# The M. A.C. RECORD. 

REMEMBER THE CONCERTS.
thursday, may 19, afternoon and evening.
Following is the program for the afternoon: The numbers are of a style which will please all lovers of music - both students, professional musicians, and the public generally. And the variety in the program will give the artists ample opportunity to show their skill and artistic ability. No one should fail to hear this concert.
program.
Fantasie, Schubert, Mr. Schroetter.

Aria, Honor and Arms (Samson), Handel, Mr. Howell.
a. Oh that we two were Maying, Wilson G. Smith. b. Since we Parted, J. H. Rogers, Mr. Douglass.

Duet, The Fisherman, C. M. Cabussi, Mr. Douglass, Mr. Howell.

Scherzo, Op. 39, Chopin, Mr. Schroetter,
a. Time's Garden, G. Thomas. b. She Wears a Rose in Her Hair, C. B. Hawley, Mr. Howell

Air from Favorita Spirito Gentil, Donizetti, Mr. Douglass.
Duet-a. I would that my Love, Mendelssohn. b. Wanderer's Night Song, Rubinstein, Mr. Douglass, Mr. Howell.
Imprompta, Op. 36, Chopin, Mr. Schroetter.

The Horn, Fligier, Mr. Howell.
Poppies, De Koven, Mr. Douglass.
Duet, Lead Kindly Light, Biedermann.

While we have every reason to congratulate ourselves on the opportunity of hearing this excellent program which has been arranged for the afternoon, we yet wish to lay the greatest stress on the work to be done in the evening by the M. A. C. Chorus assisted by the three soloists, Mrs. Green, Mr. Douglass, and Mr. Howell, in Hadyn's "Creation."

The members of the chorus are enthusiastic and have been doing good work in preparing for this occasion, and the soloists are excellent.

Mrs. Rachel Frease Green, the soprano, has a wide reputation and her singing is said to be equal to that of the admired favorite of the people, Mrs. Clark Wilson of Chicago. Notice more about Mrs. Green in another column of this issue.

In last week's Recorp extended mention was made of Mr. Douglass and Mr. Howell, the tenor and bass soloists, both of whom have had much success in Oratorio work.

This is your opportunity to hear something good, well rendered, and being given by home talent it is worthy of your interest and patronage.
Afternoon concert, $2: 30 \mathrm{p}$. m.;
Evening concert, S:15 p. m. The Evening concert, $\mathrm{S}: 15 \mathrm{p} . \mathrm{m}$. The doors will be closed during numbers. Admission fee, afternoon 35 c , evening $50 \mathrm{c} ;$ Both afternoon and evening 75 c .
Students' Rates: Afternoon 25 c , evening 35 c ; botk. afternoon and evening, 50 .

## BASEBALL.

For the first time in five years, M. A. C. defeated Kalamazoo in one of the best college games ever played in Michigan by a score of 3 to o. The battery work of both teams was excellent, but M. A. C. had the decided advantage. Kalamazoo stole no bases, while M. A. C. stole six and turned the tide. The hitting was about even. M. A. C. made no errors while Kalamazoo made only one that was costly, netting one run in the second inning. Not a visitor saw third base until the seventh and only two other men got as far as second. In the seventh a two-bagger and a single brought a man on third. Chapman caught the man on first trying to steal second, the next man flew out to Burke and Hyde struck out the third man. This was the only possibility Kazoo had for a score in the entire game. Burke played a fine game at first and Canfield's base-running, hitting and catching a line drive were features of the game. A fine double was made from Millar to Ellsworth to Burke. M. A. C. has been weaker in the out-field than in-field. Canfield, a star at any place, strengthens the out-field considerably by playing center. Kalamazoo played a good game and were cheered whenever they made a good play. They said that their treatment here was the best and most sportsman-like they had received this year.

## The line-up:



Kazoo. 0 o 0 o 0 o 0 o
M. A, C. a $\quad 0 \quad 0 \quad 0 \quad 2 \quad 0 \quad 0 \quad 0 \quad 3$
Two-base hits, Post 2 . Struck out, by Hurd 7, by Hyde g. Base on balls, off Hurd 2. Left on bases, M. A. C. 5, Kazoo $4^{-}$ Earned runs, M. A. C. 2. Umpire, Byron. Attendance, 750 . Time, I hr. 30 min .

## WISCONSIN VS. M. A. C.

Next Friday at 4 o'clock, Wisconsin will play M. A. C. on our home grounds. Wisconsin has defeated Michigan, Illinois, Northwestern and Chicago and has undoubtedly the strongest team in the University League. This will be a fine game and everybody should attend.

## WRESTLING MEET.

Alma contested with the M. A. C. wrestlers on Friday evening. M. A. C, tried out several new men while Alma had her regular wrestlers. Althougn M. A. C. lost three out of five, the result is very satisfactory since the men showed excellent form. Manning and Hach gave exhibitions in club swinging and Balbach and Manning performed on the horizontal bars. Both drew forth enthusiastic applause. As preliminaries to the meet, Brunger, M. A. C. threw Welch M. A. C. and Belknap and Bartlett, M. A. C. wrestled a draw. Welsh, Alma, secured two falls from Bird, M. A. C., feather weight. Bird was too light but put up a plucky fight.

In special weight, Jennings of Alma secured one fall from Wright, M. A. C. This was Wright's first attempt and his showing against last year's intercollegiate champion was excellent.

In light weight, Clark of M. A. C. won one fall from Moon of Alma. Clark was last year's champion.
In middle weight, Marshail of Alma secured one fall from Sanborn of M.A. C. Sanborn is a new man and did good work,

In heavy weight, McDermid, M, A. C. threw Angell, Alma. Though Angell was 20 pounds heavier, he could not throw McDermid who wrestled his first public bout.

## INTER CLASS MEET.

The local track meet last Saturday was very successful. M. A. C. will send a strong team to Albion, June 3 and 4 .

100 yds.-Moon 1, Graham 2, Pearsall 3, Hahn 4. Time, to 3.5. ${ }^{1}$ mile-Burrell 1, Holdsworth 2, Wait 3, Rogers 4. Time, 5 min . 16 sec .

Shot put-Kratz i, McDermid 2 , Moon 3, McKenna 4. 35 ft .2 in . Discuss-Kratz 1, Childs 2, Pearsall 3, McDermid 4. 108 ft .7 in . 220 yds,-Moon 1, Pearsall 2, Bennett 3, Verran 4. 223.5 sec .
Hammer-McKenna 1, Kratz 2, Childs 3, Hyde 4. 96 ft .

120 hurdle-McKenna ${ }_{1}$, Graham
2, Martin 3, Hahn 4. iS 3.5 sec .
The sophomores are ahead so far. This afternoon the remaining events will be held at 4 o'clock. Kratz's work in discuss and shot was excellent, nearly equalling the state record. The mile run between Burrell and Holdsworth was practically a tie. The interest was good.

220 hurdle-Martin 1, Pearsall 2, Graham 3. $1 / 4$ mile. Eleven starters. In the first heat, Burrel 1 , Graham 2. $\quad 5^{6} \quad 1.5 \mathrm{sec}$. Second heat, Verran 1 , Holdsworth $2,5 \mathrm{~S}$ $1-5 \mathrm{sec}$. Two trials a week will be held for the relay. The above men have qualified so far.

The remaining events were run off in sections last week. The following is the score made by the different classes: 'о6, 34; '०7, 3; '05, 22; 'o4, 14; Preps, 20; specials

## ALUMNI.

Jay Sessions, prominent agriculturist of Maple Rapids, Mich., was at M. A. C. a short time last Wednesday.

## '93

D. J. Crosby, of the U. S. Department of Agriculture, addressed the Interstate Cane Growers' Association on Agricultural Education at their recent meeting in Jacksonville, Florida.

## '95.

We are very sorry to see in the Parkersburg News the statement that Mr. Guy L. Stewart, for so long a time Industrial Agent for the B. \& $O$., is leaving West Virginia, to take a probably better position on the Southern Road, with headquarters at Columbia, S. C. Mr. S. is a fine young man, and we congratulate him and the road which has secured his services, but we cannot help thinking that the B. \& O. was better able to keep than to spare him.-The West lirginia Farm Review, April 1904.

## ' 96 .

W. J. McGee has spent a year investigating the value of a patent for the production of white lead from ore. The process was roasting the ore, treating with soda, dissolving into basic acetate, precipitating with $\mathrm{H}_{2} \mathrm{SO}_{4}$ and finally treating the $\mathrm{Pb} \mathrm{SO}_{+}$with NaOH and $\mathrm{Naz} \mathrm{CO}_{3}$. He has recently made a trip through the lead producing counties of Missouri.
H. C. Skeels, who has charge of a large park in Jolier, Illinois, sent seventeen plants to Dr. Beal for use in the botanic garden.

## '99.

Thorne Swift made one of his regular visits to Lansing and M. A. C. last week. He is hustling things for the Canada Life Insurance Co., and is doing a large business.
'oz.
D. S. Bullock writes from Chili, S. America, that his work is getting along real well and that the climate agrees with him. Another M. A. C. graduate is wanted there this year.
M. B. Stevens has resigned his position in the Department of Agriculture at Washington and is now taking charge of the old homestead near Paris, Mecosta Co.
H. E. Young, assistant editor of the Farmer's Guide, of Huntington, Indiana, writes that the circulation has increased during the past year to over 30,000 . A new building will be erected this summer to accommodate the offices and printing plant.
J. A. Dunford is at the university taking the electrical engineering course. Farming did not seem to agree with him, though born and raised on a farm and educated with that profession in view.

THE M. A. C. RECORD.

THE M. A. C. RECORD. Published every Tursday d
college year by the Michigan State Agricultural College

EDTTORS.
g. Masselink, Managing Editor.

Associate Editors: H. N. HORNBECK, '0ta.
L. T. CLARK, '0+ $a$.
C. D. STERLING, ${ }^{\circ} 05 m$. BESS K. PADDOCK, '05w. G. f. TALlADAY, '05a. R. C. POTTS, 'OG GRACE BRAHAM, sp.w. E. B. MCKENNA, '06m. ANNA PICKETT, 'OAw.

Subscription,
50 cents per yea ered Letter. Do not send stamps. Address all subscriptions and advertising mat-
ter to the College Secretary, Agricultural College, Mich. Adrress all contributions to the Business Ofitice
Business Office with Lawrence \& Van Buren
Printing Co., 122 Ottawa St. E.. Lansing. Mich. Entered as second-elass mail matter, Lausing,

This paper is occasionally sent to non subserib-
ers. such persons need have no hesitation about taking the paper from the post-ottice, for
no charge will be made for it. The only way however, to secure the paper regularly is to sub $\stackrel{\text { seribe }}{ }$

TUESDAY, MAY 17, 1904.
The Wesleyan of Macon, Ga., is an interesting exchange. It contains some very readable matter. The editor of the exchange department in speaking of a college journal which contained a sketch of the life of Booker T. Washington, makes the following caustic comment: "The life of Booker T. Washington, the Negro Educator" is expressed well, but it is an article fitted to disgust the true Southerner when he reads again and again of this negro, as "Mr. Washington." The smallness of such a contemptible remark disgusts every true American citizen, every decent man and woman. It is nauseating and we are convinced that the comment does not express the sober thought of one true southern American. The time has come when a gentleman can be called Mr., be he black, yellow, red or white. The Caucasian race has certainly had enough training to have within it the elements of courtesy and propriety.

## Y. M. C. A.

The Thursday evening prayer meeting was led by Mr. E. S. Smith. The topic was "Lives that Lift." The discussions were led by Mr. Smith and Mr. Westerman, and the last few minutes the meeting was thrown open for general discussion. The meeting was well attended and a success in every way.
Sunday morning chapel service was led by Rev. W. S. Doty, of North Lansing. The sermon was one of helpfulness, along the line of looking to Christ as our ideal in life and being saved, showing the simplicity of true Christian faith.
The union meeting of the Y. W., and Y. M. C. A. was conducted by Mr . Clarence Bement of Lansing. His theme was the siezing of opportunity. He showed that, in order to be able to sieze opportunity, we must learn to compromise some of our ideas when no moral issue is involved, and that attention to detail is at the bottom of all opportunity. The opportunities to choose between good and bad are the crucial moments in life, and emphasis was laid on choosing for good rather than for gain. The address was a thoroughly practical one, full of good, wholesome advice.

## MRS. RACHEL FREASE GREEN.

Mrs. Rachel Frease Green, of Pittsburg, who sings the soprano parts in the "Creation" at the College Armory Thursday evening, has the honor of having charmed her audiences wherever she has appeared. She has a most pleasing personality and the full, rich, sweet tones of her and the full, rich, sweet tones of her her home city, Pittsburg, she was a prime favorite and she has sung successfu!ly in many other places.
Following are among press notices:
Mrs. Green, in her singing of Gounod's "Redemption" last evening, showed a voice of exquisite sweetness. Her tones were perfect and proved that Mrs. Green not only has had the most careful training and finish, but also possesses a most artistic temperament. The audience received her most enthusi astically.-Akron, Ohio, Daily.

Mrs. Green sang her numbers very charmingly. Her stage appear ance is very attractive, and with her beautiful voice Mrs. Green captivated her audience, who insisted on a number of encores. - McKeesport, Pa., Fourney.

## ELECTIVE COURSES.

Dean Hudson, of the University, advocated the elective system in a paper read before the Association of American Universities at Yale University. He says that the introduction of new courses or subjects made the elective system necessary at Ann Arbor, and that the results have been very satisfactory. Since there is some discussion in regard to the crowded condition of the courses at M. A. C. why would it not be a good plan to adopt a similar system here? Let every department in the College offer one or two courses of study per term. This would give a student an opportunity to elect more work along certain lines than he is now getting. It would relieve the present congestion and do away with departmental ague. It would increase the efficiency and thorougliness of the different departments for each one would stand on its own merits. The quality of the work done would gradually determine the number of gradually determine the number of
students taking a given course. students taking a given course,
Each department would then be kept busy looking after its own affairs. Students not adapted to certain lines of work would then not be barred from enjoying the benefits of the College. The plan is in vogue in nearly all the universities and many of the large colleges and is everywhere a pronounced success. If a certain department should become overcrowded or too popular, it wouldn't be necessary to "bat it in the head," but it might be well to investigate the causes and then bring the other departments up to this the other departments up to this
standard. Some years ago Agassiz made zoology very strong at Harvard. Even Ralph Waldo Emerson suggested that it might be well to cut out some natural science work and curtail the department. Agassiz replied, that granting that his department was better than the others, wouldn't it be a sensible thing to bring the others up to his standard? Emerson had sense enough to see the point and Agassiz was left alone. As a result, the fame of Harvard rests more on the work of Agassiz than on any other one individual.
A. D. Baker is secretary of the Michigan Millers' Mutual Fire Insurance Co. J. N. Estabrook, ' 88 , and L. H. Baker, '93, are also connected with the company. Mr. Estabrook acts as field inspector. The offices of the company are well equipped, being among the finest in the city and require a force of 15 . The net assets of the company were $\$ 1,311,050.99$ on Jan. 1, while the net cash assets were $\$ 255,256.03$. The amount of insurance carried has increased from $\$ 6,807,000$ in 1900 to over $\$ 24,000,000$ on Jan. I, 1904 . The company is in a very flourishing condition and does a constantly increasing business.

## 'O2.

The U. S. Department of Agriculture will establish some 30 "Diversification Farms" in the South Atlantic and Gulf states. The object is to give practical demonstrations in diversified agriculture. The south seems to raise nothing but corn and cotton. As a result, the soil is being depleted rapidly. Live stock will be introduced and a regular rotation practiced. The idea is to restore the soil to its original state of productiveness and to show that rotation is more profitable than the one crop plan. M. A. Crosby will have charge of several of these farms.

## With 'oz.

Maude Parmalee is a student in Oberlin College. Her folks are residing in Elyria, Ohio, at present.
The Wyandotte Daily Record is published by Sovereign and Webster. O. E. Sovereign is the editor. The paper is a seven-column, fourpage daily, full of news, attractively gotten up and reflects great credit upon its publishers. The editorial page contains an article strongly advocating a commercial course for the local high school.

## 'o3.

O. M. Nacker is now drafting for the Buick Motor Co. of Flint.
Howard Severance is now in San Francisco, investigating the possibilities of engineering employment before accepting a position elsewhere.

With 'o3.
Ed. Whitney will graduate from the Normal College this year. He has made a specialty of mathematics.

Magnolia trees are in bloom on the campns. These blossoms are very interesting and can be found near the old gate.

The "Preps" played a game of ball bristling with errors with the Lansing high school. The game resulted in favor of the "Preps" by a score of 22 to ro.
The members of the Sororian Society very pleasantly entertained the faculty ladies Saturday afternoon. The rooms were very prettily decorated, and a well rendered program and refreshments added to the enjoyment.
C. H. McGugan has handed in his resignation as manager of the co-operative book store, and has accepted a position in the secretary's office. He will have charge of the books of the club boarding association and the mailing of college bulletins.
The mathematical department has purchased six color poles. A radical departure has been made in these. These poles are usually made of wood, but the new ones are of iron. Their weight is about the same and they are not affected by the wind.

Hillsdale is now certain of a place in the finals. If Albion loses to both M. A. C. and Kazoo, a thing not at all impossible, she wiil be shut out from participating in the finals. M. A. C. must lose every game in order to be shut out. From present indications this is highly improbable. We want to win every game and then end up with the cup.
A short time ago the Department of Forestry received from Mr. Frank J. Phillips a fine specimen of cypress knee, seven specimens of wood, including myrtie, holly, chinquapin, laurel, sweet gum, sweet bay, and magnolia, and two peculiarly twisted sticks, all from Texas.
Prof. Bogue is making a study of the plantations of forest trees that have been made in southern Michigan. On Friday, the sixth, हe visited that of Chas. W. Garfield at Grand Rapids. On Saturday, the seventh, he, accompanied 'by Land Commissioner E. A. Wildey, inCommissioner E. A. Wildey, in-
spected a sand dune covering about 500 acres of state lands at Big Prairie in Newaygo county.

The botanical department has put in some new cases to hold stage microscopes. The instruments are numbered and each student will be held responsible for the condition of the one he uses. New glass cans have also been purchased for preserving flowers, seeds and fruits for class use. Fruit cans were not satisfactory on account of the corroding of the covers. The new cans have glass covers and are very convenient and simple.

The Latest and Best Creation in Confections

## Wilson's

Bitter Sweets

TRY THEM AT
WILSON'S SUGAR BOWL,
106 Washington Avenue South.

NORTON'S RANGES! $\because$

The Easy Line to Use
Take it EARLY in the SPRING, and avoid that tired feeling
which surely comes unless you have a
marguart or hincoln.
CHAS, M. NORTON, 11 Washington Ave S

## Furniture...

Headquarters
COIPLETE LINE OF FURNITURE FOR STUDENTS' ROOMS

Canvas Cots at 95 c . Woven Wire Cots at \$1.50. Woven Wire Springs at $\$ 1.50, \$ 2.00$, and $\$ 2.50$. Mattresses at $\$ 2.00, \$ 2.50$ and $\$ 3.00$. Tables at $\$ 1.50$ and \$1.35. Chairs at 50 c up.

All goods delivered
to your room free.
M. J. \& B. M. Buck.

## THE JEWETT \& KNAPP STORE

## Lansinn's Low Priged Reliadle Stope

## Every Department full of New Spring and Summer Goods

New Dress Goods, Silks, Laces, Gloves, Hosiery, Underwear, Silk and Cotton Shirt Waists, Muslin Underwear, Dress and Walking Skirts, Tailor Made Suits, and Jackets.

We also carry a Complete Stock of Lace Curtains and Draperies.

## Jewett \& Knapp,

Lansing, Mich.

ABOUT THE CAMPUS.

Students in the forge shop are working in steel at present. Teapot stands are being made from files. Some are not only useful, but also very ornamental.
Messrs. Crawford and Hartwell have organized a tennis team. Those who wish to compete can make arrangements by calling on either of the above gentlemen.
M. A. C. has entered 70 men for Field Day. In every event we have from three to seven men. If we do not win the championship this year it will not be due to the lack of a well balanced team.

A lamprey was caught in Cedar river recently and is now in the zoological laboratory. Five salaman ders, a turtle, a horned toad from Oklahoma, frogs, fish, snakes, etc., are also on exhibition.

Robert Stark of Ann Arbor called at M. A. C. last week. Mr. Stark took the Beet Sugar course at M. A. C. two years ago and was connected with the Lansing Sugar Co during the campaign of 1902-1903.

The Forestry Department is carrying on an exchange of specimens of tree seeds and cuttings with a gentleman in Paris, France. A large bundle was recently sent to France by express.

The seniors were defeated by the Howell high school 14 to 7 , the Juniors defeated the "Preps" I3 to 4, and the All-freshman team took the instructors into camp 8 to o, last Saturday.
P. M. Lyman, assistant postmaster at M. A. C. for several


This Cut represents one of the many
New Styles in Men's Hats
which we now offer for your inspection. Vothing but latest styles and best qualities find place here. Same applies to our neck wear and cap stock-they are up-lo-date in every res. pect. Student patronage solicited.
ELGIN MIFFLIN

## Rubber Heels

(Next to Wings)
The rubber heel makes no noise, diminishes perceptibly the jar incident to walking and makes a consequent saving in nerve force.
Price, 40c. a pair.
Special to M. A. C. Girls.
Also rubber sole and cloth top gymnasium shoes.

C. D. WOODBURY, ноцІІster

Some more bleachers will be pu field.
E. A. Boyer, a special student in chemistry, is collecting fertilizers for the experiment station.

The new greenhouse is completed and is now in use. It will serve as a propagating house this season
E. A. Hardy has left for northern Montana to shear sheep. He exPro be Ann Arbor recently in connection with his work for the degree of Ph. D.

The freshmen in civil engineer ing $I$ a are divided into twelve squads for practical work in surveying.

The Juniors have been doing a high quality of work in triangula tion, which is a part of civil engineering 6.

The horticultural department is testing a new gasoline spraying outfit. The machine seems to give good satisfaction,

The Pine Lake extension of the Electric Railway has been abandoned for this year. The Leadley Park line is now being built.

Messrs. McDermid and Bates are making castings for the tunnel They will be used in connection with the pipes.

Prof. Bogue, assisted by two sen iors in the Forestry Department, re cently completed a valuation surve of a piece of timber for private par ties.
years and lately clerk in the secretary's office, has been appointed mail clerk on the Lake Shore. His run will be from Toledo to Chicago.

All students and members of the faculty having jokes or grinds should nand them to H. F. Tuttle, editor of the humerous department of the Junior Annual, This will be the last week contributions can be re ceived.

The All-Freshman team defeated the Eaton Rapids high school recently 3 to o. Larned and Harris formed the battery for the Freshmen. This team is exceedingly strong and is an innovation at M. A. C. that deserves hearty support.

Burke and Chapman are practically tied in the batting average, followed closely by Ellsworth and Canfield. Canfield has the most hits, Millar the most runs, Armstrong leads in stolen bases, having 11 to his credit.

Mr. J. D. Hanks, President and General Manager of the Detroit and Mackinac Railway Company, has asked the privilege of furnishing passes to the forestry students of M. A. C. if they wish to go into the country reached by that railroad.

The Horticultural Department has received a consignment of seeds from France. The following list will give some idea as to the kinds Alkekenge, arroche, baselle, cardoon, celerirave, cerfenil, chenille, chervis, chicoree, chou (40 varieties) chou-rave, ciboule, concombre, feve haricot (28 varieties), dolique, lima-
con, pimperuelle, pissenlit, poiree, patisson, and numerous others,
Excavation has begun for the new power house which will be located almost directly south of the veterinary laboratory. The farm depart. ment is using the sand to grade up the yards in the vicinity of the barns.
Prof. U.P. Hedrick has an article in the Chicago Record-Herald of Wednesday, on "Grass in Orchards" in which he maintains that the sys. tem will diminish growth of trees, render them susceptible to drought and encourage the breeding of insects.
Ray E. Hart, deputy factory in spector of the second inspection district, visited M. A. C. last week and inspected the shops. He expressed himself as well pleased and congratulated the college on the way the mechanical department is conducted.

The mechanical freshmen in physics are performing experiments in heat and light. The specific heat of copper, wave-length of light, effect of pressure on boiling point, heat required to vaporize a gram of water, magnifying power of a telescope, and use of the sextant are some of the things being determined.

Entomologist Pettit is working on the mosquito trouble again this spring. Owing to lack of funds only about four square miles of surface will be covered. An attempt will be made to control this nuisance at a reasonable expenditure of time and money.

THE M. A. C. RECORD.

## STANDINGS OF TEAMS.

Won Lost Percent
...
on Los 1,000


Olivet Alma .333

The young women in physics have been determining the velocity of sound in the air. Two stations were set up. The distance between was measured by a sextant. A pendulum was used to indicate the time. The velocity was found to be 1,190 feet per second. Theoretically, the velocity should have been 1,160 . The sextant used was made by Duncan McGregor of Scotland. It has seen service on the Atlantic and Pacific Oceans and has a very remarkable history.

Capitol Grange has voted to spend $\$ 10$ for flower seeds, mostly hardy, easily managed annuals. These are to be given to the children for experimental purposes. Specimens are to be brought to the Grange from time to time; discussions will be given and a fair will be held at the end of the season. Dr. Beal and Instructor Gunson will give instructions as to method of handling. Nasturtium,zinnia,aster,snap dragon, pink, marrigold, morning glory, double sunflower, calliopsis and other seeds were ordered from G. W. Park, of La Park, Penn., who graduated at M. A. C. in 'S6.
Rowland's concave grating is an interesting piece of apparatus in the department of physics. It was made by Schneider of Johns Hopkins and is used to measure wavelength of light. It was made in July, $18 \mathrm{SS}_{5}$ and is one of the original gratings. Northwestern University has been trying to purchase it for some time. Its value is gradually on the increase. The grating is made on polished speculum metal. There seems to be no record as to the number of lines to the inch, but Mr . Curtis will determine this in the near future. There are probably 10,000 to the inch. The concave gratings are exceedingly rare.
Elbert Hubbard says that if ten Yale or Harvard graduates were wrecked at sea not one would be able to construct a raft even if all the material were at hand. This lack of the practical seems to extend to the Harvard course in Ornithology. While very theoretical discussions are given, methods of catching snipe, quail, partridge, etc., are not mentioned, much less practiced. mentioned, much less practiced. the middle of the night by means of a tennis net, a lantern and a cudgel is an old one at M. A. C., but seems to be brand new to easterners. However, several birds were seen and undoubtedly some will be caught next time.
Chemistry is one of the very oldest of the " laboratory sciences," and yet Professor Josiah P. Cook, of Harvard, succeeded in getting a small laboratory fitted up in the basement of the main university building as late as 1851, and President Eliot was the first student to take advantage of the opportunity offered. This is emphatically the age of laboratories in education and there is every prospect that they will become more numerous and more elaborate. "Our laboratories have overwhelmingly justified their cost
by their past history, and are justified in making greater demands than ever, by the importance of the functions which they fulfill."-S. Lawrence Bigelow, University of Michigan.
Thomas Foster died of pneumonia last week Monday after an illness of only a few days. He was 76 yeors old and had lived near the big stone ever since 1851 . He saw M. A. C. from the very start and watched its growth and development with much interest. The "old boys" all remember the brick house near the large stone. Here in the days of no cars and high-priced busses, many a one has taken a rest and refreshed himself at the Foster well. Three Foster families have lived between M. A. C. and Lansing for between M. A. C. and Lansing for
over 50 years. Wm . Foster now over 50 years.
lives in Lansing. Foster now
The Adam Foster place is near the switch just outside the city limits. Two sisters still live here and both are well supplied with information regarding pioneer days. Dr. Joseph Foster had his home at this place. The funeral was held on Wednesday afternoon and was largely attended. Mrs. Sweeney was present.
Instructor Michels is the author of a 265 -page book on "Creamery Butter-making." It has been pronounced by experts a most valuable addition to the dairy literature and the best book in its line published up to date. Mr. Michels is well known as an expert in dairy lines and as a buttermaker who understands the theory as well as the practice. Some of the principal subjects considered are, Babcock test, bacteria, cream ripening, starters, churning, packing and marketing butter, construction of creameries, creamery mechanics, pasteurization, detection of impure milk, care of milk and cream, refrigeration and creamery bookkeeping. The essential facts are stated in a very interesting and concise manner. Some excellent hints are given and the book will be of great value to the book schools, buttermakers and farmers. The illustrations are good and the general appearance is neat and attractive. It has already met with a hearty reception.


BaSE BALL GOODS !
of all kinds now in stock.

We shall make every effort to keep in
stock just what you want.

## J. H. LARRABEE,

325 Washington Ave, S. LANSING.

It's Record shows it to be

## THE POLICY HOLDERS' COMPANY

## The Matual Benefitit Lifte Insurance Co.,

## OF INEWARIK, N. J.

CHAS. B. COLLINGW00D, District Manager,
Agricultural College.
Lansing Office, 100 Hollister Block.

WHEN IN NEED OF
Sobioty or Dance Progiams call on

Lawrence \& Van Buren Printing Co.,

122 Ottawa St. E. Lansing, Mich.
DIRECTORY

## LANSING BUSINESS and

PROFESSIONFL MEN
The names in this Directory, as well as those of all our other advertisers, are of relistudents will take pains to patronize those who patronize us.

## BARBERS.

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

## BOOKS AND STATIONERY.

A M. EMERY, 116 Wash, Ave. N. Books, A Fine Stationery, Engraved Calling Cards,
Fountain Pens. Pictures, Frames. Fine Framing
a Specialty. New store. New Stock. CTY BOOK STORE. Fountain Pens, Drafting Cools, Stationery, Card, Engraved, Pocket Books, Card Cases and Bibles. Tennis, Football
and Baseball goods. Crotty Bros., 206 Wash.
Ave. N.

## BOOK BINDERS

GO. G. BLUDEAU \& CO-Bookbinders AcG count book makers, paper ruling, hibrary ams pocket books. etc. Citizens phone No. 56 . 109
Wash, Ave. N. W AGENVOORD \& CO.- Bookbinders, Blankbums, book Makers, Librtbooks, Mary and Art Bindings, Al- Mountings, etc, Back
numbers of makazines and periodicals supplied. bums, Pocketbooks, Map and periodicals supplied
numbers of mayazines
Bell phone 378 . 109 W ashington Ave. South.

BOOTS AND SHOES.
D. WOODBURY. - Boots and Shoes. We
shoe the students. See ad. shoe the students. See ad.

NLY the best candies at the "Sugar Bowl."
Washington Ave. S.
Clothing.
BY rour Dry Goods and Clothing, Hats, Caps B and Furnishing Goods at H, KOSITCHEK

OUIS BECK.-Clothier. Gents' Furnishings,
Hats and Caps. 112 Washington Ave. North.

## CROCKERY AND GLASSWARE.

H $\begin{aligned} & \text { H. LARNED.-China, } \\ & 105 \text { Washington Ave.S. }\end{aligned}$

## dentists.


E. STOFFER, D, D. S. Office 105 Wash-
ington Ave, S. Former M. A. C. student.

R W. MORSE, D. D. S. Hollister Block, Room
H. MOORE, D. D. S. Office 411-13 Hollister

DRUGGISTS.
R OUSER'S CAPITAL DRUG STORE. Up to
$\mathrm{R}_{\substack{\text { OBINSON DRUG CO., successors to Alsdorf } \\ \text { \& Son, Drugs and Druggists' } \\ \text { Sundries. } \\ 102}}$
$\mathrm{R}_{\text {Washington }}$ Ave. N.

## DRY GOODS.

THE IEWFTT
Goods. $222-224$ WNAShington Ave. S.

## ELECTRICAL SUPPLIES.

APITOL ELECTRIC CO. Electrical Supplies.
Telegraph Instruments and Telephones. 321

## all Meats

May look alike to you, but there is a very great difference in the quality we hanWe and that sold by some other markets. We handile 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.
Wo make daily trips to the College.
'photh orderontes. Careful attention given to
A. C. ROLLER,

Successor to GOTTLIEB REUTTER.
ington Ave. South.
Successor to GO
Washington Ave. South.

## PURNISHING GOODS.

E Furnishing Goods. See ad. and Gentlemen's
fURNITURE DEALERS.

HACK AND BAGGAGE LINES.
$\mathrm{O}_{\text {Ave. } \mathrm{N} \text { Line. }}^{\text {RDER Your hacks for parties at Carr's Hack }}$ Livery in connection. 410 Washington
HARDWARE, STOVES AND TINWARE.
ORTON'S HARDWARE-General Hardware,
Stoves, Tinware, Graniteware, Cutlery, etc.
INSURANCE.
THE DYER-JENISON-BARRY CO., LTD., orporated) Hollister Block, All kinds of the
insurance. Strongest agency in city. JEWELERS.

MANICURE AND HAIRDRESSING.
 Switches made of cut hair or combings. New
'phone $118.2221 / 2$ Washington Ave. S., up stairs.

MERCHANT TAILORS.
OHN HERRMANN'S SONS.
218 Washin
W trade solicited. Opposite Hotel Downey, North,
MUSIC, PIANOS, ETC.
$\mathrm{G}^{\text {RINNELL }}$ thing in the line of music. 219 Washing-

## oculists.

## 

## PHOTOGRAPHS.

C. WALTER, M. A.C. I make Photographs; Landscapes, Buildings, Interiors, Flash-lights, Lantern Slides, Transparencies, Medallions and
Stereoscopic Views. Developing and Printing for
Armateurs. Views for sale.

## PHYSICIANS.

## W. HAGADORN, M. D.-Office hours, 11 to $12 \mathrm{~A}, \mathrm{M} ., 2$ to 4 and 7 to 8 P , M . ${ }^{\text {Office }}$.






PLUMBERS.
SHIELDS \& LEADLEY. Plumbing and Heat-
ing. 300 Wash. Ave. N., Lansing. Both
SPORTING GOODS.
$\int \begin{aligned} & \text { H, LARRABEE, Base Ball Goods, Foot } \\ & \text { Ban Goods, Tennis, } \\ & \text { and Fishing Tackle. } \\ & \text { Golf, Guns, } \\ & \text { B25 }\end{aligned}$

