material. It is a product of the mineral pitch-blende which is found deep in the earth. Most of the mineral used in experiment came from Bohemia. It is also found in Saxony and in Colorado.

The quantity of Radium already found is so small that the figurative price of a grain has been placed at \$10,000. It may be that there are large quantities of it stored under the surface somewhere, but the man who found a quantity of it in anything like a pure state would probably not live to tell the tale. A small quantity, in the possession of M. Currie, has caused the most painful blisters when brought in contact with the skin. A small particle of Radium salt was sealed in a glass tube and tied to Prof. Currie's sleeve for an hour and a half. It produced a suppurating sore which did not heal for over three months.

Radium has been photographed with its own light; further, if it be brought into the neighborhood of certain other substances it imparts its luminous quality to them. Diamond is a good example. Within a few months past great interest has been attracted by the statement, made by Profs. Currie and Laborde, that Radium maintains its own temperature at 1.5° Cent. above its surroundings. This is equivalent to saying that half a pound of Radium salt would evolve in one hour sufficient heat to equal that caused by the burning of one-third of a cubic foot of hydrogen gas, and that the heat evolved from pure Radium salt is sufficient to melt more than its own weight of ice every hour. This evolution of heat goes on constantly for indefinite periods of time and leaves the Radium at the end of months of activity as potent as at the beginning.

The problem therefore confronts the world of solving how Radium can constantly throw off heat without combustion or without chemical change, as Prof. Currie says it does. It is now emphatically stated that Radium is undoubtedly an element and has a spectrum peculiar to itself. While it is spoken of as a metal, Radium has never been secured in a metallic form, the usual form being as a chloride or bromide. Prof. Currie says that the result of all the work done in Germany and France during the past three years has been the securing of only about one pound of Radium, including all grades and qualities.

As indicative of the enormous

difficulties to be encountered in procuring this wonderful substance, it is interesting to note that it takes 5,000 tons of uranium residue, that is residue from pitch-blende, to produce 2.2 pounds of radium salt, and the cost of handling these residues is \$2,000 per ton.

It is easily seen that the material possibilities of the Currie discoveries are enormous. Among many suggestions as to the outcome are: The transmutations of metals, solving the problem of light without heat, the perfection of wireless communication, the cure of certain phases of blindness, new sources of heat; and, since it would now seem that there is, after all, but one substance in the world, chemistry may undergo such a rejuvenation as will result in the most unheard of discoveries. Is the discovery of Radium, then, merely an expression of the di-integration of matter? merely evidence of the coming extinction of the universe? There is room for speculation. Prof. Crookes well summed up the situation when he said, "The fatal quality of atomic dissociation appears to be universal. It works in the sunshine and raindrops, in the lightning and flame. It prevails in the waterfall and the stormy sea, and, although the whole range of human experience is all too short to afford a parallax by which the date of the extinction of matter can be calculated; 'Protile,' the formless mist, may once again reign supreme and the hour hand of eternity will have completed one revolution."

WARD D. CARPENTER.

Prof. F. S. Kedzie has recently received a thousandth part of a milligram of Radium from Germany. It is certainly a wonderful substance. Prof. Kedzie will make arrangements for a general exhibit in the near future.

With '04.

August Frey is a draftsman with the Deering Harvester Co., and takes work in the higher mathematics in the night school at the Lewis Institute.

With '07.

L. D. Baker is drafting for the Baker Iron Works of Los Angeles, Cal. The firm manufactures drilling engines, power pumps, well casing and is the largest well tool manufacturing firm in the west.

Dr. C. E. Marshall has an article on Aeration of Milk in a book dedicated to Dr. V. C. Vaughn of the University by colleagues and former students on the twenty-fifth anniversary of his doctorate. The book is called Contributions to Medical Research and contains articles by Prof. Freer, Prof. Novy, Prof. Nancrede, Dr. Huber and other eminent specialists.

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