

The M. A. C. Record.

VOLUME 2.

LANSING, MICHIGAN, TUESDAY, JULY 27, 1897.

NUMBER 25.

A Word to the Farm Boy—and the Girl as Well.

You are growing restless on the farm. The editor of this paper knows just how you feel, for he has traveled after the plow many a weary day thinking the thoughts that you are thinking now. You don't see much in life given to raising 10-cent corn or 12-cent oats. You know there is a great outside world which you long to enter and which can only be entered satisfactorily through the portal of an education. You believe that an education would be worth to you more than your father's farm, and would give that farm, if you had it, for that education. We sympathize with you, for that was our dream for long years by day and by night. We approve of the feeling which inspires it. We would like to see every bright boy who reads this paper have an education, but would not like, unless you are particularly qualified for it, to see you secure an education that would land you in one of what are called the professions.

The country is full of lawyers, the majority of them briefless and obliged to get a living in real estate, insurance, or some other business quite apart from law. They have been driven out practically from the profession for which they spent thousands of dollars and years of time to acquire fitness. The same may be said of doctors and preachers. If you are qualified for it by nature and grace, there is no profession more honorable, nor in fact so honorable, as that of the minister of the gospel, but unfortunately many a man who has had in him the making of a good farmer has been spoiled by becoming a poor preacher.

We know of but one branch of education that has a certain, definite job waiting for the graduate when he gets his diploma, and that is an agricultural education. Every other profession is not equal to the demand, and will not be in the next twenty years. The farm boy, who, having learned the practical part of farming, having familiarized himself with the machinery and become qualified to handle farm animals as they are handled on the father's farm, will take a thorough course at the Agricultural College will be just the kind of a man, provided always he has the brains and the grit that the world is looking for today. You may devote yourself to horticulture, to stock-breeding, to dairying, to butter-making, to cheese-making, or to cattle feeding, and if you have the stuff in you, will find a job, and a good paying one, waiting for you at the end of your course.

The colleges and experiment stations will require the services of a great many educated farmers. It will not be many years until every line of railroad in the west will have an industrial department which no one can run who does not combine the theoretical with the practical. A railroad official told us the other day that they needed a man of this kind, and when we pointed out the kind of man required, he said: "Why, that man would cost \$5,000 a year." The department of agriculture needs more than anything else this kind of men, and boys without capital who will qualify themselves for this kind of work will not need to wait ten or twelve years before they see a living clearly ahead of them.

As the years go on, it will become more apparent that the man who will farm successfully must have the "know-how," which he can gain only by long experience and reading at home or by an education plus experience and reading. Four years at college, or even two years, will be worth to you twenty years of farm life without it. Therefore, we say to the young man, not "Go West," but, go to college if you possibly can. Go to an agricultural college.

Don't start out to be a pure scientist; you want a broader education than that. It will pay you if you go back to run your father's farm; it will pay you if you buy a farm of your own. If you are not able to do this, somebody who has a farm will need you. The oil meal folks were not long since looking for a young man to act as their agent who knew how to feed cattle and how to compound rations of which oil meal is a part. Every line of business that has to do with farmers greatly prefers a man who not only knows how farming is done but can tell why it is done, and hence is in touch with the farmer.

Don't go west, young man; don't go to the city; go to the Agricultural College, and go to the agricultural end of that college. This would be our advice to you if we never wrote another line. It would have been worth 15 years of life to the editor of this paper if he had had the opportunity at your age to follow the line which he maps out for you.—Wallace's Farmer.

The above is sound advice. It applies to girls on the farm, and also to the farm boys who desire an education in mechanical engineering. Are you not planning to enter this college next September?

A Tribute From ex-Gov. Luce.

I am asked to write of the Agricultural College; to write of its mission; to write of its importance to the young men and the young women who expect to spend their lives in rural homes.

The request starts my mind racing back over the years. I was a member of the legislature forty-two years ago when the Agricultural College was established. From the time I was seventeen until twenty-four years of age, I had worked at a trade. At the age of twenty-five, I commenced farming in earnest, was ambitious to succeed as a farmer. Five years later I was elected to the legislature; during these five years I encountered many problems that were not solved.

The life of the ordinary man is too short to grapple with all the knotty questions that confront the farmer; hence when I went to the legislature I was prepared to plan out work for a whole corps of professors. I was extremely anxious that it should be almost exclusively an agricultural institution, but other and, I have long since admitted, wiser counsels prevailed in relation to the educational policy which should prevail at the Agricultural College. And now the institution furnishes every opportunity to impart such general education as shall develop and broaden the young men and young women who attend it, and the most earnest advocate of prac-

tical education must now be satisfied with the facilities there enjoyed.

The citizens of Michigan enjoy almost unequalled educational facilities. The University has its mission, and discharges its duties well. The same is true of the Normal School and colleges and high schools that are scattered throughout the length and breadth of the commonwealth; and what is true of all these other institutions is emphatically true of the Agricultural College. It educates; it broadens all along the line of life's duties. It teaches industry, and by its teaching and practice honors labor.

Keen observers of passing events, as well as the foremost educators of the land, are more and more coming to the conclusion that if we realize the best results attainable in our civilization, young men and women must be educated to do something and to be something and somebody as they go out of the school room to discharge the great duties of life.

Our Agricultural College furnishes opportunities to acquire industrial education as well as intellectual, and those who take a course there need not fear to come in contact with those educated elsewhere, and in many respects and for many callings it is superior to the ordinary college education.

As I write this I have in mind scores of young men, whom I will not name, who stand in the front rank as successful farmers and as honored citizens in the communities where they reside. If a young man or woman desires to climb, the Michigan Agricultural College is prepared to furnish the ladder upon which they can go up to any desired height. It is prepared for the use of the ambitious, and why more of our young people do not avail themselves of its benefits, I know not.

CYRUS G. LUCE,
Coldwater.

Notes from the "Hort."

The long summer vacation is but a name without a reality to those connected with the Horticultural Department. A busier lot of workers than those on the "Hort." would be hard to find.

The abundant rains of spring and early June produced a large crop of small fruits. Strawberries were of large size, and though somewhat lacking in quality, the results obtained were quite satisfactory. Currants and gooseberries produced but a fair crop, raspberries, both black and red, set abundantly, and blackberries, for the first time in several seasons, promise to mature a full crop. Cherries have been considerably below the average in productiveness.

The latter part of June and the first part of July were very dry and hot and many of the fruits and garden crops would have suffered much from drouth had not the irrigation system been in continuous use during that period.

Injurious insects and fungous diseases have been numerous and destructive during the season, and it has been a continual warfare to keep them in check.

The labor on the department has been performed mainly by students who have remained here during the College vacation. Most of them are upper classmen who have had the

benefit of class room instruction in the various methods of work and have then had the opportunity to learn the numerous necessary details through actual practice in orchard and garden. It is but fair to state that this labor has been faithfully and intelligently performed, and the plan one of mutual benefit to the College and student.

The equipment of the department is being increased by the erection of a cold storage building southeast of the horticultural barns, which is to be a model of its kind.

Farm Notes.

Statistics of the yield of hay on all of the fields cannot be given for the reason that part of the crop had to be stacked and was not therefore weighed. The twenty-three and one-half acres in field 9 yielded fifty-one and three-quarters tons of well-cured clover, or an average of 2.2 tons per acre. Field 11 containing the same area, yielded 47 tons, or exactly two tons per acre. No. 12 has carried an average of 18 head of cattle up to the first of July, when 36 tons of alsike and timothy were harvested from it. The hay in 7, 13, and 15 was a fairly heavy crop, but was not weighed.

C. F. Austin, J. E. Bishop, H. Caramanian, A. G. Bodurian, F. S. Gunn, C. M. Krentel, M. H. Lapham, F. N. Stocking, F. E. West, F. W. Whitney, G. M. Odum, are working on the Farm Department during vacation.

The name of Herbert Windsor Castle God-Save-The-Queen Mumford appears at the bottom of a letter supposed to be from the assistant professor of agriculture, who is now traveling in the island of British lions and jubilees. He had visited the Royal, the great livestock exhibition, and after "doing" the rural districts of England, was in Scotland when last heard from.

Director A. C. True made his annual visit to the Michigan Experiment Station on Tuesday and Wednesday, July 20 and 21. He came from the Minneapolis convention by way of the Madison station and went to Guelph by way of Detroit. He pronounced himself as highly pleased with the work which the station is doing and with the efficiency of the various departments.

Under the supervision of the bacteriologist the cattle barns are being thoroughly disinfected and white-washed as a farther means of preventing the spread of tuberculosis.

Removed.

D. W. Trine, '92, and U. P. Hedrick, '93, have been removed from their positions in the Oregon Agricultural College, as a result of a political revolution. It is said that the board has no charges to make, in fact, they gave the gentlemen removed testimonials of efficiency; but the term of service in some of the western colleges depends upon the political party in power and the Oregon college seems to be one of them. Mr. Trine was at M. A. C. last Wednesday, on his way to his old home at Springport, Mich. He has not laid definite plans for the future, but may spend a year in post graduate work at Cornell. Mr. Hedrick is visiting his parents and sister at Harbor Springs. He will visit M. A. C. soon and enter Cornell this fall.

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MICHIGAN AGRICULTURAL COLLEGE

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ASSISTED BY THE STUDENTS.

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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 8:30. C. W. Loomis, President. E. M. Hunt, Cor. Sec. 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. Stocoum, 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. Thos. Gunson, President. W. R. Kedzie, Secretary.

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

COLUMBIAN LITERARY SOCIETY—Meets every Saturday evening at 7:30, Middle Ward, Wells Hall. R. E. Morrow, President. F. E. West, Secretary.

ECLECTIC SOCIETY—Meetings every Saturday evening at 7:30, Fourth Floor, Williams Hall. W. J. Merkel, President. W. C. Ergenzinger, 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 7:30, West Ward, Wells Hall. J. B. McCallum, President. M. H. Hammond, Secretary.

OLYMPIC SOCIETY—Meetings every Saturday evening at 7:30, Fourth Floor, Williams Hall. A. M. Patriarche, President. E. D. Brown, Secretary.

PHI DELTA THETA FRATERNITY—Meetings 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 7:30, 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—I. L. Simmons, President. H. A. Dibble, Secretary.

M. A. C. ATHLETIC ASSOCIATION—C. B. Laitner, President. G. B. Wells, Secretary.

Minutes of Board Meeting, July 6.

Present: President Wells, Messrs. Garfield, Moore, Monroe, Bird, Marston, President Snyder, and Secretary Butterfield.

Minutes of last meeting read and approved.

President presented resignation of Instructor C. C. Pashby, to take effect August 20. Resignation accepted.

Request for changes in rooms in Physical laboratory referred to committee on Buildings and Property.

Request for room in Wells Hall for Grange referred to committee on Buildings.

Matter of changes in Armory referred to committee on Military.

The committee on Farm reported:

The Farm committee recommend that the sum of \$1,200 be expended, under Prof. Smith's direction, in the purchase of a dairy herd. Also that a committee be appointed to make arrangements for cheap but practical quarters for the above mentioned herd, at a cost of not exceeding \$600.

It is our desire that these dairy operations be put upon a practical and business-like basis from the beginning; that all accounts in connection therewith shall be kept distinct and separate from all other farming operations and experimental work. experimental work.

T. F. Marston,
A. C. Bird.

Report and recommendation adopted, to be carried out under the direction of the Farm committee and Prof. Smith.

The committee on Buildings and Property reported, asking for further time on the matter of electric light plant. It was moved that the matter be left with the committee, with power to act. Carried.

The committee on Experiment Station reported on the communication from Director Smith relating to appropriations for the Veterinary department, Experiment Station, for the ensuing year, covering material and expenses for that department, recommending that the schedule be allowed.

Mr. Garfield offered the following, which was adopted:

Resolved, That we adopt the plat drafted by F. E. Skeels for the division of the piece of land designated "The flatiron," and that hereafter it be known as the "College Delta."

Resolved, That the drainage of the "College Delta" be made under the direction of the president and secretary, and \$200 is hereby appropriated from current funds for the purpose; so much thereof as necessary to be used and the balance, if any, returned to current funds.

Resolved, That the drives on the plat be constructed under the same direction, and that \$100, or so much thereof as shall be found necessary, is hereby appropriated from current funds for the purpose.

Resolved, That the president and secretary are hereby authorized to put prices upon the lots in the "College Delta" according to their judgment, the average price to be \$130, which is hereby designated as a reasonable figure, based upon a present value of the plat of land as \$1,000 and the added improvements at \$300.

Resolved, That the secretary of the board is hereby authorized to negotiate sales of lots upon the "College Delta" at the appraised values to persons whom, in his judgment, will be entitled to purchase because of their connection with College affairs, provided that no one person shall be allowed to purchase more than one lot, and no sale shall be entertained except that contract be entered into to erect a residence costing not less than \$800.

It was resolved that the next meeting of the board be held at Kalamazoo, Tuesday evening, August 10, at 7:30.

The following was adopted:

Resolved, That the president of the College be authorized to use his good offices in securing the appointment of a deputy sheriff upon the College premises.

Adjourned.

Does a Thorough Education Benefit the Farmer?

ELLA E. ROCKWOOD, FLINT, EDITOR OF THE HOUSEHOLD DEPARTMENT IN THE MICHIGAN FARMER.

Among intelligent men and women it is commonly acknowledged that at the present time the farmer needs a thorough education fully as much as any one. Our country boys and girls, the hope of the years to come, will find abundant use for all the education they

can get whether they are to remain upon the farm or whether they go out into the world to seek home and fortune in the great, bustling, busy city.

There are those who will tell you that it is a useless expenditure of time and money to get a thorough education if one's life is to be spent upon the farm. They will point to this man or that who is a successful farmer and ask, "How much better off would he be if he had a college education?" Then to another and ask, "How much good is his fancy education doing him now?"

It will be the writer's aim in this short article to tell some of the good to be derived by the country boy or girl in obtaining a more thorough education than that offered by our district schools.

In the first place, the demand of the times is for better educated men and women in all vocations. Even the housewife, who, only a few years since, was supposed to need no other knowledge than that which would enable her to boil potatoes and make bread and cake, now finds a thousand and one ways in which a thorough education is a benefit to her. Science is opening up an immense field of useful information as regards her profession, that of providing for her family; and there is as much need of intelligent labor in this as in any other line of work. Indeed, as it is generally acknowledged that the health of a family is governed largely by the food they eat, it would seem that this ought to rank first in importance. The educated housewife possesses an immense advantage over the uneducated one. The teaching of domestic science should receive the hearty endorsement of all classes, and no girl's education be considered complete until she has finished such a course.

In other ways than this is the young woman as well as the young man who intends spending a lifetime upon the farm benefited by a thorough education.

In all walks of life it is the better educated who forge to the front. The time has gone by when success is gained independent of this. Intelligent labor of all kinds is educated labor today. The youth who sets out in life without an education is handicapped from first to last. Education is the mighty lever which gives one the power to take advantage of whatever opportunity may present itself. Many men and women now in the prime of life realize this to their sorrow. The rising generation have a right to demand of their parents that which the youth of thirty years ago did not have the same opportunity of possessing. I deem that man guilty of gross negligence who, today, "being able to do so, fails to provide his sons and daughters with educational facilities other than those offered by the district school, and this is not intended as any reflection upon the latter. Our district schools are good as far as they go, but the fact is they leave the pupil when he is at exactly the stage where he ought to go on. One year's schooling after that time is worth more than two before, for the simple reason that he is at just the age to apply himself to study to best advantage.

It was once deemed unimportant for the farmer to be an educated man. Today all that is changed. It is generally acknowledged that theory and practice should go hand in hand. You may think you know all about farming when at 50 you have been working hard at it all your life. But once let your son attend an agricultural college where he studies soil composition, effects of different chemicals as represented by

fertilizers upon different soils and crops, the most advanced methods of cultivation and conservation of fertility, retention of moisture, effects of different foods upon milch cows and other live stock, with best methods of their care and treatment, and see if he can't show you something worth knowing when he comes home. His book learning, which some farmers declare has no legitimate place upon the farm, will be a very efficient aid to your practical experience. The two should go together every time for best results.

The Agricultural College is the best school for farmers' sons and daughters. There they can get an education which will fit them for the duties which are to come. There theory and practice go hand in hand. There they are taught to apply science to the every-day affairs of life, and fortunate indeed is that young person who can take a full course at the Michigan Agricultural College before beginning in earnest his life work upon the farm. Such will most surely have cause in after years to bless the parents who helped them to make such a course possible. Many in the prime of life today regret exceedingly that in their own youth a thorough education was not obtained, for it is when youth is past and we look back upon lost opportunities that the full measure of that loss is realized.

To anyone who has ever visited the Michigan Agricultural College it must be remembered as a most delightful place in which to spend one's time while attending school. A single visit will be sufficient to convince the most skeptical that as an educational institution it cannot be surpassed. There are the Agricultural and Mechanical courses for men, and that of Domestic Science for women. Besides these there are special short courses, covering a period of six weeks each. These come in mid-winter, so that any farmer boy can attend without interfering with his general farm work.

But it is not my purpose to go into detail regarding the Michigan Agricultural College. I wish most of all to say something which may encourage parents to send their sons and daughters there. Our boys and girls are the farmers and the farmers' wives of the future, and they need exactly the education which there they will find. Do not be afraid it will tend to lead them away from the farm; if they are worthy of the calling they will be more deeply interested in it than ever. What they will there be taught will go far toward relieving the drudgery which so many find in farming. It will open their eyes to the possibilities of the soil as nothing else can do. It will make them practically masters of the situation, prepared to attack the problem, "How to make farming pay," and to solve it successfully.

The Michigan Farmer and the College.

Since June 12 the "Michigan Farmer" has devoted considerable of its valuable space to the friendly discussion of topics connected with the Agricultural College, and to the presentation of articles by professors and graduates of the College. There have been published articles by President Snyder, Dr. Kedzie, Prof. Smith, Prof. Weil and Colon C. Lillie, '84. This friendly relationship between the "Farmer" and the College should be fostered. Both are working for the advancement of the same class of people and they should work together in harmony.

At the College.

The new catalogs are out.

Ray S. Baker, '90, visited the College July 4.

Ex-Secretary Henry G. Reynolds visited the College July 5.

Quite extensive repairs are being made in Williams Hall.

Total enrollment last year, 425, an increase of 32 over the previous year.

C. E. Hoyt spent several weeks of the vacation in Walker's shops, Cleveland, Ohio.

Mr. and Mrs. Dean spent a week of the vacation at their old home near Napoleon.

The interior of the armory is being repainted. The ceiling will be painted a cream color.

Dr. Edwards and D. J. Crosby start today for a bicycle trip through Canada to Buffalo, N. Y.

Rufus and Lee Landon are spending their vacation at Niles. Mrs. Landon will visit Niles this week.

The Grand River Valley Masonic Picnic Association will hold its annual picnic at M. A. C. tomorrow.

Miss Pearl Kedzie entertained a party of young ladies from the College and Lansing one afternoon last week.

President A. W. Harris of the Maine State University visited the College on Saturday, July 17, as the guest of Dr. Barrows.

Miss Katharine Clute ('97 Florida Agricultural College) will enter the Women's Department as a post graduate next year.

Chace Newman is spending the vacation in travel. Appleton and Buffalo, N. Y., Cleveland, Ohio, and Detroit, Mich., are some of the places visited.

The Wheelers, Woodworths, Clutes, Pettits and Messrs. Eastman, Richmond and Skeels spent the 2d, 3d and 4th of July at Hickory Island, Pine Lake.

Mrs. Gunson has been very ill during vacation, but is at present resting well and slowly improving. The rupture of a vein in one of her limbs will confine her to her bed for several weeks yet.

Prof. and Mrs. Holdsworth and Prof. Hedrick report a very pleasant time in Scotland and England. They unexpectedly met Prof. Mumford on the street in Edinburgh and had one day with him.

Mrs. Landon and Mr. and Mrs. Dean entertained 16 of the young people of the campus in the Union Literary rooms last Friday evening. The evening was spent very pleasantly at games and dancing. Ice cream and cake were served.

Prof. Brigham of the Rhode Island Agricultural College visited M. A. C. several days last week. He reports that J. D. Towar, '85, is convalescing from typhoid fever and hopes to be able to visit his old home near the College in about a month.

President Oscar Clute of the Florida Agricultural College, and family, are visiting Prof. and Mrs. Woodworth. Mrs. Clute, Katharine, Ed. and Marion, came the last of June and will remain all summer. Pres. Clute arrived last Tuesday from Minneapolis.

Pres. Snyder and family, after attending the National Educational association at Milwaukee and the Association of Agricultural Colleges and Experiment Station workers at Minneapolis, went to Council Bluffs and Eu-

reka, Neb., where they are now visiting.

The seventh annual picnic of the Grand River Valley I. O. O. F. Picnic Association was held at the College July 15. A large crowd was in attendance and an interesting program was carried out. A ball game between the Mapes and Queen Bee teams resulted in a victory for the latter. The association includes membership from Ingham, Eaton, Ionia, Clinton and Shiawassee counties.

President Snyder and Profs. C. D. Smith and C. F. Wheeler attended the meeting of the Association of Colleges and Experiment Stations in Minneapolis, July 13-15. Among the delegates M. A. C. was represented by W. M. Munson, '88, of Maine; Geo. T. Fairchild, of Kansas; U. P. Hedrick, '93, of Oregon; L. C. Corbett, of West Virginia; E. A. Burnett, '89, of South Dakota; Director Chas. E. Thorne, of Ohio; H. R. Allen, '95, of Minneapolis; Dr. T. D. Hinebaugh, '85, of North Dakota; Chas. F. Wheeler, '91, of the Agricultural College; Gilbert H. Hicks, '92, of the Department of Agriculture at Washington; Pres. O. Clute, '62, of Florida.

Physical Laboratory Card Catalog.

The library card catalog would probably be missed more than any other recent improvement at this College. The catalog and classification has enhanced the usefulness of the library. The cards answer directly and quickly almost all the constant questions asked by students about books.

A new application of the scheme has been made in the physical department. It is an apparatus card catalog or an inventory of the department. A regular card catalog case was purchased and a set of cards printed so that a card gives the following information:

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*.....*
: No. 423.
:
: HELIOSTAT.
:
: MADE BY McIntosh Battery and
: Optical Co., Chicago.
: COST $1,600. BOUGHT, 1892.
: REFERENCE, Atkinson's Ganot,
: No. 605.
: REMARKS : Includes regular lan-
: tern front with Darlor
: projection lens.
:
: *.....*
    
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The back of each card is ruled in three spaces; the first space has the date printed; the second space is headed "case," and the third "value." It is expected once a year to mark the location in the cases of each piece and to give its estimated value as given in the regular College inventory. So that anyone by consulting the catalog can find the history references, location and value of any piece of apparatus.

After the whole catalog is complete and the cards arranged in alphabetical order the cards are numbered and a corresponding number placed on the piece of apparatus. It is expected that additions can be made on the decimal plan. The feature of the invention is the ease of keeping the catalog up to date and in perfect order.

The enormous advantages of an apparatus card catalog will be apparent to all students and instructors who have worked in a physical laboratory.

A regular library card catalog for the physical department is now being prepared. The authors will be arranged in alphabetic order. The catalog is to include all books on physics and electrical engineering in both the general library and in the physical laboratory.

Teaching Horticulture.

L. R. TAFT, PROFESSOR OF HORTICULTURE AND LANDSCAPE GARDENING.

It is very proper that in an institution "whose principal object shall be the giving instruction in those branches that relate to agriculture and the mechanic arts," considerable attention should be given to horticulture.

Recognizing the fact that the time that can be profitably devoted to the subject by some of the students who purpose to select some branch of horticulture for their life work, is greater than can be given by those who intend to follow general farming, or to engage in some other calling, the present curriculum provides for a short but general course adapted to the requirements of the latter class, and affords an opportunity for advanced work in such of the branches of horticulture as may be elected for those who desire to give this subject special attention.

As the agricultural course is now arranged the instruction in horticulture does not begin until the third term of the sophomore year, after the students have had elementary instruction in botany, chemistry, physics and entomology, as well as in the methods and effects of tillage and other agricultural operations that are equally applicable to horticulture, so that the ground work has already been prepared and the entire time can be devoted to purely horticultural methods.

The first six weeks are devoted to vegetable gardening, and so far as the time permits all of the leading crops are treated from the standpoint both of the market gardener and the home consumer. This, of course, includes instruction in the uses and care of cold frames, hot beds and vegetable forcing houses, as well as the location, soil, manures and fertilizers, implements and tools best adapted to each crop, and the methods of planting, caring for, harvesting, preserving and marketing them. Some attention is also paid to the nature and the application of the remedies for the various insects and diseases that attack the crops of the vegetable garden.

The subject of landscape gardening is taught in a similar manner during the last half of the spring term of this year. The instruction includes a discussion of the characteristics and history of the various styles of gardening and of the principles upon which they depend.

Considerable attention is paid to the arrangement of grounds of different sizes, from small town lots to those about a farm home or more pretentious country residence, as well as of school grounds, cemeteries and small parks. Such topics as the slope of the grounds, the methods of grading, the making of a lawn by seeding and sodding, the location and construction of walks and drives, and the arrangement of the trees, shrubs and flower beds, receive attention. A study is also made of the more common trees, shrubs, vines and bedding plants, and their adaptation.

The fall term is devoted to a consideration of pomology or fruit culture. Each of the fruits in turn is considered, such points as its origin, method of propagation, soil and location, distance and method of planting, and its general care in the orchard, including pruning, cultivating and cropping, harvesting and spraying for insects and diseases being discussed.

During the above terms, which cover most of the growing season, the students are occupied for two and one-

half hours each afternoon in practical work along the various horticultural lines, in becoming proficient in the different operations, or in studying the development of the crops or the characteristics of the leading varieties.

During the last five terms of the course each student must elect either agriculture or horticulture as one of the studies pursued. In horticulture, the election may be along lines relating to either of the three topics mentioned above, in which case the instruction will extend and elaborate that given in the required course, or floriculture may be studied both in the class room and conservatory.

The department is well equipped giving instruction in all of the lines. The vegetable garden contains all the common and many new sorts, and it is supplied with nearly all kinds of garden implements and apparatus. The orchards and small fruit plantations are also very complete and afford excellent opportunities for illustration and for practical orchard work.

The range of conservatories, propagating and forcing houses are adapted to the growing of all the leading crops of the florist, and are not only themselves good examples of greenhouse architecture, but they supply the means for practical work in floriculture. The grounds also afford opportunity for practical work in landscape gardening, and serve for the illustration of that subject.

Students who take the required work in horticulture and then supplement it by electing along some one line during the remainder of the course, can, by making good use of the opportunities offered, secure such a training that they will be fitted to successfully engage in it as a life calling, always provided they have a taste for the work, and have the business and other qualities without which they could not hope to succeed in any vocation.

Dr. Grange Resigns.

It is with extreme regret that we announce the resignation of Dr. E. A. A. Grange from the Veterinary Department of this College to take charge of the work in veterinary science in the Detroit College of Medicine. Dr. Grange has been a member of our faculty for fourteen years, or since the first introduction of veterinary science into our course, and has been a most efficient lecturer and instructor besides being a very successful practitioner. His departure for other fields of labor is regretted by all who have come in contact with him, either as pupils or associates.

Report of State Veterinarian.

Dr. Grange has recently sent out his sixth biennial report as state veterinarian. The report contains much valuable information concerning tuberculosis, which is perhaps creating more discussion in scientific circles, the public press and amongst laymen in general than any other disease in the list of communicable complaints. He gives a history of the disease in cattle, horses, sheep, hogs and birds, also the treatment of the scourge, and last but not least, the prevention.

The smallest as well as the largest university in the world is in Africa. The smallest has five students and fifteen instructors; the largest, situated at Cairo, has ten thousand students.—*Oberlin Review.*

How daintily across the street,
A woman trips with grace complete,
While men, inferior in all,
Can never trip without a fall.

—E.C.

News from Graduates.

R. B. McPherson, '90, is enjoying a tour through Europe.

Geo. White, with '94m, is on his way to the Alaska gold fields.

C. K. Chapin, with '97m, is spending the summer at Pentwater beach.

Miss Bertha Wellman, '96, will teach in the Holland high school next year.

C. E. St. John, '87, has been elected professor of physics in Oberlin College.

W. E. Davis, '89, has been elected to a principalship in the Chicago schools.

S. H. Fulton, '97, has a position with Smith & Son at Highland Farm,

D. Sanderson, '97, has gone to Cornell to take special work in entomology.

George A. Hawley, '92m, is father of two bright young boys—prospective M. A. C. students.

Mrs. Jessie Foster Sweeney, '91, is visiting at the home of her parents near the College.

John W. Rittinger, '94, has been elected principal of the Walkerton, Ind., high school.

Robert L. Reynolds, '95m, has secured a position with a Lynn, Mass., electrical company.

J. E. Stoffer, who took post graduate work here last year, will return this fall to complete the course.

E. A. Robinson, '97, and R. H. Stocoum, '98, are at Bay View taking flash-light photographs of interiors.

C. B. Collingwood, '85, has been appointed chairman of the republican county committee of Ingham county.

H. E. Van Norman, '97, left July 5 for Terre Haute, Ind., where he becomes manager of the More Park farm.

Frank V. Warren, '98m, is farming at Marlette and incidentally playing base ball with a team of which he is captain.

J. H. Brown, with '87, Climax, has been appointed member of the state live stock sanitary commission for six years.

W. R. Vanderhoef, with '97m, is at work for Porter & Porter, the large fruit and commission house of Minneapolis.

John W. Rigterink, '97, is selling insurance and studying. He will enter the medical department at the U. of M. this fall.

Dr. Joseph Foster, '90, eye, ear and throat specialist, has opened an office in the City National bank building, Lansing.

Prof. E. Carl Bank, '84, and family have returned from Ione, California, and are residing on the A. D. Bank farm, west of Lansing.

Charles V. Fisher, '00, will not be in College next year. He has engaged to teach the Cedar school in Elbridge for a year at \$38 per month.

George W. Rose, with '95m, is official assayer with the Salt Lake Mining & Improvement Co. in Northwestern Utah. His address is Almo, Idaho.

Geraldine Elizabeth Bulson will be four weeks old Thursday. She is the daughter of Dr. and Mrs. Albert E. Bulson, Jr., '88, of Fort Wayne, Ind.

John F. Nellist, with '96m, is employed as draughtsman in the city engineer's office in Grand Rapids. He is also working on a new road map of Michigan for the L. A. W.

Howard Evarts Weed, '89, has resigned his position as the entomologist of the Mississippi experiment station and is now in business for himself at New Orleans, La. Mr. Weed will continue the line of work in which he has

formerly been engaged as well as being a dealer in insecticides and spray pumps. He will also publish a paper devoted to the horticultural interests of the south. His house address at present is No. 1809 Marengo street.

Frank V. Young, with '99m, is associated with D. F. Smith in Grand Rapids in electrical work and model making. He will take electrical engineering at the U. of M. next year.

W. H. Smith, '75, who has been for several years superintendent of the Cheyenne River Agency Indian school, has been transferred to a similar position at Hammon, Custer Co., Oklahoma.

H. R. Allen, '95, is the cashier and bookkeeper of the Merrian Park branch of the Pioneer Fuel Co. in Minneapolis and St. Paul. He reports himself as enjoying the somewhat rapid life of the twin cities.

Lew W. Spaulding, '90m, who, in company with F. E. Seman, with '89, put in and is now operating an electric plant at Demopolis, Ala., writes as follows: Everything goes off very nicely down here and we are putting in more lights right along. Have over 400 in now and prospects good for 600 or 700 before winter. There is a good opportunity here for a man who has money to erect a 10-ton ice plant. The 5-ton plant here now is badly managed and is in a bad state of repair, hence the service is irregular. Ice sells for 50c per 100 lbs.

A. H. Voight, '81, furniture dealer, Los Angeles, Cal., writes: "We have quite a number of college people here now. Henry G. Reynolds, '70, ex-secretary of the state board, lives at Pasadena; Mrs. T. C. Abbot, Mrs. Moore, (nee Abbot) and Rodney Abbot, '84, live at San Gabriel; Wm. S. Baird, '85, city; G. C. Davis, '89, city; Dr. F. M. Seibert, '89, lives at Chino (the great beet sugar center); Robt. L. Reynolds, '95, at Pasadena. There are others in this section of the state but those mentioned are quite close to this city. I came here in '81, a few months after graduating, to grow up with the country, and I have seen a change from 12,000 to 100,000 people in this city. I would not live anywhere else than in this sun-land."

Vacation Days.

PAUL THAYER, UNION LITERARY SOCIETY.

"Now vacation comes in dog-days,
And the 'hort' much labor lacks,
By the boys who break their shovels
Or for eight cents break their backs."

So sang the alumni poet but although the change in the school year may deprive the "hort" of some student labor, yet it must not be supposed that under the new plan the students are spending the summer in idleness. Of the M. A. C. boys in Berrien county, C. H. Hilton, '00, is applying his lessons on farming to practical agriculture; W. R. Goodwin, '97m, and W. T. Parks, '00m, are each taking a summer course in agriculture, the former on his father's farm at Union Pier, and the latter on his father's farm in Pipestone, where he has assisted in harvesting 50 acres of wheat and 50 acres of hay. D. J. Hale, '98, is in the employ of the Vandalia railroad at St. Joseph, at which place his brother is station agent. My own vacation is being spent at home on a fruit farm two miles out of Benton Harbor.

Benton Harbor is in the northern part of Berrien county. It is 62 miles from Chicago and about 90 miles from Milwaukee. Although it is not on the lake it is connected with it by a ship

canal, and from its location is one of the most important points on the lake for the shipment of fruit. For two or three hours every evening the streets of the city are filled with teams loaded with fruit.

At present the bulk of the shipments consists of raspberries and early blackberries. One or two shipments of peaches have been made. The season is fully two weeks late this year. The weather has been very dry and we have had a week or so of exceedingly hot weather, although at present it is very comfortable. Strawberries and raspberries were in the greatest abundance and unusually cheap this year. Peaches will be scarce and it is hoped will bring a better price.

Benton Harbor, July 22, 1897.

Weddings.

Prof. Albert J. Cook, '62, was married to Mrs. Sarah J. Eldridge Saturday, July 3, 1897, at the residence of the bride, Pasadena, Cal., the Rev. H. T. Staats officiating. Prof. and Mrs. Cook will be at home in Claremont, Cal., after September 15.

The marriage of Obadiah C. Wheeler, '87, and Miss Lulu Conn, both of Lansing, was solemnized June 30 at the home of the bride's father. Mr. and Mrs. Wheeler left the following day for Belding, Mich., where they will make their future home.

Royal C. Fisher, '95, and Miss Etta Carr were married June 30, 1897, at the farm home of the latter's parents, Mr. and Mrs. A. L. Carr, in Weare, the Rev. J. T. Kerr officiating. Mr. and Mrs. Fisher will reside in Elbridge, where Roy has engaged to teach during the coming school year.

Thorn Smith, '95, and Mertie B. Underwood, with '00, were married Wednesday evening, July 21, at Portland. They will reside at 283 Woodland avenue, Cleveland, Ohio. Mr. Smith recently resigned his position here to accept a position with the Grasselli Chemical Co. of Cleveland.

A Valuable Endorsement.

We have reason to prize unsolicited praise for good service very highly. The following unexpected letter to D. D. McArthur, '94, superintendent of the Omaha agency Indian school, from Capt. William N. Beck, U. S. A., agent for the Omaha and Winnebago agency, will be as gratifying to the many friends of Mr. McArthur as it was to the recipient of the favor:

"My dear Mr. McArthur: I desire to express to you, before leaving, my appreciation of your industry and ability in the management of your school.

"It gives me great pleasure to say that on the recent transfer of property to Lieut. Mercer that he joined me in expressing satisfaction at the evident labor bestowed upon the institution.

"If at any time you may desire an endorsement from me, which might possibly be of some use to you, I will be very glad to say that in my estimation you are one of the most capable superintendents of schools that I have met."

Death of Mrs. G. C. Davis.

The many friends of Mrs. G. C. Davis will be sorry to hear of her untimely death, which occurred at Pasadena, Cal., July 16. The news came as a great shock to us at the College, for we had supposed her health to be improving. While studying elocution in New York with Miss Ida Benfey previous to

her marriage to Mr. Davis in 1894, Mrs. Davis suffered two severe attacks of grip, from which she never fully recovered. After their marriage Mr. and Mrs. Davis spent two winters in California; and last fall, owing to her continued poor health, Mr. Davis resigned his position here and removed to Pasadena. During the winter she again suffered from grip, and four weeks ago her parents were called to her bedside. Mrs. Davis is survived by her husband, a daughter one year old, a sister and brother, Mrs. W. S. Esselstyn and Prof. Carl Bank, and her parents, Mr. and Mrs. A. D. Bank of Lansing.

The sympathy of the whole College goes out to Mr. Davis in his great bereavement.

Louis Agassiz.

By request I recently stated in the RECORD the way we teach botany at M. A. C. For some time I was a student of Agassiz and of him I acquired the German method. Here are a few sentences with reference to Agassiz from William James in *The Harvard Graduates' Magazine*: "He made an impression that was unrivaled. Nowhere had a single person ever given so decisive an impulse to natural history. And Agassiz came before one with such enthusiasm glowing in his countenance, such a persuasion radiating from his person that his projects were the sole things really fit to interest man as man—that he was absolutely irresistible. He said to every one that a year or two of natural history, studied as he understood it, would give the best training for any kind of mental work.

"Agassiz's influence on methods of teaching in our community was prompt and decisive, all the more so that it struck people's imagination by its very excess. The good old way of committing printed abstractions to memory seems never to have received such a shock as it encountered at his hands. Go to Nature; take the parts into your own hands; look, and see for yourself!—these were the maxims which Agassiz preached wherever he went, and their effect on pedagogy was electric."

He gave his students specimens to study in abundance, but forbade them to make any use of books till after some months of close work.

W. J. B.

Sad News.

We are informed that F. H. Hall, '88, who was for a time instructor in mathematics here, afterward holding several responsible positions in Washington, D. C., and last spring appointed to the position of editor of bulletins at the Geneva station, N. Y., has become hopelessly insane. Our informant could give no reason for the dire calamity which has befallen our bright, industrious young friend, of whom so much was expected.

A Culinary Device.

Young Husband—Dear, what was that white powder you dropped into the fire?

Young Wife (cooking)—That was baking powder, stupid! I'm ready to put the cake into the oven.—N. Y. World.

In an examination paper an agricultural student once made this remarkable statement: Plant onions in rows two feet apart and have them eleven inches apart in the rows. Of course they were to be planted on rich ground and would need a good deal of space in which to spread themselves.