

The M. A. C. Record.

VOL. 3.

LANSING, MICHIGAN, TUESDAY, NOVEMBER 30, 1897.

No. 12.

Chrysanthemum Forcing With Chemicals.

PROF. L. R. TAFT, HORTICULTURIST.

The past twenty years have marked a great change in the methods used by florists in growing chrysanthemums, especially for the production of cut blooms. Formerly they were grown in pots and the flowers were seldom more than two or three inches in diameter, but by the method in use now, blooms twelve to fifteen inches in diameter are not uncommon. The plants are set either in beds or benches as early as May for early flowers and from that time until August, when the late varieties are planted. In this way a succession of blooms can be secured from September until Christmas. The side shoots are pinched off and if large flowers are desired the plants are allowed to develop but one bloom each. The plants often reach a height of five or six feet and necessarily make a rank and rather watery growth. In order to secure this it has been the custom of florists to use large amounts of manure, it being both mixed with the soil to the extent of one-third before the plants are set, and used as a thick mulch over the surface as well as applied as a liquid dressing every four or five days from the time the plants have become established until the flowers are half opened. The result of the

rapid growth thus secured is that the flowers are quite soft and tender and wilt quickly after being cut, thus greatly lessening their value for purposes of decoration and exhibition.

During the last summer the College has been carrying on experiments with various chemical fertilizers to learn if they could not be used to advantage instead of the stable manure. About sixty-five varieties, comprising seven hundred and fifty (750) plants were used in the experiment. They were set in the wide center benches in the forcing houses, which had been divided lengthwise of the houses into two parts by a board partition. One-half of each bed was enriched with stable manure and the same material was used as a mulch and as a liquid dressing. The soil in the other half of the beds was ordinary loam that had received no fertilizer of any kind for years. This portion of the beds was laid off into sections, each of which was fertilized with a mixture of various chemicals. The combination was such as to provide about the proportion of nitrogen, phosphorus and potash that it was thought would be required by the plants. Among the materials used were sulphate of potash, nitrate of potash, nitrate of soda, phosphate of ammonia, as well as ground bone and wood ashes. These were also mixed with the soil and were used as a liquid dressing at the same time as the manure water. The cost of the chemicals was very slight, and they were applied with much less trouble than the animal manure.

[During the period of growth they were carefully watched, but no difference could be noticed in the rate or the appearance of the growth.

The flowers formed at the same time and were of equal size and fullness. When fully developed the flowers were cut and three of a variety from the different plots were photographed. They were then placed in a cool room to test their keeping qualities, and after a week or ten days were again photographed.

While growing it was noticeable that the flowers grown with chemicals were of a firmer texture than those from the manure plots and the difference was even more noticeable after the blooms were cut, as those grown with stable manure wilted much sooner than the others. Although the experiment is not completed, it is very evident that as good flowers can be grown with chemicals as with stable manure, with less labor and little if any greater expense, while the firm growth that can be thus secured will greatly increase their value as cut blooms.

The same thing was noticeable at the recent chrysanthemum show at Chicago, where an exhibit grown

elect fruit growing will be given lectures and practical demonstrations on the various phases of nursery work, planting and care of the orchard, and small fruit culture. These lectures will be given by college men who have made a specialty of the subjects in their charge and by outside lecturers—leading fruit growers of the State who will give the students the results of their valuable experience.

Laboratory work will be an important feature of the course. It will include practice work in grafting, budding, layering, making cuttings, etc. Considerable attention will be given to spraying machinery and other implements of the orchard.

Botany will be given considerable attention, as will also entomology and chemistry.

Fruit growers should know *how* insects eat and fly and breathe and burrow; how they moult and grow; the way in which they multiply; when, where and how the eggs are laid; where and how they winter; why they appear and disappear so suddenly; and how to handle old

The Final Game for '97.

Our football team went to Notre Dame on Thursday for the last game of the season, and although Notre Dame won by a score of 34 to 6, the game our boys put up was a credit to themselves and the institution. Becker, our heavy guard and one of our best men both with the ball and on the defense, was compelled to go home on Wednesday because of the illness of his father. Crane filled his place and did excellent work, but Becker's absence was felt by the whole team. Notre Dame's team was much the heavier of the two, the line averaging over 190 pounds. The center weighed 246 pounds. Notwithstanding the difference in weight, our team held their opponents for downs repeatedly and when in possession of the ball played with greater life and snap, but lost frequently by fumbling, two of Notre Dame's touchdowns being secured in this manner.

Notre Dame won the toss and Wells kicked off for M. A. C. Woodworth secured the ball on a fumble and by quick, snappy work our boys carried the ball to their opponents' five yard line. It looked very much like a touchdown for us, but Notre Dame rallied and, aided by a slight fumble, secured the ball on downs. Notre Dame punted and then carried the ball slowly down the field for a touchdown but failed in kicking for position. During the remainder of the first half the ball was in the possession of Notre Dame the greater part of the time. Once when Notre Dame was compelled to punt the ball was fumbled and a clean run for a touchdown was made. The half ended with the score 22 to 0 in favor of Notre Dame.

The second half was characterized by harder ball than the first, every foot of progress being secured only by a desperate struggle. Notre Dame kicked to our 15 yard line. The ball was returned 20 yards and lost on downs, but soon regained. Wells broke through the line and went like a whirlwind down the field, but by a very pretty tackle was downed on the five yard line. On the next down Baker carried the ball over the line for a touchdown and Russel kicked goal. During the remainder of the game Notre Dame made two touchdowns and kicked both goals. The game ended with the ball in the possession of M. A. C. Score 34-6. During the second half Price, Brainerd and Wells had to be taken out on account of slight injuries and were replaced by Parks, Russell and Smith.

Every man on our team played good ball and all are deserving of the highest praise. The boys are loud in their praise of the treatment received at the hands of the Notre Dame people. The game was clean and free from disputes, and every effort was made to entertain us properly. We hope this will not be the last of our contests with our friends from South Bend.

F. V. W.

Men make money, women spend it; men make trouble, women preserve it.—Puck.



SPECIAL STUDENTS IN FRUIT CULTURE, 1897.

by the use of chemicals remained in a presentable appearance much longer than the others which were largely if not entirely grown with stable manure.

Sodium nitrate, mildly acidulated ground bone and wood ashes, gave good results; but, especially for the liquid applications, nitrate of potash, phosphate of ammonia and sulphate of potash will be more readily applied and will give fully as good results.

Horticultural Courses.

FRUIT CULTURE.

One of our popular special courses last winter was the course in "Fruit Culture." The fruit interests of the State are of great and growing importance. Many thousand acres of excellent fruit land along the west shore remain as yet undeveloped, and here many a young man will in the next few years make a start in fruit raising. For such of these as can not take a full college course at M. A. C., our special courses offer peculiar advantages.

For six weeks, beginning January 3, the special course students who

pests as well as to prevent the introduction and spread of new ones. This they will get in the study of entomology. The lectures in agricultural chemistry will have to do with some of the leading points in plant growth and the nature and sources of the food of plants.

FLORICULTURE AND WINTER VEGETABLE GARDENING.

In this special course thirty lectures will be given, covering the subjects of construction of glass houses, commercial floriculture, and winter vegetable growing.

The College greenhouses will be used to illustrate each of the above lines, as they afford excellent examples of the various methods of construction, and will contain all of the leading crops of the florist and vegetable gardener. They will also be used to afford practice work in the various methods of propagating and growing the plants.

In this course as in the others we hope to have the aid of some of the leading specialists of the State. Work in botany, entomology and chemistry will be similar in scope to that offered in the course on fruit culture, but adapted to the needs of the greenhouse.

THE M. A. C. RECORD.

PUBLISHED WEEKLY BY THE
MICHIGAN AGRICULTURAL COLLEGE.

EDITED BY THE FACULTY,
ASSISTED BY THE STUDENTS.

SUBSCRIPTIONS SHOULD BE SENT TO THE SECRETARY, AGRICULTURAL COLLEGE, MICH.

SUBSCRIPTION, - - 50 CENTS PER YEAR

Send money by P. O. Money Order, Draft,
Registered Letter. Do not send stamps.

Business Office with LAWRENCE & VAN BUREN
Printing Co., 122 Ottawa Street
East, Lansing, Mich.

Entered as second-class matter at Lansing, Mich.

For various reasons THE M. A. C. RECORD is occasionally sent to those who have not subscribed for the paper. Such persons need have no hesitation about taking the paper from the postoffice, for no charge will be made for it. The only way, however, to secure THE RECORD regularly is to subscribe.

Official Directory.

PREACHING SERVICE—Sunday afternoons at 2:30 in the Chapel.

Y. M. C. A.—Regular meetings Sunday evenings at 7:30 and Thursday evenings at 6:30. C. W. Loomis, President. E. M. Hunt, Cor. Secretary.

Y. W. C. A.—Weekly meetings for all ladies on the campus, Tuesday evenings at 8:00, in Abbot Hall. Sunday meetings with the Y. M. C. A. Miss Clara J. Stocum, President. Miss Ella Phelps, Cor. Secretary.

KING'S DAUGHTERS—Meet alternate Wednesdays. Mrs. J. L. Snyder, President. Mrs. W. Babcock, Secretary.

NATURAL HISTORY SOCIETY—Meets second Friday of each month in the Chapel at 7:00 P. M. T. L. Hankinson, President. O. W. Slayton, Secretary.

BOTANICAL CLUB—Meets Monday evenings at 6:30 in the Botanical Laboratory. B. Barlow, President. Miss Marie Belliss, Secretary.

SHAKESPEARE CLUB—Meets Wednesday evenings at 7:30. Dr. Howard Edwards, President.

COLUMBIAN LITERARY SOCIETY—Meets every Saturday evening at 7:00. Fourth floor, Williams Hall. R. E. Morrow, President. F. E. West, Secretary.

ECLECTIC SOCIETY—Meetings every Saturday evening at 7:00, Fourth Floor, Williams Hall. W. J. Merkel, President. Elton Bailey, Secretary.

FERONIAN SOCIETY—Meetings every Friday afternoon at 1:00, West Ward, Wells Hall. Fay Wheeler, President. Ella Phelps, Secretary.

HESPERIAN SOCIETY—Meetings every Saturday evening at 7:00, West Ward, Wells Hall. J. B. McCallum, President. M. H. Hammond, Secretary.

OLYMPIC SOCIETY—Meetings every Saturday evening at 7:00, Fourth Floor, Williams Hall. A. M. Patriarche, President. C. H. Chadsey, Secretary.

PHI DELTA THETA FRATERNITY—Meets every Friday evening at 7:30, East Ward, Wells Hall. A. B. Krentel, President. H. B. Clark, Secretary.

UNION LITERARY SOCIETY—Meetings every Saturday evening at 7:00, U. L. S. Hall. F. V. Warren, President. Paul Thayer, Secretary.

TAU BETA PI FRATERNITY—Meetings on alternate Thursday evenings, Tower Room, Mechanical Laboratory. F. V. Warren, President. C. A. Gower, Secretary.

CLUB BOARDING ASSOCIATION—E. A. Calkins, President. J. B. McCallum, Secretary.

M. A. C. ATHLETIC ASSOCIATION—F. V. Warren, President. E. W. Ranney, Secretary.

Educated Farmers Needed.

Read what J. H. Brown, associate editor of the *Michigan Farmer* and himself a practical farmer, has to say of education for farmers and where it should be obtained:

"In my opinion, there never was a time when the young men and young women, especially those on the farm, needed a good practical education, as they do now. There is no excuse for ignorance in this age of progression and cheap educational facilities.

"The best farmers I know are progressive and well educated. The best help I ever had to work on my own farm has been the man with a well trained intellect to control and guide his muscles. Brawn without brain is of little value to me, and the man who works on the farm under hour to hour directions, and must be constantly watched to prevent errors and false motions, is sure to be found wanting.

"I urgently advise my young farmer friends, of both sexes, to

secure an education of such a practical nature and value that it may be of incalculable benefit to them in after life, and I advise these young people, knowing the institution so well, to attend the Michigan Agricultural College. Make up your mind to go, and go. You will never regret it."

Two Valuable Special Courses.

CREAMERY MANAGEMENT AND BUTTER-MAKING.

Both experience and technical knowledge are necessary to the successful management of a creamery. Something of the former and much of the latter can be secured in a special course arranged to begin January 3, 1898, and continue six weeks.

The practice and instruction will be adapted to the wants of the beginner in creamery work who is anxious to fit himself rapidly and economically for the successful management of a creamery, and to the experienced butter-maker who has already served for one or many years at the business. The former will have daily experience in actual butter-making with the apparatus which he will be called upon to

istry. (5) Dairy bacteriology. (6) Milk production—lectures and demonstrations on stock feeding, veterinary anatomy and medicine, and laboratory work on forage crops. (7) Butter judging. Samples of butter as found in the regular market will be presented for inspection, and each day's make of the dairy school will be scored before shipment to the city expert. A sample of each lot so scored will be reserved for re-inspection on the receipt of the score card reporting the judgment of the city buyer.

HOME DAIRYING.

The instruction in this course will be especially adapted to the wants of the beginner in home dairy work, and will include topics relating both to the selection and care of the dairy herd and the treatment of milk and manufacture of butter.

The young men who attend will begin at the outset judging dairy stock and selecting from the College herd the animals best adapted to the production of milk and butter. Practice in scoring dairy cattle is kept up until the student acquires confidence in his own ability to recognize by the exterior conformation of a given animal her value in the dairy.



IN THE DAIRY ROOM

operate later in the factory; will be taught the correct use of the Babcock test, the physics and chemistry of milk, the best methods of operating various styles of separators, churns and other dairy machines and conveniences, the reasons for the various operations and the best methods of performing them, and finally the rules of business which should govern him in managing an enterprise of this kind.

The experienced butter-maker will have his attention called to many kinds of separators and their relative merits as shown by their actual work in the dairy room under the care of an expert; to the various methods of heating milk for separation, and the care of cream and ripening it; to the use of the combined churn and worker, and to the methods of performing the host of details that have to be gone over every day in the working of a creamery.

The course will include: (1) A course of lectures on methods of keeping books, illustrated daily by the business operations of the College dairy. (2) Daily practical work at butter-making, which will be made the dominant feature of the course. (3) Creamery mechanics, which will include the study of, and practical work with, the machinery of the creamery. (4) Dairy chem-

After listening for two weeks to lectures on the theory of feeding, the student spends an hour or more daily studying stall fittings, stable construction, preparation of feeding stuffs, quantities of feed to be given, and other factors in the feeding and stable management of dairy cows.

In the dairy room, daily practice is given in the various operations in the manufacture of butter. Such apparatus is used as ought to be found on every dairy farm, not expensive but efficient. Among the topics upon which special emphasis is laid may be mentioned the use of the Babcock test, securing cleanliness in milking, in the milk utensils, and in all the operations of the dairy, the use of various styles of creamers and separators, handling, ripening and churning cream both with and without commercial starters, and finally working and preparing the butter for market.

This course will also include lectures on dairy chemistry and veterinary anatomy and medicine, and a study of the botanical characteristics and economic value of the various forage plants grown in the State, with methods of culture and place in the rations. The construction and filling of silos will find place here as one method of caring for the corn crop.

The Possibilities of the Grand Traverse Region for Fruit Culture and Dairying.

JOHN SEVERANCE, '99, UNION LITERARY SOCIETY.

Thirty years, yes, even as late as twenty years ago, the Grand Traverse region was, comparatively speaking, a wilderness; but, owing to its abundant natural resources, it has been developing rapidly and in some sections it is becoming quite thickly settled. While the lumbering interests were being developed the more settled occupations, as farming, fruit raising and dairying were neglected. This has been the condition of northern Michigan in the past.

The lumbering industry while exhausting itself has practically been the means of settling and developing the country. But the once rich and beautiful forests of pine and hardwood are gradually but surely disappearing, and the time has come when the woodman must lay aside his axe and turn his hand to the development of the rich and more inexhaustible agricultural resources.

To say that agriculture up to the present time has received no attention would be untrue to the present conditions, for in many places near the lake shore are to be found some of the finest and most productive farms in the State.

As yet, however, but little attention has been given to dairying and fruit raising—two of the most profitable branches of agriculture. The farmer up to the present has been engaged, chiefly, in general farming, producing only the staple articles necessary to supply the demands of the lumbering sections. But there is no good reason why dairying and fruit raising will not, in the near future become two of the leading industries in this section of the State.

The soil and climate are peculiarly adapted to the production of the leading forage crops. Much of the hardwood land which has been stripped of its timber can be purchased at from two to five dollars per acre, and can easily be converted into the best of pasture lands. Then too, much of the land which is too rough for purposes of general farming makes equally as good pasture as the more expensive flat lands. In this way much of the land which otherwise would be a waste could be made valuable.

But if dairying is to be profitable, the dairyman must not only be able to produce cheaply, but must also have a good market for his products. The home consumption greatly exceeds the production and the demand for better products is becoming greater every year. The many summer resorts in the Grand Traverse region furnish a ready market for all products of the dairy, and a fancy article is always sure to command a good price.

One of the best points in favor of dairying in northern Michigan is that the greatest demand comes at a time of year when dairy products are most easily and cheaply produced.

So much, in brief, for the dairy industry; now let us turn our attention to the possibilities of this section for fruit raising.

Although fruit raising is new to this part of the State, it is by no means untried. Ten or twelve years ago, it is true, fruit raising as an industry, was yet in its infancy. But to-day it bids fair to become one of the leading agricultural pursuits; already thousands of bushels of ap-

ples and other fruits are grown along the lake shore annually.

The climate of this section is much modified by the waters of the lakes; and is well adapted to the production of such fruits as the apple, pear and plum, most varieties of which thrive well without danger of winter killing. The quality of northern grown fruit is of the best, surpassing that of other localities in flavor and keeping qualities. This is substantiated by the fact that the fruit grown in this section brings the highest price in the leading markets.

The orchards are also remarkably free from most of the insect pests and fungous diseases that infest orchards and damage the fruit in other parts of the State.

The home markets are always good and this, together with the cheap means of transportation by water, enables the producer to compete favorably with fruit growers of other localities.

The growing of the small fruits, as the berry fruits, has, as yet, received but little attention, and most fruits of this class are imported from other parts of the State. There is no necessity for this, however, because the same quality of fruit can be produced just as easily and cheaply at home with good profits to the producer.

Wherever dairying and fruit raising have been tried in this section, they have proven profitable. Under the existing condition, and as the country becomes more thickly settled there is little doubt that these two branches of agriculture will become the two leading rural occupations of the Grand Traverse region.

At the College.

Mr. R. H. Pettit is on the sick list.

Mrs. Clute returned from Chicago last week.

The contractors are wiring the library building.

The ceiling of the general museum is being redecorated.

L. E. Sage, '99, has been confined to his room for over a week.

Mr. and Mrs. E. E. Pattison of Chicago, are visiting Mr. and Mrs. C. H. Alvord.

Messrs. Parks and Russell went from the Notre Dame football game to their homes.

Miss Grace McEuen of Mason, spent Sunday, November 21, with Miss Grace Melton, '01.

W. J. Merkel went from the Notre Dame game to Chicago, where he remained until Sunday afternoon.

H. S. Anderson and A. K. Hayden of Cassopolis, visited A. W. Reynolds, F. W. Mansfield and G. VanRiper last week.

Boarding club stewards for the winter term have been elected as follows: Club A—C. H. Chadsey; B—E. D. Gagnier; C—Mrs. Bacon; D—F. W. Robison; E—H. L. Becker; F—W. K. Brainerd.

The Farm Department has just sent to the printers a valuable bulletin on "Feeding Dairy Cows." It contains a definition of terms used in feeding literature; a table of the composition of food stuffs; methods of computing rations; and deduces from records of several years, a new feeding standard, which prac-

tically confirms and puts on a scientific standard the standard published by Prof. Woll of Wisconsin University. The bulletin contains also discussions and analyses of the food-stuffs used during the last three years, and describes the method here used of keeping cows in stables.

Michigan vs. New Mexico Sugar Beets.

From the *Western Liberal*.

The sugar beet is becoming an important agricultural product in more places in this country than in New Mexico. Recently the *Liberal* heard that a friend in Michigan had been analyzing sugar beets raised in that state, and had said they were the richest in sugar of any raised in the world. Not wanting the friend to make a public statement that could not be substantiated the *Liberal* wrote him telling that the beets richest in sugar were raised in the sun kissed valleys of New Mexico, and in proof thereof quoted to him the result of analyses made by Prof. Goss of the experiment station, who found from a series of analyses that the New Mexico beet produced from 15.5 to 20.3 per cent of sugar. In answer to this the following letter was received: "Don't prophesy unless you know. Don't be positive in your statements about sugar beets unless you are certain. The sun-slapped valleys of New Mexico may produce sugar beets with a percentage of sugar ranging from 15.5 to 20.3, but frost-nipped Michigan has produced sugar beets under the McKinley tariff that beats New Mexico. I have analyzed eight samples of the Vilmorin that range from 19.99 per cent sugar to 22.33 per cent and with an average of 20.73 per cent and a coefficient of purity of 88; also eight samples of Klein Wanzleben that ranged from 19.28 per cent to 21.28 per cent sugar, with an average of 20.11 per cent, and purity 87. Go to Texas! New Mexico is nowhere!"

A Simple Method of Combining the Colors.

PROF. F. W. MCNAIR.

The following very simple method of illustrating the recombination of the spectral colors into white light has some obvious advantages in the way of ease of apprehension on the part of the beginning student. It also possesses an additional and not inconsiderable advantage in that it is striking.

A rectangular refraction tank with glass ends is set up in front of the lantern, both being preferably upon a rotating stand. From a horizontal slit a beam is projected and the prism interposed in such a manner that there is sent down into the water the rays of the spectrum, their order from red to violet running lengthwise of the tank. A few drops of milk are mixed with the water, and with care a mixture may be obtained, which in a side view shows the separated rays clearly, while at the same time if viewed from the end of the tank it looks quite white. On cutting off either the violet or red end of the spectrum the end view becomes colored.

If a strong beam is available it is better to turn it backward toward the lantern by a reflector before sending it through the prism. This brings the violet rays which are least intense nearest the end, when they have to traverse a thinner stratum of the mixture.—*Science*.



These cool nights suggest heavier Night Shirts. Nothing you can buy in that line that will give the same wear and afford the comfort of a good quality flannelette. The one I offer at 50c is unquestionably the best value you ever saw and one dollar buys the heaviest quality, made in best manner possible and sixty inches in length. Anything you require in Up-to-Date Furnishings. Students' patronage solicited.



Elgin Mifflin.

The House that Jack Built

Must have been from the good old

HIRAM RIKERD BRAND OF LUMBER.

It Stands the Test of Ages. Suits all Places and Purposes.

any women's shoe in our store at

295.

every-thing goes

no reservation.

G. D. WOODBURY.

INCLUDING

\$5.00 Patent Leather.
4.50 Finest Paris Kid.
4.00 Fine Vici Kid.
3.50 Welts and Turns.

NOTICE

No trading stamps given on this special sale.

C. D. W.

Simons Dry Goods Co.

NOVEMBER SPECIAL VALUES.

KID GLOVES.

We sell the best \$1.00 ladies' black and colored Kid Gloves in the market, with Foster Anchor Clasp.

OUR UNDERWEAR DEP'T.

Is the largest in the city. Ladies' Union Suits 50c, 75c and \$1.00 up.

Complete line of Men's Underwear at 50c, 75c and \$1.00 each. We will save you 20 per cent.

HOSIERY DEP'T.

We carry a Standard Line of Ladies' Cotton and Woolen Hosiery.

Special Value at 12½c, 15c, 21c a pair.

100 Fur Astrachan Fine Collar-ettes at \$4.00

Ready made Skirts and Waists, Wrappers, Mackintoshes can be found in our Cloak Department.

THREE FLOORS.

- 1 Dry Goods.
- 2 Cloaks, Curtains.
- 3 Carpets, Rugs and Window Shades.

Simons Dry Goods Co.

VETERINARY COLLEGE.

The Veterinary Department of the Detroit College of Medicine.

is now fully equipped, under the supervision of Prof. E. A. A. GRANGE, V. S., late professor of Veterinary Science at the Agricultural College. This department is prepared to furnish instruction in the science of medicine as applied to dumb animals. Ample Hospital Accommodations are provided for horses, cattle, dogs and other domestic animals. Send for catalogue to

Or, Dr. H. O. WALKER, Secretary.

PROF. GRANGE, Principal.

Lawrence & VanBuren PRINTING CO.,

Ottawa St. E.

Lansing, Mich.

News from Graduates and Students.

Notice that this column is mostly a record of marriages this week.

H. N. Jenner, 86, is a well-to-do druggist in Goshen, Indiana.

Carl Hoppough, with '00, spent a few hours at M. A. C. Wednesday.

Born, Tuesday, November 23, to Prof. and Mrs. P. M. Chamberlain, '88m, a daughter.

S. W. Keefer, with '97, is again in College, having returned last week to take special work.

Don H. Kedzie, '76, editor of the *Western Liberal*, has been appointed postmaster at Lordsburg, New Mexico.

N. E. Dresser, with '92, is a nurseryman and fruit grower at Jonesville, Mich. He has a very pleasant home, a wife and two bright children.

Wint D. Bingham, with '93, after leaving M. A. C. attended Yale until a junior and then went to Seattle, Washington, to engage in engineering business.

We've just found it out—some time last July or August one of the ne'er-do-as-others-do, '93 men, Albert B. Chase, by name, was married to Miss Alta Bush of Gobleville.

John F. Coats, with '97m, arrived at M. A. C. Sunday from Park City, Montana. He will take the special course in cheese making. He says a position is awaiting him in Park City. All that he needs is the necessary preparation.

Thursday evening at the residence of Mr. and Mrs. Daniel Binns, Woodstock, occurred the marriage of their daughter Ethel, to J. DeWitt McLouth, '97. The young couple will reside on the old farm near Addison.

Hon. C. W. Garfield, '70, was married to Miss Jessie A. Smith of Grand Rapids, Wednesday evening of last week. The wedding occurred at the residence of the bride's brother, Mr. J. R. Smith, in Denver, Colorado. Mr. and Mrs. Garfield will spend several weeks in Washington, D. C., returning to their Burton Farm home about the first of March.

Last Tuesday evening, at the home of the bride's uncle Mr. Hobart Payne, Owosso, Miss Addie D. McGillvra, with '00sp., and Charles B. Cook, '88, were united in marriage. About 175 guests, including Misses Edith Smith and Catherine Watkins of M. A. C., attended the wedding. There were many beautiful and costly presents, among which was a chafing dish from the Abbot Hall girls. Mr. and Mrs. Cook will be at home after January 1 at Oswego, N. Y.

Thanksgiving Week.

The week was rather quiet at the College. Though but one day of vacation was given, those who desired to go home were excused from recitations on Friday, and many availed themselves of the opportunity. Devotional exercises were held in the Y. M. C. A. rooms Thursday morning at 8 o'clock. Several social functions were indulged in by those who remained here.

Tuesday evening Prof. and Mrs. C. D. Smith gave a very pleasant entertainment to the "Bachelors"

and their lady friends. Refreshments were served at small tables to twenty-six, the favors being white roses. Guessing contests and the reading of a skeleton story followed. In the freehand drawing contest, Mr. Ernest True won the honors, a copy of J. M. Barrie's *Auld Licht Idyls*. In guessing the contents of packages several were tied for first, but by casting lots Mr. Chace Newman secured the prize, a basket of fruit.

In the Abbot Hall kitchen laboratory Thursday evening, a candy pull was in progress from eight till eleven o'clock. About twenty young women and as many young men, divided into five pulling gangs, made taffy of all degrees of stickiness and brownness and sweetness, some of which might well be called edible. It was the good time they were after, not the candy, and they had it.

Wednesday evening the Union Literary Society gave an informal Thanksgiving hop. Twenty numbers constituted the program, which was thoroughly enjoyed by the thirty young people present.

About twenty young men and women enjoyed popcorn, apples, games and dancing in the Hesperian rooms Thursday afternoon.

Prof. and Mrs. C. D. Smith ate Thanksgiving turkey with Mr. and Mrs. John M. Corbin of Eaton Rapids.

Miss Amy Vaughn entertained Miss Lucy Monroe at her home in Ionia during Thanksgiving.

Mr. Chace Newman spent Thanksgiving at his home in Portland.

Mr. C. E. Hoyt spent Thursday, Friday and Saturday in Chicago.

If a college girl hears of another girl being kissed she is horribly shocked, but under favorable circumstances she will let the same thing happen right under her own nose.—*Ex.*

Phone 192. New Phone: 76
J. G. REUTTER
 322 WASHINGTON AVE. S.
Fresh and Salt Meats
 Fine Chicago Beef a Specialty.
 Headquarters for All Kinds Home Made Sausage.

Alsdorf & Son...
THE DRUGGISTS

*Everything First Class,
 Fresh and Up to Date.*

Drawing Instruments..

NOTE BOOKS, TABLETS,
 FINE STATIONERY AND BOOKS.

Lansing Book & Paper Co.,
 120 Washington Avenue N.

FOR ANYTHING IN—
**Hardware, Stoves, Tinware,
 Graniteware, Cutlery, Etc.**

.....TRY.....
NORTON'S HARDWARE
 111 Washington Avenue S.

John Herrmann

Fine Tailoring.
 218 WASHINGTON AVENUE N.

....ALWAYS ON TOP....

DAVIS—THE CLOTHIER



**Fine Clothing
 Furnishings and Hats
 Football Pants
 Sweaters, Supporters
 The King Pant**

We are Up to Date on Men's Wear.

ONE PRICE—THE RIGHT PRICE.

104 Washington Avenue North.

BOYS

BUCK Sells Furniture Right.

All Goods Delivered to the College Free.

Best Woven Wire Cots, \$1.25 . . . Best Woven Wire Springs, \$1.50

WE SELL EVERYTHING.

M. J. & B. M. BUCK,

Open Evenings.

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.

ARCHITECTS.

E. EARL H. MEAD—Architect. 115 Washington Avenue N.

BARBERS.

J. H. WOOD—Barber. 106 Michigan Avenue E. College work especially solicited.

BOOTS AND SHOES.

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

CLOTHING.

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

DEWEY A. SEELEY—27 Wm's Hall. Agent for Fine Clothing. Prices low. Satisfaction guaranteed.

A. E. DAVIS—Clothing and Gentlemen's Furnishings. See ad.

CROCKERY AND GLASSWARE.

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

J. B. SIMON—Fine China, Crockery, Lamps, Tinware, etc. 111 Washington Avenue N.

DENTISTS.

D. R. G. W. COLEMAN—Dentist. 103 Washington Avenue. First stairs north of Michigan Avenue.

R. W. MORSE, D. D. S.
 Hollister Block, Room 517.

D. R. V. A. LACY—Dentist. Hours 8 to 12 a. m. and 2 to 4 p. m. 110 Allegan St. W.

DRUGGISTS.

C. J. ROUSER—Capital Drug Store. 123 Washington Avenue South.

DOWNEY HOUSE DRUG STORE—H. J. Eilenburg. Headquarters Ice Cream Soda.

DRY GOODS.

SIMONS DRY GOODS COMPANY—Dry Goods and Carpets. See ad.

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 adv.

COWLES BROS.—Furniture Dealers. Special inducements to College people. 319 Washington Avenue South.

HARDWARE, STOVES AND TINWARE.

JACOB STAHL & SON—Wholesale and Retail Hardware and House Furnishings. 211 and 213 Washington Avenue North.

HACK AND BAGGAGE LINES.

M. A. C. STUDENTS—Don't forget W. H. PORTER, the Hack and Liveryman. Rubber tires a specialty. Office 300 Capitol Avenue South, Bell Phone 65, Lansing Phone 133.

HOTELS.

THE NEW GRAND—R. M. Renner, Proprietor. Special rates to students. Washington Avenue S.

THE INGHAM. Grand St. South; 2 doors from Michigan Avenue. Low rates to students.

JEWELERS.

A. P. RICHMOND—Watchmaker, Jeweler and Engraver. 200 202 Washington Avenue North.

W. RAPIER—Watches, Clocks, Jewelry, etc. Fine Watch Repairing. 119 Washington Avenue.

CHAS. A. PIELLA—Practical Watchmaker and Jeweler. Repairing of Fine Watches a Specialty. 121 Washington Avenue N.

LAUNDRIES.

THE VAN GORDER PALACE LAUNDRY. S. P. Lanz, Prop'r. Sage & Westcott, Agts. Room 11, Williams Hall.

STAR LAUNDRY. 208 Michigan Avenue East.

LUMBER DEALERS.

H. W. RIKERD—Lumber Dealer. Mill Street. See ad.

MERCHANT TAILORS.

WOODBURY & SAVAGE—Tailors. Student trade solicited. 208 Washington Ave. S.

MUSIC AND MUSICAL INSTRUMENTS.

HOLMES MUSIC STORE—Pianos, Organs, Bicycles, Musical Mdse. and Sheet Music. Cor. Washington Avenue and Ottawa Street.

PHOTOGRAPHERS.

F. B. LECLEAR—Photographer. Hollister Block.

PHYSICIANS.

A. D. 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 419 Seymour St.

C. M. WATSON, M. D.—Hours, 2 to 4 and 7 to 8 P. M.; Sundays 12 to 2 P. M. 419 Washington Avenue S. Both Phones.

OCULIST.

C. M. DICKSON, M. D.—Practice limited to diseases of eye and ear. Hours 9 to 12 A. M., 2 to 4 P. M.; Sunday 2 to 4 P. M. First floor Hollister Block.

RESTAURANTS.

GILBERT M. HASTY—Proprietor Hasty's Gen'l Lunch. Best meals and Lunches in the city. 117 Washington Avenue S.

GIVE YOUR ORDERS TO—

TRAGER BROS.

THE MEAT MEN.

509 MICHIGAN AVENUE EAST.