

The M. A. C. RECORD.

MICHIGAN AGRICULTURAL COLLEGE.

VOL. 18.

EAST LANSING, MICHIGAN, TUESDAY, DECEMBER 24, 1912.

No. 14



THE COLLEGE POSTOFFICE, EAST LANSING.

SHORT COURSES IN AGRICULTURE.

Six Different Courses Offered. Work Begins Jan. 6.

Short courses in agriculture were first offered at the Michigan Agricultural College in 1897, with an enrollment of 45 students at that time. The attendance has continued to increase rapidly as a knowledge of the value of the work has become more generally known, and as the necessary facilities could be provided to conduct the courses properly. In 1912 the total enrollment for the short courses amounted to 393, not including those who attended the one week courses offered for dairymen and poultrymen. The total enrollment since 1897, not including the one week courses, amounts to 2692.

There may be some who wonder who those people are, where they come from, and the objects they are seeking. The majority consists of the young men from Michigan farms, actively engaged in farming, and who are unable to leave their business to complete regular courses. A large percentage of these young men have attended high schools. There are also representatives of the professions, industries and trades from villages, cities and towns who have been lured countryward by the popular wave of sentiment which has been gaining a constantly greater momentum in that direction. The capitalist and the laborer are to be found side by side with the farm boy in the class room. Beyond sixteen years there are no age regulations for entrants, and the gray haired man mingles with the beardless youth. These courses have been attended by graduates of some of the leading Universities of America where agriculture is not taught.

Six courses are offered for the term beginning January 6th, 1913, as follows, viz.: Two in General Agriculture, two in Creamery Management, and one each in

Cheese Making, Fruit Growing and Poultry Production. The courses include both lectures and laboratory work, amounting to eight hours per day. The work is of an eminently practical nature, and is supported by some elementary science bearing a close relation to the principles and practices of agriculture.

Upon completion of their courses, those who attend, with very few exceptions, return to Michigan farms. The 2,692 persons who have attended these courses and returned largely to Michigan farms are giving the institution a large representation. It is not to be expected that every individual will excel in agriculture, but results indicate that the majority have received a stimulus to achieve greater results than their fellows in the community. The short course man who becomes a leader in his community fulfills a mission that other agencies for the betterment of Michigan agriculture fail to perform. There are always some indifferent farmers in a community who do not attend local farmers' organizations or institutes, or read agricultural papers or Experiment Station bulletins. Such men, with their exhausted lands, tumbled down buildings, poor stock and weedy farms, are practically beyond reach of organized efforts for improving agricultural conditions. This type of man is reached only through the power of example. The modernized methods of the enthusiastic and successful short course farmer are exerting a great influence in the communities where these men are operating. As a general rule, the short course man is expected to lead in his community in public business and political enterprises, as well as in matters pertaining to the improvement of moral and social conditions.

The generous treatment accorded short course students by regulars in the past is worthy of special notice. Assistance has been freely given in the carrying out of plans devised to instruct, entertain and develop a spirit of loyalty in the short course

men. It is true that no one is more loyal to M. A. C. than her short course representatives. Their efforts and words of commendation in behalf of the institution are being felt more and more in every part of the state. Every regular student enrolled at M. A. C., who has a personal interest in the institution and a proper spirit of loyalty, should at least lend their moral support to the future development of the short courses.

SPECIAL EVENTS DURING SHORT COURSE SESSION.

An effort is made to make the time that the short course student spends at the college both interesting and profitable by having as many special agricultural and entertaining events as possible take place during the short course session.

Early in the course there will be held the annual meetings of the various breeders' associations, which bring to the college the prominent breeders of all classes of live stock. These meetings are open to all who are interested in the breeding and improvement of stock, and students attend the meetings of the association in which they are particularly interested. This affords an unusual opportunity to meet and know the men who are influential in live stock circles, and to hear addresses by the leading specialists of this and other states as well. The general session of the Michigan Improved Live Stock Breeders' and Feeders' Association is held the day following the meetings of the separate breed associations. Practical problems of the breeder and feeder are discussed at this meeting by men who can present up-to-date material.

Special one week courses in dairying and poultry are held during January and February, and each of these bring to the college men of recognized ability in their special subjects. Opportunity is given the

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M. A. C. ALUMNI ASSOCIATION.

Lansing Association Is Formed.

On Thursday evening of last week some 40 loyal M. A. C. men and women gathered in the Chamber of Commerce rooms in Lansing and effected the organization of a local alumni association.

The idea of organization has been a subject of interest for some time, and much speculation has been done as to how and when. It fell to the lot of a few of our more recent graduates to actually start the movement, and now once started we are certain it will receive the support of every one connected with M. A. C.

At the initial meeting, E. I. Dail, '02, presided as temporary chairman, and Helen Emery, '09, acted as secretary. Among the speakers were W. K. Prudden, '78; E. A. Holden, '89; W. O. Hedrick, '91; C. E. Holmes, '93; B. F. Davis, with '66, and E. C. Lindemann, '11.

Prof. C. E. Holmes, the first speaker of the evening, stated that this organization could go immediately to work in the interests of the institution, for nowhere was there a broader field than right here in Lansing. College spirit may cease with the graduation from some institutions, but Prof. Holmes declared that this was not the history of M. A. C.

W. K. Prudden entered M. A. C. 38 years ago, at a time when there were 150 students, and he gave an interesting account of the history of former alumni organizations. Mr. Prudden believed that, however busy, the Lansing alumni should take a lively interest in this new organization, and do all they could to promote the welfare of the institution.

B. F. Davis, of the City National Bank, who was in college in 62-64, gave an interesting account of college life in the early days, closing with a rehearsal of the assassination of Lincoln in Ford's Theatre. Mr. Davis lived only a short distance from the theatre at the time, and had often seen Lincoln on the streets of Washington. He stated that one of Pres. Willet's greatest desires was that sometime the college could boast of 500 students.

E. A. Holden urged the maintenance of the dormitory system, and believed the Lansing association should interest itself in bringing the college into closer touch with the farmer boy and girl.

All graduates and former students are eligible to membership in this organization, and those who may have, or have had children in attendance, as well as those who have manifested a vital interest in the welfare of the college, are eligible to associate membership. Dec. 19, was fixed for the annual meeting, and a banquet is planned early in January, at which time by-laws will be submitted by the executive committee, and plans for the triennial discussed.

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The M. A. C. RECORD

PUBLISHED EVERY TUESDAY DURING THE COLLEGE YEAR BY THE MICHIGAN STATE AGRICULTURAL COLLEGE.

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SUBSCRIPTION - 50 CENTS PER YEAR

Entered as second-class mail matter at Lansing, Mich.

Address all subscriptions and advertising matter to the M. A. C. RECORD, East Lansing, Mich. Address all contributions to the Managing Editor.

Remit by P. O. Money Order, Draft or Registered Letter. Do not send stamps. Business Office with Lawrence & Van Buren Printing Co., 210-212 Grand Ave. No., Lansing, Mich.

TUESDAY, DECEMBER 24, 1912

THIS special edition of the RECORD is mailed to several thousand and young men throughout the state who are, we hope, anxious to better prepare themselves for the work in which they are now engaged, and who will thus be interested in a further announcement of our short winter courses.

An attempt has been made to secure from the departments something of the work offered in each. We are sure that these will be of interest to all, and trust they will be read carefully.

With additional instructors to properly handle the work, and with the splendid equipment now at hand, M. A. C. is in a better position than ever to make these courses of exceptional value to those who attend.

In addition to the regular class work, several special institutes, exhibits, and association meetings will be held, all of which will prove instructive to the short course students. Among these will be the Breeders' and Feeders' Association, Jan. 15 and 16, the Poultry Institute and Show in February, the Fruit Show, given by the senior horticultural students in January, and the Farmers' Round-Up Institute at the close of the course.

The plans for entertainment include addresses by various speakers of note, stereopticon lectures, musical programs, and on Sunday morning Bible school. All of these will be worth while, and should be taken advantage of by the short course student.

Announcements of these courses may be had upon request. If you have not already received a copy, write at once to Pres. J. L. Snyder, at East Lansing.

SPECIAL EVENTS DURING SHORT COURSE SESSION.

(Continued from page 1.)

short course student to attend demonstrations and hear lectures given by these men, and to meet and talk with them about their own particular questions.

A series of Friday night entertainments is planned, to give something of interest apart from regular school work. These are begun by a reception given to the short course students by the Y. M. C. A. This is always a very pleasant affair, at which the short course students become acquainted with the regular students and faculty. Other Friday nights are occupied by musical programs, and illustrated lectures on popular and entertaining subjects.

Following the plan of last year, the Saturday evening entertainment will be provided for by the People's Church of East Lansing. The program for these meetings consists of

a short speech by some prominent man, a social hour, and some good music. From 150 to 250 men attended these meetings last winter.

A special class will be arranged for short course students, to be held each Sunday morning at 9:15. In this work will be taken up topics, which bear directly upon rural life, and general discussion will occupy the greater part of the time allotted to this work.

All special students are welcome to attend the meetings of the Farmer's Club and Horticultural Club, which are held every week on Tuesday and Thursday nights. These clubs offer an opportunity to meet the regular students, hear topics of general interest presented, and join in general discussion.

Other things of much interest to all will take place during the Short Course weeks, and no opportunity will be lost to make that time one full of events to be remembered.

FOOT BALL FOR 1912.

A Brief Review of the Season's Work.

Ever since the year 1907, each football summary has begun or ended with this phrase, "The best football team in the history of athletics at M. A. C." This year we can only repeat the well-worn phrase. Volumes of praise have already been written and read by RECORD subscribers concerning the wonderful victories, the splendid team play, the loyalty of students, the ability of the coach, and the plays of special note. M. A. C. has never had a poor season in football—each has been more brilliant than the preceding one. Each season shows development, as indicated by the summary of scores, and a correspondingly increased satisfaction and pride is manifest on the part of alumni and students. This development has naturally strengthened M. A. C.'s claim to a recognized high standard of football efficiency in the west. Without doubt, M. A. C. and Penn. State hold jointly the distinction of being the strongest college football teams in the country, and only a very short step removed from the class of the strongest university teams.

The top-heavy scores recorded by M. A. C. against her opponents were not due to any weaknesses on their part, but to the strength and diversified attack of our own offense, combined with the splendid fighting spirit of the defense. Every man gave his best to M. A. C. every minute of play, and the best of spirit was always shown, no matter how great the strife for a particular position.

Although to the average spectator the man who actually advances the ball appears as a bright light, it is nearly always the inconspicuous player—the one who makes the advance possible—who deserves credit, and upon whom such credit is seldom bestowed.

This idea of sacrificing self and individual play for the good of the team as a whole was so forcefully and so successfully injected into the men by Mr. Macklin that every man did his part all the time. This is the secret of the team's success. Any play will work if eleven men know what to do, and do it at the proper time. The team did the

fundamental things right. When they dove for a fumbled ball, they got it. When running interference, they took their man out. They tackled low and fiercely, so that no back could consistently escape. And further, they were no quitters. These qualities make stars when shown by the team as a whole; no individual stars are wanted to demoralize team play.

The new game of passing was developed and used successfully by M. A. C. in all her games. The team showed increased strength as the season progressed, culminating in the great Thanksgiving game at Columbus, when the Buckeye rooters saw their heroes practically helpless before our own fighting machine. Their feeble efforts in the last quarter left no doubt in the mind of any one where the victory should rest.

The spirit of loyalty exhibited in this last game was the same that has characterized the student body throughout the season. The fact that the score was 14 to 20 against the team at the end of the first half did not in the least dampen their spirits. It was a loyal bunch—the 200—who, after riding 230 miles, many of them with no breakfast or dinner, proceeded at once to the field and cheered themselves hoarse. No better support could have been given, and the team appreciate it.

A lot of credit is due the peppery little field-general, Gauthier. The team was somewhat lacking in fight, initiative and speed before he took the helm, but in him was found the necessary cog to make the complete machine. Capt.-elect Gifford is also deserving much credit for his all-round steady, consistent playing, both on offense and defense.

The all-freshmen team showed more strength than many college teams, holding the varsity to the score of 19 to 17 in the last month of the season, and playing a high class article of football. Several of these men are sure to get a monogram next year if they continue to improve.

The five men who will be lost by graduation this year—Capt. Riblet, Gorenflo, Campbell, Servis, and Chamberlain—were all stars in their respective positions, and will be sorely missed; but with the ten monogram men who remain in school, no better prospects ever faced an M. A. C. coach.

The following summary shows, in a measure, the strength of the home team:

M. A. C.	14	Alma	3
"	7	U. of M.	55
"	52	Olivet	0
"	58	De Pauw	0
"	46	Ohio Wes'n	0
"	61	Mt. Union	20
"	24	Wabash	0
"	35	Ohio State	20
Totals	297		98

Dean Bissell left Saturday for Mt. Vernon, N. Y., where he will spend Christmas with his parents, later going on to Cleveland to attend the meetings of the American Association for the Advancement of Science.

Earl P. Robinson, '07, who is doing field work for the Indiana Sugar companies, located at Decatur, Ind., paid college friends a visit Saturday. Mr. R. was on his way to St. Louis, Mich., where he is spending a few days and looking after his farm.

M. A. C. ALUMNI ASSOCIATION.

(Continued from page 1.)

Mr. Lindemann, who has taken an active part in the organization, proposed a Lansing Club room which would serve as headquarters for visiting alumni, and also provide a place where trophies might be kept. The M. A. C. RECORD was proposed as the official organ of the association, which proposal included certain suggestions as to its future field of activity.

There is certainly much that the home association can do to further the interests of the institution, and with the strong men and women behind the movement we shall look for results.

At the business session officers for the new organization were elected as follows: President, E. I. Dail; vice president, Clarence E. Holmes; secretary, Zelin Goodell; treasurer, E. C. Lindemann; chairman of executive committee, W. K. Prudden, and registrar, Prof. W. O. Hedrick.

ALUMNI.

'69.

Dr. C. E. Bessey gives the address as retiring president of the American Association for the Advancement of Science at the coming meeting in Cleveland, Monday, Dec. 30.

'92.

Dr. E. S. Bullock, with the class of '92, has made good in New Mexico, where he is head of the Cottage Sanitarium, devoted to the care of tuberculosis patients. He is recognized as an expert in his line. According to D. H. Kedzie, '76, he does not confine himself "to the bugs." Mr. Kedzie states that "Last fall he led the forces of the righteous on the field of Armageddon, in Grant Co., and succeeded in capturing 277 out of a possible 2136."

Dr. Bullock recently delivered the memorial address in Silver City for the Elks. The *Enterprise* publishes a very complete outline of the address, from which we quote the following paragraph:

"People have grown so accustomed to expect something different and original from Dr. Bullock that they were not at all surprised when he departed from the usual stereotyped memorial address and dwelt on man's inhumanity to man and the duty the living owed to the dead—not a mere sentimental idea but a beautiful practical thought that once applied to the whole world, will transform it into an earthly paradise."

'03.

Announcements are received of the marriage, on Dec. 14, of Frank K. Brainard, '03, and Miss Harriet St. John, of Madison, Wis. Mr. Brainard is assistant engineer in the electrical engineering department of the Allis-Chalmers Co. The young people are at home at West Allis, Wis.

'12.

James A. Smith has recently accepted a position with the Tennessee Copper Co., at Copperville, Tenn. He will be associated with A. H. Case, '01.

FRUIT COURSE.

The fruit course this year will cover six weeks, terminating on the 14th of February. The following two weeks will be given over to a consideration of truck and greenhouse crops. This additional work is given upon the recommendation of previous classes, and to answer the demand from market gardeners.

The work in fruit growing will be very practical and thorough. Fruit growing is no longer a part of general farming, but has developed into a highly specialized industry that demands a large degree of special knowledge and skill to pursue it with success, and the successful man must have a thorough knowledge of a wide range of subjects. Not only must his knowledge of varieties be very extensive, but he must know how trees are propagated; how they are handled in nursery and in the orchard. With this must go the knowledge of all diseases and insects that fruit trees and fruits are heir to, and in addition to this, the most approved methods of destroying and controlling them are absolutely essential. Too much definite knowledge about soils and their make-up, nature and properties, and how they should be handled, cannot be secured, and every fruit grower must know how to use, and especially to buy, fertilizers intelligently, and how to mix them at home in the most economical way. In addition to these very essential kinds of knowledge, the fruit grower must understand absolutely the different ways of propagating plants and making every spray material that he may need to use. No fruit farm is complete without the gas engine, so that the fruit grower must have a first-hand and very thorough knowledge about the leading makes of gas engines and their uses in driving spray machinery.

The fruit course as offered at the Michigan Agricultural College aims to give the student all that the above mentioned subjects call for.

These subjects are presented in the form of very practical lectures. Text books are not used, but the students are urged to take good, full notes upon the subjects presented.

Fruit growing will be thoroughly considered from the selection of the site to the marketing of the crop. A large collection of varieties of fruit from the college orchards and the South Haven experiment station are being held in cold storage for study, and every member of the class will have an opportunity to become thoroughly familiar with all the varieties of Michigan winter fruit. In addition, the department of horticulture has secured, from many other states, collections of apples and these will be compared with the Michigan kinds. A large collection of apples has been secured to show the results of spraying with the Bordeaux mixture and the newer mixture known as lime-sulphur. This collection is one of the greatest interest to fruit growers in Michigan at this time.

The important practice of spraying will be thoroughly discussed and each student will be expected to make and test every kind of spraying solution and poison now in use. A large collection of spraying appliances will be on hand to be tried and tested.

One of the pleasant features of this course will be the talks to be

given from time to time by some of the successful fruit growers of this state. It will be an inspiration to meet and hear these men tell of their methods and results.

The business of renting and improving apple orchards in Michigan is now an important one and some of the men who are handling this work on a large scale will tell of their methods.

The college is constantly receiving inquiries for young men of some practical experience and a knowledge of the fundamental principles of fruit growing to fill positions as managers and superintendents of fruit farms. These positions frequently carry a salary and a percentage of the profits, and offer attractive openings for young men who do not have the capital to start in the business for themselves.

POULTRY COURSE.

Michigan poultry interests are developing very rapidly. As this interest increases, so does the demand for poultry knowledge, and as the poultry business grows and spreads to new localities, there is demand for poultrymen possessed with good education along these lines.

To aid in the distribution of this knowledge and make possible a very thorough study of poultry problems, the College Department of Poultry Husbandry offers an eight weeks' short course during January and February, a time when it is in general most convenient for the individual to be absent from other duties and pursue systematic study along these lines. The course of study deals with many phases and problems which confront poultry raisers, including feeding and general care, breeding, a study of breeds, judging, exhibiting, incubating, brooding, preparing rations, and considerable importance will be placed on marketing of poultry and eggs and a study of present market conditions.

Lectures will occur daily, and laboratory work will be of accompanying nature, including planning and estimating costs of buildings, feeds, etc., judging, killing and dressing, and many other problems which need thorough study and practice to perfect. Practice work will comprise actual feeding for egg production, fattening, operation of incubators, setting up brooders, and

chances to observe demonstration work in caponizing, grading and candling of eggs, killing and dressing of poultry, etc.

There are many good commercial poultry establishments near the college, which will afford opportunity to study the actual conditions and to gain considerable valuable knowledge in this manner.

In past years the work done during our special poultry week has been of such a nature that we feel justified in continuing the same. Those who can leave their work for only a short time thus have opportunity to gain a great deal of valuable information in a series of special lectures which are given by professional poultrymen at this time. This poultry week will occur from February 10th to 15th.

Among the speakers who will present the poultry problems are the well known Professor Graham, of Ontario Agricultural College, Guelph; Franklane L. Sewell, Poultry Artist for the American Poultry Association; Mr. I. A. Freeman, who, aside from being a commercial poultryman, is on the lecture bureau for the American Poultry Association, and several other speakers who will be secured for single lectures during the week.

In connection with the poultry week there will be held, at the same time, in the college pavilion, our Fifth Annual Poultry Show. Judges Tucker and Wise will place the awards, which will be done on comparison system, but at the request of any exhibitor their birds will be scored. Universal cooping belonging to the Battle Creek Poultry Association has been loaned for the occasion. Mr. B. Porter, of Grand Rapids, who has had considerable experience along poultry lines, will superintend the show, and everything possible will be done to make this one of the best, as well as one of the most educational shows held in the state. No entry fees will be charged, ribbons of good quality will be given for prizes, and score cards may be had at the request of the exhibitors.

The M. A. C. Poultry Association will hold meetings during the term, which we hope will receive the co-operation of all students, and will be open to any interested in poultry subjects.

Mr. L. Fuller, who has completed a poultry course in this department, and who is also a commercial

poultryman of considerable experience, will assist in teaching short course work. It is hoped that there will be a large attendance for the eight weeks' course, and we especially desire the hearty co-operation and interest of all Michigan poultry raisers for the special week and show.

FARM MECHANICS.

To the farmer, the ability to use wood and blacksmithing tools with skill is a source of great satisfaction. Skilfulness in handling these tools does not require genius nor special gift. It has been repeatedly shown that the average boy, given opportunity and instruction, will develop along these lines rapidly, not only in dexterity shown, but in his taste and liking for work involving their use.

The popularity of the shop courses given to those taking the short courses is attributed to the fact that they enable the student to develop the hand and the eye, and at the same time present useful facts concerning such tools as those for which the farmer has almost daily need.

The first year's work in farm mechanics is devoted entirely to daily practice in the shop. A regular course of exercises is completed which brings into play all of the tools in common use. The more proficient of the students are then assigned to special work, such as making a whole or part of step ladders, wheel barrows, tool boxes in the wood shop, and special work in tempering and some of the more difficult welding and forming in the forge shop.

The second year's work in farm mechanics, called farm engineering has become very popular with short course men. Dealing with a most fascinating subject, gas engines and the use of other power on the farm, it brings up some interesting and practical problems. Other work, such as soldering, babbiting, belt lacing and rope splicing give the student opportunity to gather a large number of useful facts in a limited space of time.

711.

F. Lossing is with the U. S. lake survey at Highland Park, Ill. H. A. Lossing, of the same class, is now foreman of the erecting department of Folk Co.'s plant at Milwaukee.



THE AGRICULTURAL BUILDING.



MAIN DAIRY BARN. EXPERIMENTAL PLOTS AND FARM IN BACKGROUND.

THE DAIRY COURSES.

The short courses in dairying comprise four separate and independent courses. They are as follows: Creamery butter making, creamery management, cheese making and farm dairying. The course in creamery butter making has thus far proven the most popular of the above courses, if the number of students taking the course is to be a guide to its popularity. This deals quite largely with the theory of butter making, and to prepare the man of limited experience for undertaking the work with more confidence. It gives daily practice at the churn and thorough drill in the different processes of the creamery. It enables him to take hold of his season's work with a much more complete knowledge than he could have from several years of factory experience.

The course in creamery management is intended for those who have already completed the course in creamery butter making, and who have subsequent to this had a number of years of successful experience in creamery work. It is intended to give a better scientific background for the work which the men have already been working on, and which they will continue to carry on in the future.

While the number of cheese factories in the state of Michigan are not increasing as rapidly as the number of creameries, due to the fact in some instances that the condensery business is in some sections of the state established in the cheese making areas, still the number of men who have taken the cheese making course in past years have found ready employment.

For those who are to return immediately to the farm, the course in farm dairying is proving especially desirable. The production of milk and cream, and their proper care and management before marketing are topics of very vital and basic importance to the dairy industry of the state. This is particularly true since the gathered cream system of butter making is quite generally practiced in this state. The erection and operation of the farm separator is taught to all men who take the second year course in general agriculture. These also receive instruction in making the Babcock test. This is extremely necessary in connection with the separator, because without it the efficiency of

the machine could not be measured. It also gives the man upon the farm the ability to measure the productivity of the cows in his herd.

Each year more importance is attached to the dairy operations as carried on on the farm, and the instructions given the men help to improve the quality of the dairy farm products.

The corps of instructors in the creamery course for this coming year are as follows:

Prof. A. C. Anderson, who, besides the general supervision of all courses, will teach the work in dairy cattle as given to the members of the creamery management course.

Instructor C. E. Newlander, who besides teaching the theory of butter making, will teach the Babcock and other tests.

Mr. C. W. Brown will give a series of lectures on dairy bacteriology.

Mr. Simon Hagedorn will instruct all the creamery men in the matter of pasteurization and starters.

Mr. O. A. Jamison, besides assisting in the work in farm dairying, will teach the operation of the churn.

Mr. Chas. H. Dear will have charge of the course in cheese making, and will also assist with the work in dairying.

Mr. Chas. W. Brown, of the bacteriology department, will have charge of the course in creamery management in so far as it relates to fermentation, starter, pasteurization, and kindred topics.

JUNIOR AGRICULTURAL ASSOCIATIONS.

Plans and Purposes Set Forth in Special Bulletin.

The following article is the introduction to a forthcoming bulletin by the Department of Agricultural Education at M. A. C. If proper interest is taken by county school commissioners and rural schools alike, great good should be accomplished through the organization of these junior associations.

One of the most striking changes that are taking place in the educational landscape of this country is the removal of line fences between the school with its 35 hours per week time limit and the remaining 133 hours per week of real life of the pupil. Educators are becoming more and more imbued with the

notion that if education is to do its best to prepare the child for adult life, then those two preparatory institutions, the school and the home, must stand together, and together must lead the child out into the broader life by first entering into his life, making their interests his interests, and tempering their demands upon his powers by a knowledge of his viewpoint. Teachers have too often looked upon the child as merely a necessary adjunct of the school. It was the child for the school rather than the school for the child.

The play of the child is often, if not usually, an imitation of the real life of the adult. Boys and girls like to do the things that men and women do. This desire is the rudder by which they can be guided into the right course in life.

The most convincing proof that the barriers between the school and the life of the child are crumbling away, and the best evidence that educators are recognizing the educational significance of this tendency of children to imitate men and women are seen in the introduction into the schools of manual training and vocational courses, and especially the introduction of agriculture, not merely agricultural instruction, into the rural schools.

The county school commissioners have usually taken the lead in carrying the educational work into the home life of the rural pupil. So far, this has mainly taken the form of corn growing contests, in which the children of a county have been invited to grow a plot of corn, with a view to high yield, excellence of individual ears, or some other object, the conditions varying in the different counties. From these contests some very excellent results have been obtained, real interest and enthusiasm aroused on the part of the juvenile growers, parents awakened to the new trend of things educational, and the office of county school commissioner, as a factor in the training of future citizens of the county, magnified.

So far there has been no concerted action among the commissioners of the several counties where this sort of work has been undertaken. However, at their meeting held in connection with the State Teachers' Association in Grand Rapids, October 31, 1912, this department (Agricultural Education) proposed to them a plan of permanent organization. This plan as

submitted was unanimously adopted, and Commissioner T. H. Townsend, of Clinton county, was chosen president, and Commissioner Thomas M. Sattler, of Jackson county, treasurer, of a state executive committee. By the terms of the constitution, W. H. French, of the department of agricultural education at M. A. C., is ex-officio secretary of this committee.

The purposes of the organization, to be known as the Junior Agricultural Association of Michigan, may be outlined as follows:

1. To render permanent the educational move now expressed in the corn growing contests in the various counties.

2. To serve as a convenient vehicle for carrying out such concerted projects as the several county commissioners may wish to undertake.

3. To aid in unifying the efforts of the home, of the local teacher, of the county school commissioner, of the State Department of Education, and of the Michigan Agricultural College, along the lines of extension of agricultural education among the children of the state.

4. To bring together in a social way from time to time the young people of a community and of a county, in order to prevent the too common tendency toward a narrowing seclusion in the life of rural people.

5. To aid in training children in matters of organization and self-government, and to give practice in public reading and speaking.

6. To help in the developing of good farmers, good home-makers, good neighbors, good citizens.

Dr. Bessey's new bulletin, which has been sent to press, gives the text of the state law in the Seed Analysis for 1911-12, as well as the analysis of samples for two years.

Prof. King appears on the program of the Central M. E. church lecture course. His recital of the drama, "Breaking with the Past," will be given some time in January. The drama is by Danton.

At the last meeting of the year, the Farmers' Club elected officers as follows: President, G. E. Piper; vice president, O. T. Goodwin; secretary, K. K. Vining; treasurer, J. S. Wells; Scribe, J. H. Hamilton.

The new experiment station bulletin on alfalfa, by Prof. Shoesmith, will soon be ready for distribution. This bulletin is the result of the state-wide investigation which has been made of the experience of farmers with the growing of this crop.

D. F. Fisher, '12, was at M. A. C. several days the past week, when he made a collection of fruit to be sent to Washington for future laboratory specimens. Mr. F. will spend the holidays in New York at his old home, and then proceed to Washington for the winter.

Alma, Ypsilanti and M. A. C. each submitted a question for the coming triangular debate, the one offered by M. A. C. being selected. The question will be, Resolved, that the federal government should attempt to control the trusts, rather than to dissolve them. The debate will be held May 2. All societies except one have accepted the proposal to enter into a series of intersociety debates.

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ABOUT THE CAMPUS

Dr. Hutton, of the veterinary division, will spend the holidays at Wooster, O.

Pres. Snyder was in Flint Friday, where he spoke before a Bankers'-Farmers' meeting.

Prof. Johnston, of the English department, acted as judge at the recent local oratorical contest held at Olivet, Dec. 18.

H. C. Hilton, '11, was a recent college visitor. Mr. Hilton is in the forest service in Colorado. He will spend the holidays at his home in Fremont, Mich.

A. B. Cook, of Owosso, and Dwight S. Cole, Grand Rapids, both members of the class of 1893, were visitors at M. A. C. on Thursday, December 19.

R. E. Davis, instructor in zoology the past year, is visiting college friends at this time. Mr. Davis holds a like position in the Eastern Illinois State Normal School, located at Charleston.

Profs. Baker and Sanford will attend the meetings of the Eastern State Foresters, held in Lakewood, N. J., on Jan. 6 and 7, and also the meeting of the American Forestry Society in Washington, on Jan. 8.

On Thursday evening of last week the dining room of the Women's Building presented a very pretty appearance, with its holly trimming and numerous scarlet candles. The Christmas dinner was served, this being the last full day of college life for the fall term.

L. A. Wileden, senior vet., will spend the vacation in the veterinary laboratory.

Dr. and Mrs. Otto Rahn are in Lansing for the holidays, visiting at the former's old home.

Miss Ruth Wood is at her home in East Lansing, recovering from an operation for appendicitis.

Dr. Ruth Allen, of the Botanical Dept., will spend her Christmas vacation with friends in Sturgeon Bay, Wis., her former home.

L. O. Benner, '12, with the Studebaker Wagon Works in South Bend, was in Lansing several days the past week. Mr. Benner plans to make Lansing his future home.

Dr. Ernst Bessey plans to attend the scientific meetings at Cleveland during the week beginning Dec. 30. He will give a paper before the Botanical Society of America, and one before the Society of Seed Analysts.

The Idlers gave their annual Christmas party on the evening of Dec. 14, in the parlors of the Women's Building. Santa Claus was on hand, and the children (costumed) of all ages and sizes amply provided for.

W. M. Barrows, '03, assistant professor of zoology and entomology, in Ohio State University, Columbus, arrived at M. A. C. last week, and will spend Christmas with his parents, Prof. and Mrs. Barrows. Miss Marguerite Barrows is also at home for the holidays.

Just enough of the beautiful to make it seem like the Christmas time at M. A. C., but not yet enough for that sleighride.

The price of board as audited for the fall term in the various clubs is as follows: A, \$2.85; B, \$3.53; C, \$2.10; D, \$2.44; E, \$3.15; G, \$3.03.

A new operating table, especially for dogs and other smaller animals, has been added to the veterinary equipment. The table has a handsome steel enameled frame, is some 3 feet in height, 2 ft. x 5 ft. in size, and mounted on cushioned rollers.

Dr. Giltner, Miss Zae Northrop and Instructor C. W. Brown, of the department of Bacteriology, will attend the meeting of the Society of American Bacteriologists held in New York City, Dec. 30, and January 1 and 2. Dr. C. E. Marshall is secretary of this association.

M. T. Munn, '12, spent Thursday and Friday with M. A. C. friends. One of the objects of his visit was to obtain several hundred seed samples from the large seed collection in the botanical department, to form a basis of a seed collection for the New York state experiment station at Geneva, where Mr. Munn has charge of the seed testing work. He is also engaged in studies of various plant diseases. Mr. Munn will spend Christmas at his home, and then proceed to Cleveland, where he gives a paper before the Association of Seed Analysts.

Miss Bessie Bemis, '05, instructor in domestic science in the University of Minnesota, is at M. A. C. to spend the holidays with her parents.

By recent action of the State Board, Prof. J. Fred Baker, of the Forestry department, was granted leave of absence for one year, beginning April 1. Prof. Baker will study abroad during his leave.

Mr. Stephen B. Klem has been appointed instructor in forestry, beginning Jan. 1. Mr. Klem is a graduate of the Yale Forest School, 1910, with the degree of M. S. He entered the U. S. Forest service upon civil service examination, and for some time held the rank of forest assistant. He is now in special work in the forest service.

Dr. H. J. Webber stopped at M. A. C. Friday, on his way to California, in order to visit his son, Earl, '17, and to visit certain departments. Dr. Webber has resigned his position as head of the department of plant breeding in Cornell, to become head of the graduate school of sub-tropical agriculture, to be located at some point in the citrus region of Southern California. This school will provide for graduate work for a limited number of students. The faculty will consist of investigators who will guide the work of the graduate students, and at the same time carry on research work along various lines of sub-tropical agriculture. This institution is to be under the same control as the State University.

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New Law Becomes Effective Jan. 1, 1913.

The new parcels post law, which goes into effect on January 1, provides:

"That hereafter fourth-class mail matter shall embrace all other matter, including farm and factory products, not now embraced by law in either the first, second, or third class, not exceeding eleven pounds in weight, nor greater in size than seventy-two inches in length and girth combined, nor in form or kind likely to injure the person of any postal employee or damage the mail equipment or other mail matter and not of a character perishable within a period reasonably required for transportation and delivery."

The postage is thus reduced quite materially, and the limit of weight increased from four to eleven pounds. Those residing on rural or star routes will be accommodated, and the city dweller where free delivery is now in operation may have his parcels delivered at the door.

Special delivery service will be accorded upon payment of the usual fees, and packages may also be insured against loss or damage in an amount equivalent to their actual value.

The United States has been divided into zones, in order to carry this law into effect, and rates of postage are made applicable to each.

The local rate is made five cents for the first pound and increases one cent for each additional pound until the limit of 11 pounds is reached, with a charge of 15 cents.

For the first zone of 50 miles the rate will be five cents for the first pound, increasing three cents with each additional pound, or 11 pounds for 35 cents for the limit.

In the second zone, from 50 to 150 miles, the rate will be from six cents to 46 cents increasing four cents for each additional pound.

In the third zone, 150 to 300 miles, the rate will be .07 to .57; in the fourth, 300 to 600 miles, .08 to .68; in the fifth, 600 to 1,000 miles, .09 to .79; in the sixth, 1,000 to 1,400 miles, .10 to \$1.00; in the seventh, 1,400 to 1,800 miles, .11 to \$1.11; in the eighth, all over 1,800 miles, .12 to \$1.32.

A VISIT TO PANAMA.

Dean Bissell gave a most interesting account of his trip to the Panama before the members of the Women's Club at the last meeting.

At the beginning he showed, by means of maps and charts, the present routes of steamship travel and the suggested routes for the canal. The big relief map was brought into use, and the course of the canal nicely explained by its use.

Three great difficulties had to be encountered in this undertaking. The first was that of health and sanitation, the engineers sharing

alike the dangers with the common laborers.

The great rainfall of the country was another obstacle. The rivers rise several feet in a very few hours on account of the excessive rainfall of that region. This was in part overcome by the construction of a great dam, thereby spreading the water over a greater area.

The great Culbra cut was another obstacle, and the tunneling and excavating was a feature of this great engineering feat.

A short description of the country before the work began was given, a statement of when the canal will be formally opened, something of the tolls to be levied, and the number of ships likely to pass through the canal in a given time.

Dean Bissell closed his address with a series of lantern slides showing actual working operations on the canal.

Several M. A. C. men are employed on this project, one of whom, Rufus Landon, with '98, son of our librarian, is in the offices at Gatun.

BREEDERS' AND FEEDERS' ASSOCIATIONS.

The 22nd annual meeting of the Michigan Improved Live Stock Breeders' and Feeders' Association will meet at the College on Wednesday and Thursday, January 15 and 16.

The sectional meetings will all be held in the Agricultural building on the 15th, and will include the following: Horse Breeders; Cattle—Short horn breeders, Holstein, Jersey, Guernsey, Red Poll and Hereford breeders. Sheep—Merino, Oxford, and Shropshire breeders. Hogs—Berkshire, Poland China and Duroc Jersey breeders.

The general session will be held on the 16th in the assembly room of the same building. At this session several men of note will have part in the discussion, among whom will be Prof. W. C. Coffee, the University of Illinois specialist on sheep breeding and feeding; Mr. Wayne Densmore, secretary of the Percheron Horse Association of America, and Mr. H. R. Rall, chief of the Dairy Division, U. S. Department of Agriculture.

A new feature in connection with this association will be the show of fat barrows on the afternoon of the 15th. The animals will then be slaughtered, and on the 16th the carcasses will be judged. This should be a most instructive demonstration, especially to the producer of pork.

The annual banquet will be tendered the visiting association members on the evening of the 16th at 8 o'clock, probably in Club D. At this time several outside speakers will be present, including Mr. M. H. Gardner, of DeLavan, Wis.; John W. Grove, Chicago; and W. H. Cadwell, of Petersburg, N. H. In addition, a number of local speakers will appear on the program.

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