

The M. A. C. RECORD.

MICHIGAN STATE AGRICULTURAL COLLEGE.

VOL. 9.

LANSING, MICHIGAN, TUESDAY, DEC. 1, 1903.

No. 11

LOST.

A ring of keys with the name of E. E. Bogue on Chinese coin attached to ring was recently lost. Finder will please leave keys at post office or secretary's office.

FORESTRY DEPARTMENT.

The forestry department has begun planting in the open places in the woods the trees that were grown in the nursery this season. Over a thousand white-wood seedlings have been received from Ohio for spring planting. One bushel of hickory nuts have been planted and about half as many acorns. Fifty-five large bur oak acorns were received from Oklahoma. They weighed 26 ounces or an average of nearly a half ounce each.

A few weeks ago 100 red fir and 100 bull pine seedlings were received from Mr. F. J. Phillips who was at that time at Arlington, Or. A part of these were planted in the nursery and the rest planted in the woods next the river which area is intended for an arboretum. In the box also were herbarium specimens. Friday morning the department received from Mr. T. G. Phillips from Vermigo, New Mexico, a box containing specimens of several species of pine and spruce, some herbaceous specimens, petrified wood, rocks showing the imprint of some deciduous tree and of a palm, an M-shaped marker, limbs showing insect work, a piece of wood showing beaver work and a deer's horn with four points. Every point has been gnawed by some rodent indicating that the bill of fare for wild animals in that country is even more limited than that for man at the hotels.

The specimens are highly appreciated by the department, they will serve for instruction, and they show the thoughtfulness of the alumni for this new department in their alma mater.

THANKSGIVING AT M. A. C.

The Thanksgiving hop was given by the military department in the armory on Wednesday evening. It was well attended and all pronounce it one of the best ever given. The chaperons were Major and Mrs. Vernou and Director and Mrs. Brewer. The day itself was a very quiet one. Many of the students took the opportunity to visit home and friends. The football game announced for the day was ordered cancelled by the Board of Directors and so the whole interest in this sport centered in the Albion-Kalamazoo game and the Chicago-Michigan game. Both resulted in a way very acceptable to M. A. C.

Albion was defeated 12 to 5 and Chicago 28 to 0. This ties Albion and Kalamazoo for second honors in the intercollegiate, while Alma and Olivet are practically tied for third place with Hillsdale at the foot. The Normal at Ypsilanti and Adrian did not enter the contest. Their teams were light and did not

develop college form at any time during the season. The result of the Chicago game leaves Michigan in the championship class of the West. The best critics will undoubtedly divide first honors between Michigan and Minnesota.

BASKET BALL.

M. A. C. had a championship team last year and prospects are good for another fast team. Balbach, Haftencamp, Tuttle and Schaefer of last year's team are practicing this year. Morgan, Ball, Wessells and Hunt who did some playing last year are also out. About a dozen others are also practicing, some of whom are showing excellent form. Games will be played with Grand Rapids, Detroit and some College teams. The game is an interesting one, requires quickness, coolness and excellent judgment.

Y. M. C. A.

Thanksgiving services Thursday morning, conducted by Rev. Edwards, were a success in every way except attendance, which was small due largely to many students having gone home. Mr. Edwards brought out the idea of what true thanksgiving means in such a forceful and clear way as to be long remembered by those present.

Chapel services Sunday morning were conducted by Rev. Bacon, of Flint. His text was, "My Gospel," as recorded in several places in St. Paul's letters, e. g. Rom. 2:16. The service was well attended and the sermon interesting and instructive.

Dr. Waterman's talk on "The Measure of a Man" Sunday evening was a success, and all present enjoyed the discourse. The talk was very practical and showed the absolute necessity of a well defined model and a persistent effort at its production in our lives. This measure can be made up by taking all the lovely traits of those we know and putting them together, but a shorter way is to accept Jesus Christ who is the perfect measure of a man.

The Mothers' Meeting will be held at Mrs. Chas. E. Marshall's Thursday evening, Dec. 3, at 7:30 o'clock. Mrs. Collingwood will have charge of the discussion, "Children's Rights." All mothers interested in these meetings are invited to attend.

The plants in the bacteriological laboratory were frozen on Wednesday night. Several steam pipes were also frozen. The steam was evidently shut off during the evening and in consequence two months of careful work suffered severely and seemed for a while entirely lost. Careful nursing has brought the plants back to a nearly normal condition.

Senator A. E. Palmer, of Kalkaska, made a brief visit at the College last Wednesday. Mr. Palmer har-

vested over 4000 bushels of apples this fall, and realized 60 cents a bushel for the winter varieties. A Wolf River tree, 14 years old, bore 27 bushels of apples. He sprayed the trees six times the past season and had fine quality, an average of 88 per cent. being firsts. Most of the apples were shipped north, going as far as Duluth.

The teachers and students of the Woman's Department entertained the members of the football team and individual friends last Thursday evening. All had a pleasant time and enjoyed the dancing and also the refreshments. On Friday evening the members of the teaching force were invited. Music was furnished by Misses Adams, Northrup, Redner and Rounds. The reception was informal and everybody was made to feel at home. All pronounced it a decided success.

The herd barn has been refitted. A herd of 20 grade cows will be divided into groups and experiments will be carried on for several years to improve them by continuity of breeding. The farmer has exactly such a problem to solve in the majority of cases. Jersey, Guernsey, Holstein and probably Brown Swiss sires will be used. The experiment will be of great value as a means of teaching the principles of breeding to students in live stock as well as a means to show the farmer that the improvement of his herd is within easy reach.

The Port Huron factory has sent the department of Agronomy samples of chicory in all stages of preparation. The thumb of Michigan is becoming quite a productive center along this line. Factories are located at Port Huron, Capac, Gagetown, Bad Axe and Bay City. This year 2,800 tons of the finished product is the estimated output. This represents about 28 per cent. of the green product. The plant grows best in a dark, mucky clay and averages about nine tons per acre. Seed is sown in drills, 12½ inches apart and six inches apart in the row. The sowing is done from the middle of May to the middle of June. It is used as coffee and is quite a profitable crop to the farmer.

The Zoological Club discussed the subject of albinos in birds and mammals at its last meeting. Specimens from the museum were used for illustration. Among those shown the principal ones were a white raccoon, a white porcupine, a white woodchuck, a white muskrat, a white red squirrel, a white robin, a white blackbird and a white kingbird. Several imperfect albinos were also shown. Albinos are always weaker than typical forms. The color is due to the absence of dark pigment cells in the skin. The eyes are usually quite weak but are better in partial darkness than in light. The pink color of the iris is due to the absence of pigment and the fact that the color of the blood is thus brought out. What causes the lack of pigment is not well understood. To say that it is due to a weak organization does not give a clear scientific explanation.

ALUMNI.

'73.

George E. Kedzie is a mining engineer at Durango, Mexico. He recently induced a prominent Mexican family to send a son to Michigan to learn English and to receive technical instruction in agriculture. The young man is now visiting in Jackson, and will soon come here to take up special work.

'74.

Supt. and Mrs. Chas. L. Bemis, of Ionia, spent Thanksgiving at the College visiting their daughter Bessie, who is a member of the senior class. The Ionia schools rank among the best in the state. The attendance is about 1200, and the tuition from non-resident pupils brings in from \$900 to \$1000 a year.

'79.

Prof. L. G. Carpenter, of Colorado, called at M. A. C. last Friday while on his way home from Washington. Mrs. Carpenter accompanied him on the trip.

'86.

Geo. W. Park has moved from Libonia, Franklin Co., to Lapark, Lancaster Co., Pa. 34 years ago he issued his first catalog, 8 pages, 2 illustrations and 500 copies. He recently issued a catalog abounding with beautiful illustrations, of 64 pages and 500,000 copies. He has a large floral establishment and extensive greenhouses. His business has grown like his catalog.

'88.

H. E. Harrison is chemist for the Liquid Carbonic Acid Manufacturing Co., of Chicago. He and Mrs. Harrison and the baby are real well and find Chicago quite to their liking.

'90.

The *American Grange Bulletin and Scientific Farmer*, published in Cincinnati, Ohio, has a good cut and a brief sketch of the life of F. B. Mumford. Prof. Mumford is writing a series of lessons on agriculture for the above named paper. The first lesson is found in the issue of Oct. 29 and deals with the principles of plant production. Definitions are given and the success in and science of agriculture receive brief mention. The series promises to be very interesting and instructive.

W. J. Meyers is in the mathematical department of the Colorado Agricultural College. Prof. Meyers has done a great deal of work along sociological lines and is also an attorney, having graduated from the University of Michigan in 1900.

With '94.

Dr. H. H. Merriman made a pleasant call at M. A. C. last week.

'96.

W. J. McGee is with a new paint concern as chemist. He is working on a new process for the manufacture of white lead.

THE M. A. C. RECORD.

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MICHIGAN STATE AGRICULTURAL COLLEGE

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TUESDAY, DEC. 1, 1903.

ALUMNI.

'92.

L. C. Brooks is in the construction department of Cramp's Ship Yard, Philadelphia. Some time ago Mr. Brooks sent a full report of tests of electric auxiliaries of the new battleship Maine. The volume also contains many blue prints showing connections, cranes, hoists, turret turning, automatic mechanical brakes, blowers, diagrams of ventilating fans, steering engine room exhausters, etc. Mr. Brooks made many of the drawings himself and the volume has been placed in the alumni library. His address is 55 West Sharpnack St., Germantown.

With '99.

A. E. Wallace is engaged in rail-roading in California. He says he likes the work because it gives him a chance to kick whenever he feels like it. Mr. Wallace is a strong believer in labor unions, is vice master of one of the lodges and a member of the committee which has charge of difficulties between the men and their employers. He says that while corporations are in the lead at present, the time is coming when labor will be its equal and even superior. His work is a success financially and he expects to be at M. A. C. at some future time to complete his course. His address is 164 I St., San Bernardino, Cal.

'00.

James Greene is designer for a manufacturing firm in the Monardock building, Chicago.

With '00.

Miss Coral Havens called here last week. She is teaching domestic science in the Detroit schools.

'01.

Miss Alice M. Gunn writes a very interesting letter from Iron Mountain. She has charge of Domestic Science in the high school there and everything is passing along very smoothly. She teaches sewing to the ninth grade, household economy to the tenth, and cooking to the eighth and tenth. She feels delighted with the prospects of the work and enjoys M. A. C. news, especially football.

'03.

Stanley Garthe has been elected to take charge of manual training in the Iron Mountain high school. The mechanical course is well adapted for work in manual training though going much farther than any high school. But a teacher should know more than he is required to teach and taking this as a standard, mechanical graduates should find manual training an open field. The demand for this work is constantly increasing and good wages are paid.

J. L. Thorne, chemist for a Filter Co. in Chicago, spent Thanksgiving at M. A. C. He is engaged in water analysis and likes his work.

J. A. Frazer is drafting for a steel construction firm in Chicago in the Marquette Building.

Louis G. Michael writes a very encouraging letter in regard to his work at Columbia University where he holds a scholarship. He adds that the requirements of students are not as great at Columbia as at M. A. C., and that no one seems to take any special interest in the students. He makes special mention of the benefit of the work at M. A. C., and says that Dr. Beal's advice—"Keep on looking"—is excellent even in Columbia. His address is 419-W. 118th St.

IN GERMAN UNIVERSITIES.

Of the foreigners in German universities 628 study philosophy, 616 medicine, 588 mathematics and natural sciences, 351 law, 199 forestry, 146 agriculture, 124 Evangelical and 23 Catholic theology, 29 pharmacy and 27 dentistry; 876 are matriculated at Berlin, 406 at Leipzig, 257 at Munich, 197 at Heidelberg, 146 at Halle, 128 at Freiburg.

THE RHODES SCHOLARSHIPS.

The trustees of the will of the late C. J. Rhodes have prepared a memorandum for the information of college authorities and intending candidates for scholarships in the United States, which states that the first election of scholars in the United States will be made between February and May, 1904. The elected scholars will commence residence in October, 1904. A qualifying examination will be held within this period in each state and territory, or at centers which can be easily reached. This examination is not competitive, but is intended to give assurance that all candidates are fully qualified to enter on a course of study at Oxford University. It will, therefore, be based on the requirements for respensions—the first public examination exacted by the university from each candidate for a degree. The Rhodes scholars will be selected from candidates who have successfully passed this examination. One scholar will be chosen for each state and territory to which scholarships are assigned.

The committees and the universities making appointments will be furnished with a statement of the qualifications which Mr. Rhodes desired in the holders of his scholarships, and they will be asked in exercising their right of selection to comply as nearly as circumstances will permit with the spirit of the testator's wishes. They will also

be asked to furnish to the trustees as full a statement as possible of the school and college career of each elected scholar, with the special grounds of his appointment, together with suggestions, if desired, as to the course of study for which he is best fitted.

It has been decided that all scholars shall have reached at least the end of their sophomore, or second year work at some recognized degree-granting university or college of the United States. Scholars must be unmarried, must be citizens of the United States, and must be between nineteen and twenty-five years of age. Where several candidates present themselves from a single college or university, the committees of selection will request the faculty of the college to decide between their claims on the basis of Mr. Rhodes's suggestions, and present to the committee the name of the candidate chosen by that college as its representative in the final election.

The president of the state university or college is in each of the following states chairman of the committee of selection for that state:

Alabama, Arizona, Arkansas, California, Colorado, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, Wyoming.

The course in domestic art at M. A. C. is a very practical one. The sophomores spend three terms in pattern cutting, garment cutting, machine sewing, drafting, cutting and making of a plain-fitting waist, shirt waist, etc. The juniors spend the fall term in making a wool dress and studying the quality of material. This is followed by fine needle work, decorative stitches and linen marking in the winter term. The seniors spend a term in art needle work, millinery and embroidery, study of textiles, and other advanced work. The samples of work done show fine workmanship and careful instruction. The woodwork done by the women students will bear critical examination and compares very favorably with similar work done elsewhere. The five-year freshmen spend a term in making models. Mechanical drawings are made by each student before the tools are used for construction.

Squares are made and then converted into octagons which are later on changed to circles. The juniors do advanced work along this line. The room has benches for 16 students and is well equipped with all necessary tools. The present plan is to still further extend the work along this line. The students are unusually interested and derive a great deal of good from the course.

The senior class in mechanical engineering is offered the following topics in the way of suggestions for thesis work. Tests upon some of the following:

1. Gasoline Engines.
2. Gasoline Engine and Dynamo.
3. Steam Engines.
4. Blowers.
5. Stokers.
6. Electric Motors.
7. Air Compressors.
8. Wind Mills.
9. Injectors.

Also tests of the following:

1. Efficiency of Pipe Covering.
2. Friction of Packings.
3. Value of Belt Dressing.
4. Efficiency of Fan System of Heating.
5. Cements.
6. Value of Various Forms of Concrete Tunnel Sections.

Also:

1. Design and Equipment of Lighting System for M. A. C. Shops.
2. Design and Equipment of an Independent Telephone System for M. A. C. shops.
3. Design and Construction for Recording Wind Velocity.
4. Complete Power Plant Tests.

The trustees of Trinity College have established a course in civil engineering.

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ABOUT THE CAMPUS.

E. C. Crawford visited Detroit over Sunday.

Mechanical seniors are working on steam engine designs.

Mr. Paul Pierce spent Thanksgiving with friends at De Witt.

W. R. Shedd made a trip to Cleveland, starting on Friday evening.

Miss Georgiana Blunt, of Ann Arbor, spent the Thanksgiving vacation at M. A. C.

Mr. and Mrs. F. W. Bassett of Champaign, Ill., are visiting their daughter, Mrs. Myers.

Mrs. E. L. Newman of Portland, spent Thanksgiving at the home of her son, Instructor Chase Newman.

Prof. U. P. Hedrick has drawn a prize in a contest carried on by the Ladies' Home Journal on Floral Hints.

L. M. Brayman of Custer spent Thanksgiving with his brother, C. H. Brayman, who is a member of the present freshman class.

Of the senators in the present session of congress, 58 are college graduates and 215 of the representatives can claim like distinction.

The street cars are still somewhat unreliable as to time schedule. Improvements are being made and hopes are entertained for the future.

Yale has cleared \$50,000.00 on football this season. In view of this vast amount it would seem hardly necessary to endow athletics.

C. A. McCue will address the M. A. C. Foresters this evening on

forest growth and forest types of southeastern Texas. All are invited.

William F. Durand, professor of Marine Engineering, has been appointed acting director of Sibley College, Cornell University, in place of the late Professor Thurston.

F. W. Robison and family spent Thanksgiving at Dearborn, visiting C. H. Robison, '95. Dr. Charles and family were well and business in the dental line was on the increase.

Prof. Dandeno gave an interesting talk on the origin of the embryo before the meeting of the horticultural club two weeks ago. A good program has been prepared for this week's meeting.

Messrs. Garthe, McCune, Kneeland, Rosenberry, H. K. Patriarche, F. J. Wilson and M. B. Stevens and Miss Edna Smith and Miss Brown who was a student here last year, all visited M. A. C. during the Thanksgiving recess.

Prof. Buffum, director of the Wyoming experiment station, called at the College on Friday. He spent quite a while inspecting the live stock and pronounced it the best herd in the east for purposes of instruction and study.

The zoological aquarium contains among other things a salamander found near the Woman's Building a few weeks ago, crayfish, clams, snails, five kinds of fish, crustaceans, slugs and quite a number of phantom larvae.

Instructor Longyear has lately been working on anthracnose of the tomato. He has inoculated apples with this disease and has produced a disease which resembles bitter rot, in fact there seems to be no doubt as to the identity of these diseases.

Instructor Norton left for Chicago to-day. After taking a view of the show, he will take a course in the University of Minnesota in dressing and cutting meats and will make a study of quality of meat. He will return to M. A. C. in January and similar work will then be introduced here.

The course in Beet Sugar will be given this winter. At first it was thought best to put it off on account of the large number of regular students in chemistry, but it has now been decided to give it as in former years. More complete announcements will be made in the future.

Prof. Shaw and 15 members of the senior class left on Monday for Chicago to attend the International Live Stock Show. Three days will be spent in Chicago and the points to be noticed are—judging of stock, stock yards, methods of handling animals, sales methods, purchase of feeder stock, packing and transportation.

Either the students or visitors in the mechanical department are rather flush with money if the amount found is any indication. Five dollar bills, dollar bills, and gold A. O. U. W. pins are picked up frequently. Owners have been found for some, but others still await identification

and strange to say no one has inquired after the lost articles.

One of the seniors in bacteriology is conducting experiments along the line of converting starch into sugar by means of bacteria and applying the process to the making of bread. It is an interesting undertaking and is full of suggestions and possibilities. The probabilities are that bacteriology may do the work of digestion in the future. It has already solved many human ills, though the science is still in its infancy.

The five months' educational cheese scoring contest, conducted by Instructor Michels, closed the last of October. Universal satisfaction is expressed by those who entered the contest. The criticisms and suggestions were especially valuable. Thirty-three participated in the contest and these defrayed all the expenses. The gold medal was won by Hon. Fred M. Warner, secretary of state, for the highest average score, 95.8. The silver medal went to C. L. Davis, of Addison, who made an average score of 95.4.

Prof. Dandeno is conducting a series of experiments with seedlings. He is using solutions of KOH, NaOH, Na₂CO₃, NaHCO₃, HCl, H₂SO₄ and CuSO₄ and is trying to determine the strength of these solutions in which seedlings can live or the most dilute solution that will just kill. The solutions are based on gram equivalent per liter. Acid solutions that cannot be told by litmus have still the power to destroy plant life. Fungus spores will also be tested.

EDUCATION MULTIPLIES THE CHANCES FOR SUCCESS.

The second edition of "Who's Who in America" contains 1,300 pages of brief biographies, without eulogy, criticism or comment, of such persons now living in America as have become noted as factors in the progress and achievements of the age. No name is inserted or omitted for financial consideration.

With a view to determining what effect education of the various grades has had on success in life, effort was made to ascertain the school training of each of these men and women, and 7,852 were thus educationally classified.

According to the best estimate, there are in the United States 40,782,007 persons over 21 years old. These are divided educationally about as follows:

Class 1. Without school training 4,824,698.

Class 2. With only common school training 32,862,951.

Class 3. With common and high school training 2,165,357.

Class 4. With college or higher education added 1,071,291.

The question is how many of the eight thousand distinguished citizens of the United States on the Who's Who list came from each of these classes:

The 4,824,698 of class 1 furnished 31.

The 32,862,951 of class 2 furnished 808.

The 2,165,357 of class 3 furnished 1,245.

The 1,071,291 of class 4 furnished 5,788.

It thus appears:

1. That an uneducated child has one chance in 150,000 of attaining distinction as a factor in the progress of the age.

2. That a common school education will increase his chances nearly four times.

3. That a high school training will increase the chances of the common school boy 23 times, giving him 87 times the chance of the uneducated.

4. That a college education increases the chance of the high school boy nine times, giving him 219 times the chance of a common school boy, and more than 800 times the chance of the untrained.

It is a noteworthy fact that of the 7,852 "notables" thus gathered, 4,810 proved to be full graduates of colleges.—Ex.

SPECIALIZATION.

There is still a prevalent belief, even though much modified from that of former days, that the general training of the intellectual powers should continue through at least three, if not four, years of college life—that specialization should not begin early, if one wishes to accomplish the most in life. That late specialization is not the best in all professions the world has long conceded. What eminent musician has there been who did not begin his musical training while yet a child?

Ask an Agassiz, a Darwin or a Huxley, or any one of our able naturalists, when he first began the study of nature, and he will reply that he was always a naturalist. Is it probable that such men would have been greater men had they devoted four years of their life to the humanities alone? Is the great mu-

sician less successful because his training may have been at the expense of Greek, mathematics or chemistry? It is true, indeed, that such men are often one-sided, cranky, as the world calls them, and that undue specialization has robbed them of much of the sweeter part of life, has put them out of joint with the world, has often left them, as Agassiz has said, with no time to make money, but I believe that it is better to have cranky specialists than not to have them at all. Away with the idea that such men are always born great; if early specialization is good for men with great powers, it is better for those with small powers.

Precocity may be a sign of greatness, but I believe more often greatness is the result of precocity, the result of early concentration before the plasticity of youth is irrevocably gone. We cheerfully admit that the violinist *must* begin his special training while yet his muscles are plastic. Is the mind less plastic than the muscles, and is there not as great need that it should be molded early? You cannot teach old dogs new tricks, nor is it often possible to teach a man new tricks after he has become matured.—*Science*.

The museum has several skeletons which show rather remarkable developments in the upper incisor teeth. In the case of a woodchuck, the lower incisors had been pushed to one side and in consequence one of the upper incisors had curved backwards, pierced the roof of the mouth and was growing well towards the nose. The other incisor had also made a large growth but had not yet reached the palate. The animal was shot sometime ago while in the act of climbing a tree. It seems strange how life could long exist under such conditions. Its food supply must have been radically changed or else the woodchuck was remarkably fortunate in its selection.

During Mr. Gunson's stay at Ann Arbor he met several M. A. C. people. Among them were Clay Tallman, '95, J. T. Berry, '96, George Richmond, '98, N. A. McCune, '01 and E. E. Gallup with '96. All were enjoying themselves immensely. Tallman had as many artistic curves about his physique as in the days of '95; Berry was still musical; Richmond was as jolly as ever; McCune was hard at work and Gallup used words that stretched from the pedagogical room to the end of the engineering laboratory. Mr. Gallup is interested in life insurance, encyclopedias, farming, and has also become a sedate landlord. All the boys are doing well in their respective courses.

The Maine legislature having appropriated \$2,500 a year for a department of forestry at the University of Maine, the trustees have authorized the appointment of a professor of forestry.

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R. W. MORSE, D. D. S., Hollister Block, Room 517. Citizens Phone 32. Bell Phone 396.

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

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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. Bell phone 172-2 R.

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