

# The M. A. C. RECORD.

MICHIGAN STATE AGRICULTURAL COLLEGE.

Vol. 8.

LANSING, MICHIGAN, TUESDAY, FEB. 3, 1903.

No. 20

## BASKETBALL SEASON OPENS.

The basketball season of 1903 opened auspiciously for M. A. C. when the Detroit Y. M. C. A. team was beaten in the armory last Wednesday evening by the score of 43 to 8. The Y. M. C. A. is considered a strong team and the size of the score is very satisfying to M. A. C.

The new court in the center of the armory made it possible for every one in the audience to see all points of the play, a thing that has not been possible in games heretofore. The audience was probably the largest that ever attended a basketball game at the College and there was no lack of enthusiasm from start to finish.

M. A. C. wore the new suits for the first time in a game and the contrast in color between the suits of the home team and those of the Y. M. C. A. made the game particularly interesting from the spectator's point of view. The hour set for beginning the game was seven o'clock but it was seven-thirty when play began. M. A. C. was the first to score, Haftenkamp throwing a basket after fifteen seconds of play and after four passes had been made. The score soon stood six to two in favor of M. A. C. and then six to four but after this the Y. M. C. A. team never appeared to have any chance to win.

At the end of the first half the score stood 21 to 7. In the last half M. A. C. ran away with the Y. M. C. A. and scored almost at will. Nine fouls were called on each side but only seven points were scored as a result of penalties.

The Y. M. C. A. team is made up of a husky set of fellows and during the first half they played well but the superior team work of M. A. C. in the second half seemed to discourage them. The audience missed Blanchard and Cooper from the M. A. C. line-up but Morgan and Tuttle, who have taken their places, played creditably. Tuttle, in particular, played cleverly, never losing his head and making some very difficult passes. For general all-around playing, however, Balbach and Captain Haftenkamp stand out in bold relief as of old.

The line up:

M. A. C.		Y. M. C. A.
Morgan		Magee
Haftenkamp (Capt.)	Forwards	Schink
Balbach		Hockady
Tower	Center	Kuhn (Capt.)
Tuttle	Guards	Gardner

Baskets: Haftenkamp, 10; Balbach, 7; Tuttle, 2; Tower 1; Schink, 2. Scores from fouls: Schink, 2; Kuhn, 2; Balbach, 3. Halves, twenty minutes each. Officials, Hackett of Detroit, McCormick of Lansing, and Bolte of M. A. C.

## THE HILLSDALE GAME.

At two o'clock Saturday afternoon Hillsdale and M. A. C. lined up in the armory for the second basketball game of the season at M. A. C. The final score stood: M. A. C., 49—Hillsdale, 2.

The things said about the M. A. C.—Y. M. C. A. game apply very

well to Saturday's game. Hillsdale, however, did not "quit" in the latter part of the second half as did the Y. M. C. A., but played pluckily to the end. As long as M. A. C. meets teams she is able to defeat by overwhelming scores there is not a great deal to say about the work of the opponents.

In Saturday's game Balbach, to keep the interest up, would jump and seize the ball with both hands when it was put in play, Tuttle would leave his opponent and visit with the other players. But Hillsdale couldn't win.

Coach "Hurry-up" Yost saw the game and seemed well-pleased. It is rumored that he was looking up football material. As large a crowd as attended the Y. M. C. A. game was present.

The line-up:

M. A. C.		HILLSDALE.
Haftenkamp (Capt.)		Baker
Schaefer	Forwards	(Capt.)
		McIntosh
Balbach	Center	Tacey
Tower		Boone
Tuttle	Guards	Wood

Officials, Bolte, Millar, Cooper. Fouls: Hillsdale, 5; M. A. C., 3. Goals from fouls: Balbach, 5. Baskets from floor: Balbach, 7; Haftenkamp, 8; Schaefer, 4; Tuttle, 2; Tower, 1; McIntosh, 1. Score: M. A. C., 49; Hillsdale, 2.

## MILITARY HOP.

The military hop in honor of Colonel Shubel and the officers of the Governor's Guards on Jan. 30th was voted by all present, one of the most enjoyable dances ever given at the College.

The grand march commenced about eight o'clock, led by Colonel Shubel and Miss Elizabeth Dodds, the officers of guard and battalion following. After a few simple figures the programs were issued and dancing commenced.

There were about seventy-five couples present, sufficient to well fill without crowding the armory. Uniforms were almost universally worn by the students attending, and with the added blue of the Guard uniform gave quite a brilliant appearance.

The music furnished by Mr. Prost was especially appreciated as shown by more vigorous encores than at any previous dance this year.

The orchestra responded good-naturedly and was kept playing almost continuously during the last hour.

Finally, only too soon, eleven o'clock came round and a most happy company started their several ways.

## LECTURES OF THE WEEK.

On Wednesday afternoon President Snyder addressed the Special Students, his remarks being explanatory of the College, its aim, its purpose and its future possibilities. The talk was entirely informal as there had been no time for preparation but the applause at the close showed that it was appreciated.

President Snyder related some details of history which are more or

less familiar to those who have an interest in the College, but several historical facts were brought out which in general are not known and which could not be effectively told here. The talk was of much value in helping one to obtain a comprehensive view of all sides of life at M. A. C.

## CARE OF THE ORCHARD.

Prof. Taft addressed the special students on the subject, "Care of the Orchard." He spoke first of the soils suitable for the orchard. In general the ground should be well drained and natural drainage is to be preferred to artificial. Natural drainage must necessarily give a slightly rolling ground and this is of advantage in protecting fruit from frosts. There is often a difference of ten degrees between the temperature of a hilltop and that of the adjacent low land.

Different sorts of orchard trees require for ideal conditions different soils. For the pear-tree a rather heavy clay loam is good, and the plum requires nearly the same kind of soil, but if there is any difference the plum-tree should be on a soil better drained than that suitable for the pear-tree. The apple-tree requires a light clay or sandy loam; and the peach and cherry lighter loams.

Prof. Taft gave demonstrations of pruning, and advised each one contemplating the setting out of trees to see to it that the trees be purchased of reliable nurserymen. The small fruits were also discussed, though briefly. For spraying Prof. Taft recommended Bordeaux mixture and Paris green as the best for general purposes.

## HORTICULTURAL CLUB.

A very interesting program was given at the meeting of the Horticultural Club last Wednesday evening. Mr. Sway gave a talk on "The Division of Pomology." He outlined the work of the division and gave some very instructive information.

Prof. Gunson spoke on "Michigan's rank in Horticulture." Some of the things brought out were revelations to many of those present, he said: "Michigan ranks first in number of peach trees, 3d in plum and pear trees, 5th in grapes and 6th in apples; first in acreage of celery, 2d in potatoes, 3d in onions, 4th in vegetables and 2d in strawberries. Michigan holds 5th place in orchard products." One very surprising statement Mr. Gunson made was that Oakland county had the largest acreage of potatoes of any county in the state.

At the next meeting of the Club, Feb. 11, Mr. Perry will give an illustrated talk on "Pruning Dwarf Pears." Mr. Perry has had considerable experience with dwarf pears and his talk will be of benefit to anyone interested in Horticulture.

Pitcher Coakley of Holy Cross has been debarred because of professionalism.

## ALUMNI.

'89. About 1885, C. L. Bemis, '74, then superintendent of schools in Portland, came here at the opening of the College year with several young men in tow for the freshman class. He quietly made a remark about this one and another about that one, and when he came to W. L. Rossman, he observed, "He is a quiet, studious young man who knows what he comes to college for. The faculty need have no anxiety that he will ever get into any scrapes, or make any trouble anywhere." He was as good as the gold and graduated in '89, since which time he has been State analyst for the food commission, and chemist for two other manufacturers, and last for two factories at Harbor Beach, Mich. To use up a waste product (gluten) is making wheat starch, they use it with flour to make macaroni. This factory was started four years ago with a capacity of 25 bbls. per day. The company now operates two factories with a combined capacity of 150 bbls. per day. The starch is manufactured after a process invented by W. L. Rossman. The product includes what is termed a thin cooking starch. When twelve ounces of this starch is cooked in water, the resulting of the solution is but little heavier than water, consequently in using it in the laundry it requires no rubbing in, but penetrates the fibre of the goods readily, thus saving a good deal of work in starching and produces a more pliable finish. The gluten is first separated from the starch in large washing tanks, and the mass of gluten is heated so as to bring it into a soluble condition and dried. This is sold as soluble vegetable albumen, to the textile industry and is used in place of egg and blood albumen.

'93-'96m. Elon W. Pond, the son of A. L. Pond, '93-'96m, died January 21st, Coldwater, Michigan.

'00sp. Arthur Nunnally, manager of the creamery in Portland, was recently married to Miss Florence Klotz of that place.

'02m. Guy S. Covell, who has recently returned from West Point, spent Sunday at the College. He has given up his work at West Point.

'02. Mr. Burt Wermuth, who has been at M. A. C. for the past week, will work for the degree of M. S. in Horticulture.

'02. L. D. Rudolph, who is working for the National Publishing Company, will possibly go to England before long on a business trip.

'02. O. H. Skinner, of Alma, spent Sunday at the College.

'02. William Krieger was at M. A. C. last week, taking a short vacation from his green house work at Grand Ledge.



## THE M. A. C. RECORD.

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TUESDAY, FEB. 3, 1903.

FOR some the engineering students of the College have been discussing plans whereby an engineering journal might be maintained at M. A. C. The engineering department of the large Universities all have such journals and in most cases the numbers appear each month. In these journals are published technical articles full of helpful suggestion. The exchanges that one engineering department receives from the departments of other universities are also of much value. Let the publication of an engineering journal at M. A. C. be encouraged.

### CONCERNING A COURSE OF STUDY FOR AGRICULTURAL STUDENTS.

We need go no further back than the year 1870, when the writer first became a member of the faculty of Michigan Agricultural College.

At that time it was easy enough to plan a four-years course for an Agricultural College, and a course which all should be required to pursue. In fact, there was hardly enough to be found to fill a course. Astronomy had been called in to occupy a place for a few years.

The equipment of such a college was meagre; the endowment small and alarmingly unstable; in some departments competent teachers scarcely to be had. All departments of agriculture in the new country were still in the pioneer stage.

Systematic work in the dairy was unthought of; there was no Babcock test, no selection of bacteria for starters; no stock feeding with due regard to balanced rations, little practice in stock judging, none in fitting teams of students to compete at Fat-Stock Shows.

There were no experiment stations of much worth as illustrations, but little that was really valuable and interesting coming from the U. S. Department of Agriculture.

In the West there seemed to be no call for an Agricultural student to spend time in a college learning

from a competent teacher anything concerning poultry and honey bees.

The connection between bacteria and the soil, the root tubercles of legumes and their cause of disease of plants were unknown. The chemist was supposed to be the only teacher competent to meddle with the science of the soil, with some aid from geology; for soil physics had then revealed no wonders.

Nowhere in America, nor scarcely in the world, was there a College where each student of a class pursued studies in plant histology aided by a compound microscope.

Plant histology was yet in a crude condition, and it was not thought worth while to occupy a place on the program;—the wonders of modern plant pathology had not been dreamed of. There was no plant ecology, no systematic study of grasses, or other forage plants, and weeds in their relation to agriculture; no spraying to ward off or kill insects or fungi; no plant breeding or study of the evolution of plants under domestication. True, the American edition of Darwin's work on Animals and Plants Under Domestication appeared in 1868, but the ideas were new and by no means universally accepted.

The growing of radishes, lettuce, cucumbers, carnations, chrysanthemums, and roses under glass for commercial purposes was of little account and not deemed worthy of consideration by college students.

There was absolutely no attention paid to caring for trees or growing trees for timber, but every student was expected to know how to cut down trees and get rid of them in the most economical way possible, with reference to growing more wheat, corn and other crops that were deemed worth something.

There was nothing to compare with sociology or economics as now understood—involving the consideration of transportation, taxation, trusts, and other problems of prime importance to farmers.

There was no call for special courses in any department of agriculture. No farmers' institutes had begun to arouse the people; no granges or farmers' clubs had begun burning over the land, warming the minds of farmers to concerted action in better methods. No seminary work in the examination of current agricultural literature or experimentation was possible, because there were no bulletins and scarcely any agricultural books to work with.

In the year 1870, the catalogue of the oldest agricultural College in America contained the following:

#### COURSE OF INSTRUCTION.

FRESHMAN CLASS.—First half year. Algebra, Davies; history, Weber; geometry, Robinson; book-keeping, Mayhew.

Second half year. Trigonometry, Robinson; surveying, Davies; practical agriculture, lectures; geology, Dana.

SOPHOMORE CLASS.—First half year. English literature, Chambers, Spaulding; botany, Gray, elementary chemistry, Roscoe.

Second half year. Entomology, Packard; analytical chemistry, Kedzie; botany, Gray, Darlington, Lindley; horticulture, Thomas, Fuller, Henderson.

JUNIOR CLASS.—First half year. Physics, Snell's Olmsted; Agricultural chemistry, lectures; inductive logic, Herschel.

Second half year. Physics, Miller; meteorology, lectures; rhetoric, Whately, Day's Praxis; animal physiology, Dalton.

SENIOR CLASS.—First half year. Zoology, Carpenter; practical agriculture, lectures; mental philosophy, Wayland; astronomy, Snell's Olmsted; French, Otto.

Second half year. Landscape gardening, Downing, Kemp; civil engineering, Mahan; moral philosophy, Fairchild; political economy, Carey, Walker; French, Otto, DeFivas.

This reminiscence has been indulged in to show the present generation that great changes have taken place. I have enumerated more than enough new topics to occupy the entire time of a student in an agricultural course for four years.

We still have most that was in the old course, and much of it cannot be omitted today. We can curtail and add here a little and there a little; doing our very best, it is impossible in all this rich field of study in agriculture to make one course of four years hold them all, nor is it desirable to get them all into one course. This is a day of specialization in every department of human effort, as can be seen by reading the discussions that are to be found in reports of college faculties, in educational and scientific journals of the day. We know it is costly, but elective studies must become more and more numerous as the years pass on, and most, if not all colleges will continue to offer elective courses consisting of groups of topics.

Any one who has long been a

teacher in a live Agricultural College knows that every four to eight years there is sure to be a general breaking up and rearrangement of the studies with additions to certain lines. Every new professor that is added to or substituted in a faculty soon discovers some feature of the course that he would like changed. No two men can see such things alike. Each has his preferences, depending on his training and his temperament. New discoveries, new methods, new wants of the students make frequent changes inevitable. There cannot be much that is stable or permanent.

Below are enumerated some of the leading industries that a graduate of an Agricultural College is naturally supposed to make his life work.

The growing of fat cattle and swine, the growing of sheep, horses and poultry, dairying, bee-keeping, and in connection with these the growing of cereals, pastures and meadows. He may engage in growing orchard fruits, small fruits, vegetables in the open air. He may become a florist, growing carnations, roses and chrysanthemums. He may give much attention to growing young trees and plants for market. He may give his attention to some one or more special crops like sugar beets, potatoes, chicory, hops, or celery. He may engage in the work of an experiment station, or perhaps diverge in the line of veterinary, forestry, or landscape art, or help to edit an agricultural or horticultural journal.

The numerous short special courses now so common in many of

(Continued on page four.)

### FARMERS' INSTITUTES FOR FEBRUARY.

COUNTY.	PLACE.	DATE.
Lenawee	Hudson	February 9-10
St. Joseph	Centerville	" 9-10
Barry	Hastings	" 10-11
Washtenaw	Chelsea	" 11-12
Cass	Cassopolis	" 11-12
Ionia	Ionia	" 12-13
Hillsdale	Litchfield	" 13-14
Branch	Coldwater	" 13-14
Livingston	Howell	" 16-17
Jackson	Grass Lake	" 16-17
Van Buren	Paw Paw	" 17-18
Oakland	Pontiac	" 18-19
Calhoun	Albion	" 18-19
Berrien	Eau Claire	" 18-19
Eaton	Charlotte	" 19-20
Ingham	Stockbridge	" 20-21
Allegan	Wayland	" 20-21

One-day institutes will be held in Allegan county February 2d to 9th, Oakland county, 11th to 12th, Van Buren county, 10th to 13th, Oceana county, 10th to 14th, Washtenaw county, 10th to 13th, Kalamazoo county, 17th to 19th, Wexford county, 17th to 20th.

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# ABOUT THE CAMPUS.

Prof. Reynolds is ill with tonsillitis.

Mr. C. Walter Knight, with '04, is now a clerk in the Mount Clemens postoffice.

A gold locket has been found in the physical laboratory. Owner can have same by calling at the laboratory.

The Alpha Zeta Fraternity has elected the following officers: Chancellor, F. D. Stephens; Censor, E. S. Good; Scribe, G. C. Sevey; Historian, S. B. Hartmann.

President Snyder and Dr. Edwards attended the first annual banquet of the Detroit M. A. C. Association Saturday evening. A more extended notice will appear next week.

Some of the students of the mechanical department are testing a rotary engine. This engine, which can develop three-horse power, could be conveniently tucked under the arm and walked off with.

Last week Senator Goodell, of Wayne county, introduced a bill in the State Senate, providing for a memorial to the late Dr. Kedzie to be erected on the campus. It is reported that he considered \$10,000 none too large a sum to be expended.

Messrs. E. Balbach, S. E. Johnson and H. G. Walker became members of Tau Beta Pi Thursday evening. On Thursday afternoon, by way of initiation, they paraded the walks in the rain doing "stunts" for the delectation of passers-by and peekers-out-of-windows.

Prof. Robison is moving into Howard Terrace.

The State Dairy Association meets at the College today.

The ground-hog did not see very much of his own shadow yesterday.

The State Board is in session today with the new members present.

Homer Eaton taught the special students last week some things in advanced creamery mechanics.

Several things have been put in shape in the postoffice and everything about the office is now in apple-pie order.

Assistant Postmaster Goss was in Grand Rapids Friday attending the ceremonies connected with the installation of the new pastor of the Park Congregational church. Mr. Goss was a delegate from Pilgrim Congregational church.

The *I. S. C. Student* contained this item in the January 31st issue: Prof. Erwin leaves today for Madison, Wis., to attend the Wisconsin Horticultural society, where he will read a paper on plant breeding. On his return he expects to visit the Michigan Agricultural College at Lansing.

Prof. Pettit has taken impressions from all his cuts of insects and is giving copies to each of the special students in his classes and the juniors in economic entomology will receive next term similar copies to paste in their note books. Prof. Pettit has bought a small hand press for taking impressions of cuts for this purpose.

Mr. C. E. Walter has taken a large photograph of the special students in stock-judging.

Prof. Bogue has added to his forestry museum six axes of the best quality and representing the types used by the woodsman.

The Shakespeare Club read Coriolanus at its last meeting. Tomorrow evening, Mr. R. S. Baker and Mr. C. B. Collingwood will speak on the subject of vaudeville.

Mr. M. L. Dean attended the annual meeting of the Michigan State Agricultural Society last week at Pontiac having been elected a member of the board last year. The State Fair will be held at Pontiac in 1903. There will be a stock-judging contest open to students of M. A. C. and also to farmer's sons of the state. The prizes offered for this contest amount to \$50, the College and the Fair Association offering \$25 each.

At the Debating Club Thursday evening the subject, "Resolved, That President Roosevelt is justified in refusing to arbitrate the Venezuelan question," was debated. Messrs. Gates and Owen upheld the affirmative. Messrs. Severance and Flint, the negative. The subject for debate at the next meeting is, "Resolved, That the equivalent of two hours manual labor daily should be required of all Agricultural students during the first two years of their course."

The next regular meeting of the Natural History Society will be held in the zoological lecture room to-

morrow night (Wed., Feb. 4) at 6:30. In the meetings of the society for this term it is the plan to review the life of some great scientist at each meeting as well as to have one or two other articles of interest. At our last meeting Mr. Gunson gave a very interesting talk. On Wednesday evening Dr. Beal will give a talk on Louis Agassiz. During the Doctor's college days he took work under Agassiz, and will, therefore, be able to give us some interesting facts in regard to the work of this great scientist. Prof. Barrows will also lecture on meteorites, and will have some fine specimens to show, among which is a new one just received by the department that is very interesting. It was found in this state, and is of unusual size, weighing over forty pounds. Every one is welcome.

January 26th. A meeting of candidates for the baseball and track teams was held and arrangements made for coaching the applicants for positions in small squads between two and five each afternoon. Some cross country running was also promised. About fifty attended the meeting signing cards, showing work they expected to take up, and vacant hours during present term.

January 27th. An athletic meeting was held at which it was voted to leave the handling of the new M. I. A. A. constitution to a committee, composed of the executive committee of the M. I. A. A., the physical director, a member of the faculty and one representative from each class.

## NORTON'S HARDWARE

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Prices \$3.00 and \$3.50 a pair.

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## CONCERNING A COURSE OF STUDY FOR AGRICULTURAL STUDENTS.

(Continued from page two)

the states require special methods of teaching.

I am a teacher of economic botany, but the particular sections of it that I should teach a class in an agricultural college would depend largely on the kind of work the members of the class are preparing for.

Every one of the agricultural students should study at least one topic in botany, such as the grass anatomy of plants. This would be mainly to give training in learning to observe little things well. If the student had decided to devote himself entirely to raising poultry, I should not require him to take more than sixty lessons in botany, the work of twelve weeks. If the student were to make bee-keeping his specialty in addition to the above, I should advise him to spend one year daily in systematic botany, learning to identify and recognize all sorts of seed plants.

The gross anatomy of plants and the systematic study would both be important to the florist and the orchardist, and to the work above I would add the following: Sixty or more lessons in histology, seventy-five lessons in the study of parasitic fungi and plant pathology in general, and as much more in the elements of plant physiology. By this time he should acquire a training that would enable him to go on without a teacher. Much of this course for the horticultural student would consist in laboratory work with reading the best books and bulletins and very little in lectures. Were the student intending to grow a variety of farm crops, I should ask him to take less of what I term systematic botany and less of pathology and put some twenty weeks on the study of weeds and forage crops.

W. J. B.

## A NEW METEORITE.

In December, 1898, while at Reed City, Michigan, Professor Barrows saw a mass of meteoric iron displayed in a hotel window and was told that there had been a dispute as to the origin of the specimen, some claiming that it was a meteor from the skies, others that it was a lump of ordinary iron.

A glance was sufficient to show that it was a genuine meteorite, and the owner was hunted up and an unsuccessful effort made to secure the specimen for the College museum. Other attempts were equally unsuccessful until recently, when the iron was purchased by the zoological department and is now in our possession.

Its present weight is just 44 pounds, but a small piece—less than a pound—was broken off by the finder in an effort to discover what made the "stone" so heavy. It is a flattened, irregularly oval mass, about ten and one-half inches long by eight inches wide, with a maximum thickness of about three and one-half inches, and in spite of the rusting which it has undergone while lying in the earth it shows the characteristic pitted surface of all such meteorites. Analysis shows that it contains about 86 percent of metallic iron and about 8 percent of nickel, the remainder being made up of various other substances. It was found on the farm of Ernest

Ruppert, in Reed Village, near Reed City, while plowing, in September, 1895. No one claims to have seen it fall, and its condition shows that it had lain on or near the surface for some years.

As is well known, a meteorite is simply a meteor or "shooting star," which has failed to burn up in passing through our atmosphere, and so has dropped to the earth. Thousands, perhaps millions, must enter the atmosphere of the earth every day, but the very great majority take fire from the compression and friction of the air and are completely consumed before reaching the earth's surface. It is, therefore, rather unusual to find one, although several hundreds, perhaps a thousand or two, have been gathered into the museums of the world, and have been catalogued, many of them analyzed, and the results published.

Only two other Michigan meteorites have been described thus far: One an iron meteorite found at Grand Rapids, and the other an "earthy" meteorite or aerolite, which fell in the town of Allegan in July, 1899, and was picked up while still hot.

The Reed City meteorite will be exhibited at the meeting of the Natural History Society tomorrow (Wednesday) night at 6:30, when some additional facts about this and other celestial visitors will be presented.

## HAHN-PARKE QUINTETTE.

The Hahn-Parke Quintette will be with us next Friday evening and everyone should come out to this entertainment. This company is similar to the one that played here last year, but it has a wider reputation and bids fair to surpass that of last year, which is saying a good deal. The company consists of the following combination.

The Hahn Ladies String Quartette: Mary Davis Hahn, first violin; Anna Dale Parke, second violin; Ada Dale Parke, viola; Nina Dale Parke, cello.

The Parke Sisters Quartette: Anna Dale Parke, first violin; Ada Dale Parke, viola and soprano; Nina Dale Parke, cello; Caroline Dale Parke, piano; Mr. Roy H. Hoskins, basso.

The first part will be an interpretative concert under the direction of Miss Caroline Parke; the second part a recital the versatility of the the artists. Single admission will be 35 cents; course tickets for the remainder of the course can be obtained for 60 cents. Come one, come all.

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