

The M. A. C. RECORD.

MICHIGAN STATE AGRICULTURAL COLLEGE.

VOL. 10.

LANSING, MICHIGAN, TUESDAY, APRIL 11, 1905.

No. 29



VICTOR GARDNER.



BON BENNETT.



HORACE HUNT.

We present to our readers in this issue of the RECORD half tones of the orators selected by the faculty to represent the various classes at commencement. Mr. Z. Victor Gardner of Lansing will represent the agricultural department, Mr. Horace Hunt of Jackson the mechanical department, and Miss Bon Bennett also of Lansing the women's department.

NONE-SUCH BROTHERS' CIRCUS.

Saturday was a gala day at the Agricultural College when the farmer lads and lassies were given the grand opportunity of seeing the great shows of the None-Such Brothers. The day was ideal for a circus crowd, not warm enough to be sticky, and not cold enough to make the animals dormant.

It was 2:30 in the afternoon when the beauty and the chivalry of M. A. C. lined up along Faculty Row and the street car tracks to see the great pageant march by. To quote from one of the co eds. this feature of the grand moral organization was "Certainly Hot Stuff!"

In the lead was the Manager M. Nonesuch and our noble Chief of Police, followed by Jordan's world renowned M. A. C. Marine Band pouring forth strains of The Bill-board, to which Jumbo, the sacred white elephant was doing a quick-step that would make a military hop look like a lame man with delirium tremens trying to do the Highland Fling.

Behind this was Bengal Boom, the ferocious tiger from the jungles of India. In another part of the same cage was the famous lion tamer from the wilds of Africa carelessly sitting by the side of the fiercest king of beasts in captivity. Wild Tom, the only living member of a supposed extinct race of African cave dwellers, was constantly trying to eat the stone steps from the Faculty residences. With the one hundred other animals with the bands and chariots, and the pretty women, the parade was three miles long.

In addition to the animals in the parade the visitor saw in the me-

nagerie of the big show several animals and cages which the short roadways and streets of M. A. C. would not accommodate in the parade.

The most interesting perhaps was the terrible sea serpent, whose arms were continually on the move and coming in contact with those who were careless enough to get near it.

There was the only living member of an extinct species of bed bug rescued from Wells Hall the night of the fire. He was $3\frac{1}{2}$ inches in length, of the hard shell variety and weighed 34 ounces.

The wonder of creation—the famous Ki-yi Bird from the cactus country of Arizona discoursed sweet music during the entire program. There was the Bird of Paradise and the Baby Elephant, the delight of all the M. A. C. boys and girls.

Taken altogether the None-Such Brothers have the greatest menagerie in existence today. The Lincoln Park zoo authorities offered to trade outfits with them and give \$7.85 to boot. The deal has not been closed yet.

The great doors to the show were opened at 3 and 8 p. m. The tickets purchased, the crowd surged into the main tent and was at once at the mercy of the many catch-penny stands which included the throwing of balls, fish catching, side shows, and the many booths offering their wares of pop corn and candy, the latter being of the best and highly enjoyed. In so great a throng, however, it was necessary that the officers of the law (?) be "kept busy" and they fulfilled their duty to the letter. Many arrests were made and justice at the hands of Hon. Pat O'Gara dealt out in large doses. The charges made were many and varied, but "contempt of court" certainly took a very prominent place. You missed a great deal if you did not attend this show—you no doubt missed some if you did.

The Master of Ceremonies, Mr. Nonesuch, was a very dignified gentleman who announced the various numbers of the program with a grace becoming so great a manager and as he appeared upon rostrum to announce each number the audience knew what would happen next—that bow.

The light and heavy weight balancing and slack wire walking by Prof. DeBoe was one of the features of both afternoon and evening and was much appreciated. The Japanese ball roller, the parallel bars by the twin brothers and the tumbling were all worthy of a place in so great a circus; the clown, Stephanie, playing his role in an excellent manner throughout. His explanation of the "stunts" were generally accepted and appreciated and he also showed his ability to do a few himself. The juggling at the close of the program by Mr. Gregg was certainly *all right* and received much comment.

The manager stated that it was the custom to charge ten cents (one dime) for admission to the concert at the close of the performance. Upon further reflection he decided that because of the general appreciation of his fine Saturday night audience, no further charge would be made. The music and singing was of course of a high order and from the lullaby coon song to the bear dance under the direction of Prof. Russianknohaircutsky, the program was highly appreciated. The comedian's favorite "A Rare Old Bird" seemed also a favorite with the audience.

Taken as a whole the affair was the occasion of much good wholesome fun and was certainly typical of the traveling circus, and much more enjoyed than some.

It would seem that it stands one in hand to take things seriously when before the bar of justice.

A good list of track meets has been arranged for, something of which will be noted next week.

Pilgrim church will open their new pipe organ Friday evening, April 14. Prof. N. J. Corey of Detroit is the principal attraction of the recital.

The sub-faculty base ball team will be in operation in a few days and would like to secure games with any of the classes in college. Address communications to F. R. Hurst, manager.

ALUMNI.

'69.

James Satterlee and family who have been spending the winter in Los Angeles, Cal., return to their home in Greenville, Mich., the latter part of this month.

'85.

H. E. Thomas, of the above class, was elected alderman on the democratic ticket in the fourth ward, Lansing, in the recent election, by a handsome majority.

'86.

"Corn Culture in North and Northwest" is a little volume written and published by T. D. Hinebaugh, of the above class. As the name implies the book is prepared for the farmers of that section of the country. It contains considerable interesting matter concerning the growth and yield of corn in Dakota with a list of the varieties best suited to that section. It discusses the needs of the corn plant, methods of growing, harvesting, etc. It is a very valuable little volume for the purpose intended. This work may be found in its proper place in the library.

'90.

B. K. Bentley, of the above class, was visiting college friends yesterday.

'97 m.

John Nellist who has had charge of the geological map of our state completes his work at Ann Arbor this week. Judging from the interest and comment on this work at the recent conventions of the Schoolmaster's Club and Academy of Science it is easily recognized that this map fills a long-felt want and will be invaluable in scientific work. It is well that our state could have had the services of a man as good as State Geologist Lane and that our College be represented so ably by Mr. Nellist.

With '04 w.

At the Students' Concert given by the Michigan Conservatory of Music on Friday evening, April 7th, Miss Hannah Bach presented "The Lark" by Glinka-Balakirew. On a program of fourteen numbers, which represented the best talent of the school, it was a distinct triumph for Miss Bach to stand as one of the three best artists in technique and artistic finish, while she stood unrivaled in a sympathetic interpretation of her subject, which held her audience in absolute control. It is understood that Miss Bach has been offered a position as instructor in the school.

With '06.

Leslie V. Agnew with the above class was married to Miss Mabelle L. Cantwell at Birmingham, Ala., on April 5. Their home will be at 3810 Fifth Ave., Avondale Station.

The Music Festival will be given notice next week.

THE M. A. C. RECORD.

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

B. A. FAUNCE, MANAGING EDITOR

ASSOCIATE EDITORS.

PAULINA RAVEN, '05.

EDITH HUTCHINS, '06.

CALLA KRENTZ, '07.

H. I. GLAZIER, '07.

G. C. DUDLEY, '07.

T. H. MCHATTON, '07.

OIE STEPHENSON, '07.

B. B. CLISE, '07.

O. I. GREGG, '07.

BERENICE MAYNARD, Sp.

Subscription, 50 cents per year.
Remit by P. O. Money Order, Draft or Registered Letter. Do not send stamps.

Address all subscriptions and advertising matter to the College Secretary, Agricultural College, Mich. Address all contributions to the Managing Editor.

Business Office with Lawrence & Van Buren Printing Co., 122 Ottawa St. E., Lansing, Mich. Entered as second-class mail matter, Lansing, Mich.

This paper is occasionally sent to non subscribers. Such persons need have no hesitation about taking the paper from the post-office, for no charge will be made for it. The only way, however, to secure the paper regularly is to subscribe.

TUESDAY, APRIL 11, 1905.

Beginning with this week's issue of THE RECORD we shall publish the names of the M. A. C. graduates and others connected with other agricultural colleges and experiment stations, together with whatever information it has been possible to gather concerning the work of each. They will be given notice in the order in which they were received.

AMES, IOWA.

Prof. P. G. Holden, class of '89, is professor of agronomy and vice dean of the division of agriculture. Prof. Holden was connected for some time with the university of Illinois at Champaign, but went to Ames three years ago and since has been very active in building up the department of agronomy.

Prof. H. P. Baker, class of '01, is assistant professor in charge of Forestry, which is included in the department of horticulture and forestry. Mr. Baker, after three years of work in the United States Bureau of Forestry, took up his present position at Ames in the fall of 1904.

Prof. L. G. Michael, with class of 1903, is chemist of the experiment station. Mr. Michael entered M. A. C. with the class of 1901, but owing to poor health dropped out and spent two years in Yellowstone Park and parts of Montana, finally returning to complete his course with the class of 1903. He obtained a scholarship at Columbia University, and was assistant in chemistry there just previous to taking up his work at Ames, Jan. 1st, 1905.

Prof. A. B. Noble, who has charge of the department of English at Ames, while not a graduate of M. A. C., was connected with the English department of this institution for about nine years and is very well known by students and faculty from '90 to '98.

MORGANTOWN, W. VA.

Walton K. Brainard, B. S., is instructor in dairying at the West Virginia Agricultural College, which position he has held since 1903. He is also secretary of the West Virginia State Dairy Association. His address is 307 University Driveway.

W. D. Hurd, class of '95, has been professor of agriculture at

Orono since 1903. Prof. Hurd was for some time a teacher in the public schools of Lansing before accepting his present position.

ORONO, MAINE.

W. M. Munson, class of '88, is professor of horticulture in the above institution, which position he has held since 1891. Prof. Munson is also horticulturist of the state experiment station.

THE DUNBAR QUARTETTE.

The last number of the M. A. C. Entertainment Course, The Dunbar Ma'e Quartette and Bell Ringers, was given in the Armory Monday evening and was one of the very best entertainments given this year, if we are to judge by the reception given them.

The first number "Annabelle Lee" by the quartette seemed to captivate the audience and encores were responded to very generously. The next number "Narcissus" on the bells was highly enjoyed as was also the encore when Indian music was imitated. Mr. Dunbar's selection by Riley, provoked much laughter and proved him to be an impersonator as well as musician.

The violincello solo by Mr. Ralph Dunbar was one of the best numbers of the evening, and his playing called forth the applause it well merited. He certainly has perfect control of the instrument and played the difficult number with the ease of a master hand. The encores, one of which was Annie Laurie with quartet accompaniment, was also greatly enjoyed.

The bass solos were, as one put it, "certainly all right." The singer has that deep, rich voice which lends so much to the quartet.

The "Old Brigade" by the quartette was so well received that the singers were called again and again, the last call being responded to by a sacred song, "Remember Thy Creator."

The two selections on the bells, Sunday Morning in London and Sousa's March, were perhaps the most difficult to render; it was little less than amazing how they could handle the bells so rapidly. In the former the far-away chime of the church bells could be heard, gradually coming nearer until one could hear the notes of "Jesus Lover of My Soul," "Come Ye Disconsolate," and "Ring the Bells of Heaven," pealing out on the air.

The cello and flute with piano accompaniment, was good, and the last number by the quartette "The Lost Chord," proved to the audience, if there had before been any doubt, that these young men could sing, the tenor raising to the key of —? The only disappointments were that we did not get to hear the tenor sing a solo and also that the program was too short.

We believe that all went away perfectly satisfied. The gentlemen were certainly artists, besides, they were jolly good natured boys. Their responses were very generous and they seemed very anxious to please their audience.

It is with regret that we learn that Dr. Willits will not be with us, but considering the excellent course this season no one can say that the five numbers are not already worth the price paid, only 20 cents each. Even with the five numbers we be-

lieve the management is to be congratulated upon the talent secured. So, if no substitute is offered, just sit down and wonder for awhile which of the numbers was not worth the 20 cents. After deciding that you are satisfied go and tell the management. If you are not—don't tell any one.

PROHIBITION LEAGUE.

At our meeting held Sunday afternoon the president read a few short selections of interest. At roll call the members responded with quotations or other items of interest.

At the business session the following officers were elected: President, O. K. White; vice-president, E. H. Adams; secretary, G. A. Roeller; treasurer, P. H. Ellwood; record editor, D. H. Ellis.

The retiring treasurer's report showed that the league is in good financial standing.

Y. W. C. A.

The first men's meeting of the term was led by Mr. James Fisk, the new president of the Association. These meetings have been well attended during the winter term, and it is hoped that the warm evenings of the spring term will not lessen the attendance.

Rev. J. B. Silcox preached Sunday afternoon for the last time to an M. A. C. audience. His sermon was taken from Romans XII, 1, and showed conclusively the service that man owes to God because of his superiority over other creatures. The formation of character and the highest development through christian service was most forcefully shown. Mr. Silcox and his helpful sermons will be sorely missed by the M. A. C. people.

Prof. C. D. Smith gave one of his inspiring talks to the students and faculty Sunday evening. His talk was a practical one on the true purpose of a college education and pointed out the many things this training must do to make one a real college man or woman. He also showed that the place of the college man in the world demands a christian development. The world wants great and intellectual christians to carry on the affairs of every day life.

Dr. Waterman will have charge of the meeting next Sunday night. This meeting will be held in the chapel.

Next Thursday evening the meeting will be a study of Missions in Japan. The Mission Study classes have taken up the study of Japan the past term and this meeting will be a review of the book to a small extent.

ACADEMY OF SCIENCE.

SECTION OF SANITARY SCIENCE.

(Continued from last week.)

Vice Pres. Cooley, head of the Pasteur Institute at Ann Arbor, called the meeting to order, and the program was opened by Dean V. C. Vaughan, who gave an article entitled, "The War Against Tuberculosis." He said "One-seventh of the people now living in this country will die of tuberculosis unless something is done to prevent it." He states that no antitoxin of any value was known, but that preven-

tion was not difficult. Quiet breathing does not infect the air, but coughing and spitting endangers the lives of others. All sputum of consumptives should be disinfected before becoming dry.

Dr. F. G. Novy spoke on "Bird Hematozoa." These parasites, which he found in the living tissue of one-third of our common birds, were illustrated by a series of photographs.

A new fowl disease was explained by E. E. Butterfield, of Ann Arbor.

"Am I my Brother's Keeper," a paper by Dr. Baker, of Lansing, was read before the section. His central thought was "If I willfully or carelessly spread some contagious disease which causes another's death, then must I be ranked with Cain."

The last article was by Cressey L. Wilbur, of Lansing, on, "The Scientific Necessity of Complete Registration of Vital Statistics." In this article it was pointed out that though this state is ahead of many others in regard to statistics on marriages, births, deaths and divorces, yet we are much behind Japan in this respect.

M. A. C. INSURANCE MEN.

In the employ of the Michigan Miller's Insurance Company, offices in Lansing, are found the following M. A. C. men: Arthur D. Baker, class of '89, is secretary of the company and has made rapid strides in the work since locating in the city. J. N. Estabrook, class of '88, is Inspector of Risks; Luther Baker, '93, F. S. Bancroft, a student in 1902-'03, and Robert Ferguson, who recently finished his work here are all connected with this company.

In December last a company known as the Michigan Commercial Insurance Company, was organized with Daniel Andrews, class of '79, as Superintendent of Agencies. This organization has for its object the handling of such insurance as the "Miller" is, under the charter, unable to handle. The business has prospered splendidly under the present management and all of "our fellows" connected therewith are a credit to their Alma Mater.

The following M. A. C. men were present at the Michigan Schoolmasters' Club at Ann Arbor: F. S. Scott, '90, private research assistant, U. of M.; B. W. Peet, '92, instructor in chemistry, Mich. State Normal, Ypsilanti; John W. Matthews, '85, Supt. Western High School, Detroit; E. M. Elroy, '93, Supt. Schools, Three Rivers; M. A. Cobb, Science Teacher in the Lansing Schools; E. D. Watkins, Special Chemistry Student in '90-'91, Supt. of Schools at Ithaca, Mich.

Lost. — A Hesperian pin; was lost in the armory on Saturday. Finder please return to Mr. Brewer's office.

A pocketbook containing a small amount of money, a desk key, etc. Finder please return to president's office.

For "putting news in the RECORD" is about the last charge ye editor ever expected to have to meet.

"There was a young lady from Michigan,
To see whom I ne'er would wish again.

She would eat of Ice Cream

'Till with pain she would scream,

And then order another big dish again."

We would like
to show our
RAZORS

to you.

"The Tonsorial Gem" is so good that it is found in every barber shop in the city.

The "Gillett Safety,"—well that is in a class by itself. No honing or stropping, and always gives a fine shave.

We can give you a special price on Yankee Safety.—All fully warranted.

NORTON'S HARDWARE,
111 Wash. Ave. S.

EVERY KIND OF

FURNITURE

FOR YOUR ROOM.

Cots Folding Beds

Mattresses

Book Cases Desks

All Goods Delivered Free.

M. J. & B. M. Buck.



WE are now showing
our complete line of

Men's Hats

Nothing but late Styles and
dependable qualities find place
here.

You know where to get the new things in Caps.

ELGIN MIFFLIN.

THE JEWETT & KNAPP STORE

New Spring Goods in Every Department.

New Silks, Dress Goods, Dress Trimmings, Laces,
Embroideries, Gloves, Hosiery, Neckwear, Tailor-
Made Suits, Jackets, Skirts and Waists.

JEWETT & KNAPP

220, 222, 224 Washington Ave. S.

Lansing, Mich.

**SNAP AND
STYLE**

AT \$2.50 A PAIR

For little money we are selling a
dandy shoe. It has excellent style,
very comfortable, only costs \$2.50
and for wear you would guess \$3.50.

SEVERAL STYLES.

Patent Colt, heavy sole.....	\$2.50
Patent Colt, light sole.....	2.50
Kid, patent tip, light sole.....	2.50
Kid, patent tip, heavy sole.....	2.50

C. D. Woodbury's ^{SHOE}_{STORE}
HOLLISTER BLOCK.



A B O U T T H E C A M P U S .

Mr. Morell was on the sick list
a few days the past week.

Mr. Percy Tallant spent the week
of vacation with friends at White-
hall.

Watch for the announcement of
the May Festival in next week's
issue.

Mrs. Marshall entertained her
brother and nephew a day or two
the past week.

Prof. Pettit was in Rochester, N.
Y., on a business trip a few days
the past week.

Prof. Sawyer was confined to his
home a few days the past week
with a severe cold.

Mr. A. Kratz spent his vacation
with Mr. M. F. Johnson where he
found a place to "hide."

A son weighing 7¾ pounds was
born to Mr. and Mrs. Floyd Rob-
inson Monday, April 10.

Quite a heavy fall of snow on last
Thursday night but by noon on
Friday it had disappeared.

Mr. Blair was called to Alpena
Friday of last week on account of
the serious illness of his sister.

Work is moving along nicely on
Miss Ketchum's new house. It
will be completed by June 1st.

The instructors have organized
for base ball with Secretary Hurst
as manager and L. T. Clark captain.

Miss Anna Champe who has
been at Monroe for some time, has
returned to her home in College-
ville.

C. H. Goetz brought to the zoo-
logical department several snakes of
various species during the week of
vacation.

Mr. Wm. Tosh '08, has dropped
out of College and is at present do-
ing carpenter work for Mr. Gurn-
sey in Collegeville.

The steers which have been fed
during the winter by the experiment
station have been sold to Mr. J. G.
Reutter of the City.

Another new house is going up
in Collegeville, near Mr. Reasoner's.
The property is owned by Mrs.
Purvey of Meridian.

The mulch has been taken from
the plants in the botanic garden a
week or more earlier than usual.
Plants never wintered better.

Rep. Ivory and son from Lapeer
county called at the college last Fri-
day. The son expects to enroll as
a student in the near future.

The girls in gymnasium are do-
ing practically the same work as is
being done by those taking the
work at the University of Michigan.

Quite a number of visitors were
on the ground the past week among
whom were Rep. Schantz and
family, also Rep. Knight and fam-
ily.

And still we are short on news.
We hope that by next week every-
thing will be on the move and plenty
of time to think of something for
the paper.

Mr. L. A. Dodge of Flint, one
of our special course students, has

been engaged to help in the plat-
work of the Experiment Station for
the summer.

J. L. Sutherland, '86-'89, has been
elected president of the recently
organized Business Men's Associa-
tion, Portland, Mich. Mr. Suther-
land was also a graduate of the Uni-
versity.

Quite a lot of grading and filling
has been done east of the armory
during the past week and rose
bushes have been re-set where the
ground was torn up for the tunnel
excavations.

Prof. Barrows was elected presi-
dent of the State Academy of
Science; Dr. Beal, vice-president of
the agricultural section, and Prof.
Dandeno vice-president of the bo-
tanical section.

Collegeville, including the hill to
the north, was platted to include 69
lots, all of which have been sold by
the original owner. The lots over
the hill, 22 in number, have also
been disposed of.

Prof. Taft was at Ithaca and
Grand Rapids, the past week, where
he did some work inspecting or-
chards and also arranged for farmers'
institutes. He goes to Adrian on
the 12th to attend a meeting of the
county Hort. Society.

Asst. L. T. Clark of the bacterio-
logical department, spent a few days
the past week at different points in
the state looking over some co-
operative tests in use of bacterial
cultures for innoculating plants.
The work will be carried on by
Messrs. Clark and Sackett.

In the grading for the Pine Lake
road, it would have been just as sat-
isfactory to the college community
if the mound which was 1-ft in the
middle of the road at the entrance
had been left somewhere else. For
definite information see the Mr. N.
Snyder, who handles the mail.

No, that is not a threshing ma-
chine by the brook in the botanic
garden, but a machine belonging to
Packard & Edgerton, who have be-
gun to drill a well to supply the
pond with a perpetual flow of water
and incidentally have enough to
supply all visitors passing that way.

Mr. John Foster died at his home
in Okemos on Friday of last week.
Mr. Foster, who is a brother of
Mrs. Blair, has been in poor health
for some time and but recently re-
turned from Ann Arbor, where he
had been under treatment. He
was well known to many college
people, having built several houses
in Collegeville.

We understand that at the house
meeting held at Station Terrace the
question of the feasibility and ad-
visability of reorganizing the musical
club was brought up which resulted
in the chair appointing committees to
look after both the vocal and instru-
mental interests of the Terrace.
Now everyone is wondering why
the committee don't meet.

"Rah for M. A. C.!" Mr. Pat-
tengill says. "Boys from that fam-
ous school are found in every part
of the world, and when round are
always doing their share to help the
old world along. We rode third

class, as most sensible folks do here, to Santiago las Vegas, twenty miles from Havana on the Western railway, where is to be found the government experiment station. There we soon found 'Ned' Mayo and C. F. Austin, mounted on their branches, surveying the work on the plantation. C. F. Baker was busy in his botanical laboratory. All these are M. A. C. boys. Each has charge of an important department of the station. Prof. Mayo has charge of the department of animal industry. He is working on the problem of improving the hogs, horses, cattle and hens of the island. Prof. Austin is head of the horticultural department. He is solving problems as to culture of the red clay lands. He had tobacco, sugarcane, tomatoes, bananas, lettuce, beets, pears, peaches, oranges and innumerable unnameable tropical plants well under way. Prof. Baker divides his time between bugs and bulbs, trees and toads, fauna and flora. St. Patrick was as kind to Cuba as to Ireland. There is not a poisonous snake on the island. The M. A. C. lads are pioneers here. The station has been established less than a year. Dr. Earle is the director, and the bulletins sent forth will soon aid very materially in putting agriculture on a scientific basis. Every American contemplating putting money into Cuban land may well confer with the experiment station. The boys are enthusiastic, and the ladies seemed serene and happy in the cool, quaint Cuban homes."—*State Republican*, April 6, 1905.

DIVISION OF CHEMISTRY—EXPT. STA.

The resignation of Mr. Floyd W. Robison as chemist of the experiment station makes opportune a brief outline of the history and work of that branch of the station. It will be remembered that Dr. R. C. Kedzie, the late professor of chemistry had been chemist of the station from its origin following the passage of the celebrated Hatch act until his death. The coupling of the name of Dr. Kedzie with the chemical department of the station is in itself sufficient evidence of the character of the work performed in that department. There have been several assistants in the station laboratory, Prof. F. S. Kedzie, now chief of the College chemical department; G. L. Teller, now chemist and cereal expert to the Columbia laboratory, Chicago; W. L. Rossman, now chemist to the Jenks Starch Co. at Sand Beach, Mich.; H. E. Harrison, now with the Liquid Carbonic Acid Co., Chicago; Thorn Smith, now chemist to the Ducktown Sulphur, Copper & Iron Co., Ltd., Isabella, Tenn.; L. S. Munson, chief of the contract laboratory, bureau of chemistry, Washington, D. C., and L. H. Van Wormer, chemist to the Dairy & Food Commission, Lansing. All preceding Mr. Robison in the order named. All graduates of the M. A. C.

With the death of Dr. Kedzie the change of quarters, so often advocated by him, was made from the basement of the chemical laboratory—the room which is now the dispensing room—to the second floor of the veterinary building, which rooms had been but recently vacated by the department of bacteriology. These rooms were thoroughly cleaned, old partitions

torn down, walls painted and tables with cement tops built in, with open plumbing underneath and fixtures of gas, water, steam and electricity placed therein conveniently. A large hood with sliding glass doors was built at one end and because of the extremely low ceiling was extended into the room above. This hood is large and well provided for work with gases, etc., the presence of which is not desirable in the main room. The work tables having the cement tops are so arranged that they slope slightly toward the sinks and water spilled on these at any point finds its way into the sink instead of on the floor. One large electric drying oven with device for regulating automatically the temperature is a unique and necessary part of the equipment. Fat extraction apparatus operated by electric heat constitute a safe means of handling the explosive ether so necessary in these operations. Small electric heaters, a Purdy electric centrifuge for physiologico-chemical work in examining milk, urine, etc., constitute some of the modern equipment.

A 2-H. P. alternating motor suspended from the ceiling furnishes power to operate the fodder and food grinder, the beet sampler and the beet grinder, also the Kugelmuhlen or porcelain ball mill imported from Germany last fall. A large centrifuge used for the filtration of troublesome emulsions and for the separation of liquids by gravity is also operated by the small Electric Motor. Some products before analysis must be dried at a low temperature to prevent decomposition and loss. This is done in a large oven heated by electric lamps, the temperature of which is low, but steady. In the attic is a steam still for supplying pure distilled water and nothing but distilled water is used in any of the laboratory operations. The small office contains a card index outfit for reports, a sensitive gold-plated balance, and a self-regulating incubator with mechanical shaking apparatus for artificial digestion work and for other laboratory operations.

The laboratory Mr. Robison leaves is one of the best equipped and most convenient laboratories to be found for the various lines of work performed therein, and while it occupies an inconspicuous place on the campus, the laboratory itself is by no means a disgrace to the station.

C. A. Graves, a mechanical student in '93-'95, is now a special student in chemistry at the U. of M.

W. K. Wonders, of the class of '02, since leaving the Department of Agriculture Division of Horticulture, Washington, D. C., has been special student in economics at the U. of M.

Our Microscopes, Microtomes, Laboratory Glassware, Chemical Apparatus, Chemicals, Photo Lenses and Shutters, Field Glasses, Projection Apparatus, Photo-Micro Cameras are used by the leading Laboratories and Government Departments.

MICROSCOPES

Catalogs Free

Bausch & Lomb Opt. Co.

ROCHESTER, N. Y.

New York Chicago Boston Frankfurt, G'y

Organized Effort Wins.

Life Insurance is Organized Thrift.

The Mutual Benefit shows 60 years success with splendid management.

Do you want to come in now while you can? Some wait too long.

No one ever regretted carrying a good insurance contract.

CALL ON—

LAWRENCE & VANBUREN PRINTING CO.

WHEN IN NEED OF

DANCE PROGRAMS or SOCIETY PRINTING.

122 Ottawa St., E.

ALL MEATS . . .

May look alike to you, but there is a very great difference in the quality we handle and that sold by some other markets. We handle none but the very best. Like the pudding, the proof of good meats is in the eating. A trial will convince you that you ought to trade with us.

We make daily trips to the College. BOTH PHONES. Careful attention given to phone orders.

GOTTIEB REUTER.

Washington Ave. South.

DIRECTORY

LANSING BUSINESS and PROFESSIONAL MEN

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

BARBERS.

M. A. C. BARBER SHOP, Rooms in New Bath House. H. A. Sias, Prop.

BOOKS AND STATIONERY.

A. M. EMERY, 116 Wash. Ave. N. Books, Fine Stationery, Engraved Calling Cards, Fountain Pens, Pictures, Frames, Fine Framing a Specialty. Up-to-Date Styles.

CITY BOOK STORE. Fountain Pens, Drafting Tools, Stationery, Cards Engraved, Pocket Books, Card Cases and Bibles. Tennis, Football and Baseball goods. Crotty Bros., 206 Wash. Ave. N.

BOOK BINDERS

GEO. G. BLUDEAU & CO.—Bookbinders Account book makers, paper ruling, library and fine art bindings, file boxes, map mounting, albums, pocket books, etc. Citizens phone No. 56. 109 Wash. Ave. N.

WAGENVORDE & CO.—Bookbinders, Blank-book Makers, 109 Washington Ave. South.

BOOTS AND SHOES.

C. D. WOODBURY.—Boots and Shoes. We shoe the students. See ad.

CLOTHING.

BUY your Dry Goods and Clothing at H. KOSITCHEK & BROS. Dry Goods Store 210 Washington Ave. S. Clothing Store 113 Washington Ave. N.

LOUIS BECK.—Clothier, Gents' Furnishings, Hats and Caps. 112 Washington Ave. North.

CROCKERY AND GLASSWARE.

H. LARNED.—China, Glass and Lamps. 105 Washington Ave. S.

DENTISTS.

A. F. GORDON, D. D. S. M. A. C. '91, U. of M. '01. 218 Washington Ave. S. Phone, Citizens 862.

J. E. STOFFER, D. D. S. Office 105 Washington Ave. S. Citizens' Phone 1049. Former M. A. C. student.

N. H. MOORE, D. D. S. Office 411-13 Hollister Building, Lansing, Mich. Citizens phone 475.

R. W. MORSE, D. D. S. Hollister Block, Room 517. Citizens Phone 52, Bell Phone 396.

D. E. PARMELEE, Dentist, 117½ Washing-ton Ave. S., Lansing, Michigan. Citizens' Phone, office 275; residence, 1440.

DRUGGISTS.

ROUSER'S CAPITAL DRUG STORE. Up to date. Corner store. Opposite Hollister Block.

ROBINSON DRUG CO., successors to Alsdorf & Son, Drugs and Druggists' Sundries, 102 Washington Ave. N.

DRY GOODS.

THE JEWETT & KNAPP STORE. Dry Goods. 223-224 Washington Ave. S.

Officers of the Alpha Zeta for the spring term are: Chancellor, E. G. Kenny; Censor, H. F. Tuttle; Scribe, J. W. Bolte; Treasurer, C. A. Wilson; Historian, H. C. Oven.

ELECTRICAL SUPPLIES.

CAPITOL ELECTRIC CO. Electrical Supplies, Telegraph Instruments and Telephones. 322 Wash. Ave., S.

FURNISHING GOODS.

ELGIN MIFFLIN.—Ladies' and Gentlemen's Furnishing Goods. See ad.

FURNITURE DEALERS.

M. J. & B. M. BUCK.—Furniture. Cor. Washington Avenue and Ionia Street. See ad.

HACK AND BAGGAGE LINES.

ORDER your hacks for parties at Carr's Hack Line. Livery in connection, 410 Washington Ave. N.

HARDWARE, STOVES AND TINWARE.

NORTON'S HARDWARE—General Hardware, Stoves, Tinware, Graniteware, Cutlery, etc. 111 Washington Ave. South. See ad.

INSURANCE.

THE DYER-JENISON-BARRY CO., LTD., (Incorporated) Hollister Block. All kinds of the best insurance. Strongest agency in city.

JEWELERS.

CHAS. A. PIELLA. Jeweler and Optician. 121 Washington Ave. N., Lansing, Mich.

MANICURE AND HAIRDRESSING.

MRS. O. T. CASE—Manicure and Hairdressing Parlors, Masquerade Wigs for Rent. Switches made of cut hair or combings. The France-American Hygienic Toilet Requisites a specialty. New phone 118. 222½ Washington Ave. S., up stairs.

MUSIC, PIANOS, ETC.

GRINNELL BROS. Pianos, Organs and everything in the line of music. 219 Washington Ave. N.

OCULISTS.

CHAS. G. JENKINS, M. D.—Diseases of Eye, Ear, Nose and Throat. Hours, 9 to 12 a. m., and 2 to 5 p. m. Citizens Phone No. 1030. 224 Washington Ave. South.

PHYSICIANS.

J. W. HAGADORN, M. D.—Office hours, 11 to 12 a. m., 2 to 4 and 7 to 8 p. m. Office at 212 Washington Avenue S.; home 219 Capitol Ave.

DR. H. W. LANDON. Office and residence, M. A. C. Office hours from 7 to 8:30 a. m., and 12:30 to 2, and 6:30 to 8 p. m. Sunday office hours 4 to 5 and 7 to 8 p. m. Now phone 1560.

DR. OSCAR H. BRUEGEL. Hours 9 to 11 a. m.; 2 to 4 and 7 to 8 p. m. Agricultural College, Mich. Citizens phone 1802.

PLUMBERS.

SHIELDS & LEADLEY. Plumbing and Heating. 300 Wash. Ave. N., Lansing. Both Phones.

SPORTING GOODS.

J. H. LARRABEE. Base Ball Goods, Foot Ball Goods, Tennis, Golf, Guns, Ammunition and Fishing Tackle. 325 Wash. Ave. S.

Harry Courtright, student at M. A. C. last year, is now taking work at the university.

We will give full program of the musical festival May 5 in next week's RECORD.