

The M. A. C. RECORD.

MICHIGAN STATE AGRICULTURAL COLLEGE.

VOL. 14.

LANSING, MICHIGAN, TUESDAY, JUNE 22, 1909.

No. 37.

NINETY-EIGHT RECEIVE BACHELOR DEGREES

ANNUAL COLLEGE EXCURSIONS.

LARGEST GRADUATING CLASS IN HISTORY OF COLLEGE

SEVEN ADVANCED DEGREES CONFERRED

The year 1908-09 not only witnessed the largest attendance in the history of the college, but the largest graduating class as well. Ninety-eight received their diplomas this week, that being one more than the jubilee class of 1907. Besides these, seven advanced degrees were conferred.

The festivities began on Thursday evening with the annual parade and cap burning, and be it known

the faculty. Dean and Mrs. Bissell and Prof. and Mrs. Eustace were the chaperones.

BACCALAUREATE.

The baccalaureate services were held in the armory Sunday at 3:00 o'clock according to the following program. The address by Pres. Ketler may be found in full in another column.

Doxology—Congregation.

morning at 10:30. The faculty occupied the platform and the seniors reserved seats directly in front, to which they were conducted during the processional march by the Misses Blair and Taft.

The invocation was pronounced by Rev. O. J. Price, and after an appreciated clarinet solo Pres. Chas. Sumner Howe, delivered the address, the subject of which was Industrial Education. It will be

Plans are now well under way for the annual college excursions, which will be held this year during the week beginning August 23rd. These excursions will be run over five different lines.

On Monday, the 23d, the excursions will be over the Grand Trunk from the following points, including intermediate stations: Port Huron, Imlay City, Flint, Durand to College; Detroit, Pontiac, Fenton, to College; Owosso, Corunna, to College; Edwardsburg, Schoolcraft, Battle Creek, Olivet, Charlotte, to College; Bay City, Saginaw, Montrose, Flushing to College.

On Tuesday, the 24th, the P. M. will run excursions from Grand Blanc, Clyde, Northville, Plymouth, to the college; Plymouth, Howell, Williamston, to college; Big Rapids, Edmore, Stanton, Ionia, Portland, to college, including intermediate points.

Wednesday, the 25th, will be given up to the Lake Shore Ry., which will run excursions from Blissfield, Adrian, Hillsdale, Albion, to college. Also from White Pigeon, Jonesville, to college, including intermediate points.

Thursday, the 26th, the Michigan Central and Ann Arbor lines will combine. The M. C. will cover the following and intermediate points: Ypsilanti, Ann Arbor, Jackson, to college; Three Rivers, Burlington, Jackson, to college; West Branch, Pinconning, Bay City, to college; Bay City, Saginaw, St. Charles, Chesaning, Owosso, to college. The Ann Arbor will run a train from Cadillac to Owosso, connecting these with the M. C.

Friday, the 27th, the remaining line of the Pere Marquette will be covered, taking in the following and intermediate points: Fremont, White Cloud, Newaygo, Sparta, Grand Rapids, to College; Grand Rapids, Alto, Lake Odessa, Grand Ledge, to College. A train will also be run from Freeport to Elmdale. St. Joseph, Hartford, Bangor, Fennville, to College; Allegan, Hamilton, to Holland, to College; Holland, Vriesland, Grandville, to College.

Students, alumni and other friends of the college are asked to keep these dates in mind and to interest those who should come and see what the college is and what it is doing.

The *World's Work* says there is a county in the state of Mississippi, the only county in the nation in fact, "where practically every white boy of school age is working a piece of ground with his own hands as a part of his education—working it too, under proper direction so that what he does has a definite educational value; working it, too, so as to produce a better yield, at a lower cost than the land ever before knew."



GRADUATING CLASS, 1909.

that the class 1910 deviated somewhat from the set plan of former years and let the faculty rest in peace.

Headed by the band, the students marched by classes, bearing colored lights and fireworks, to the Women's Building, and from there to the parade ground in front of the President's residence, where a platform had been erected and electric lights arranged in numerals representing the different classes. The senior banner, presented by the class of '08, was formally transferred by Gerald Allen, president of the senior class, to T. A. Jordon, president of the junior class, with the compliments of the class. Following this, talks were given by H. L. Kempster, "Advice to Freshmen;" Bert Shedd, "Advice to Preps;" and by L. G. Kurtz, president of the sophomore class, C. M. Jewell, president of the freshman class, and by W. C. Chapman. After each speech a balloon was sent up, upon which was painted the class numerals. Following the program the freshmen and preps. performed a snake dance around a huge bonfire, and celebrated their promotion by burning their official caps.

SENIOR DAY.

Saturday was senior day, which was celebrated by the class with a picnic at Pine lake. A picnic dinner and supper was served at the lake, the class returning at 7:30 to enjoy a dancing party in the armory, which had been tastily decorated by

Invocation—Rev. F. W. Corbett. Anthem, "The Lord is Great," Mendelssohn-Loehr—College Choir.

Scripture lesson—Ex. 3, 1:10—Rev. J. T. La Gear.

Solo, "He was Despised," from the "Messiah," Haendel—Miss Louise Stretch.

Prayer—Rev. David Howell.

Hymn, "Mendon."

Trio, "Lift Thine Eyes," from the "Elijah," Mendelssohn—Misses Mae Herbert, Mary Allen and Louise Stretch.

Sermon by the Rev. Isaac C. Ketler, D. D. Theme, "A Fine Soul."

Solo, "O Rest in the Lord," from the "Elijah," Mendelssohn—Miss Louise Stretch.

Benediction—Rev. F. G. Ward.

CLASS DAY.

Class Day exercises were held in the armory Monday afternoon at 2:30 o'clock. This is one of the new features of commencement week, and proved to be a pleasant innovation. The program follows:

President's Address—G. H. Allen.

Class History—F. E. Wood.

Music—quartet—Messrs. Garcinara, G. H. Stephens, R. A. Turner, and Prof. Patton.

Class Prophecy—Miss Edith Hudson and Mr. H. L. Kempster.

Class Will—M. B. Ashley.

The entire program, with the exception of the music, will be found on another page of this issue.

COMMENCEMENT.

The commencement exercises were held in the armory Tuesday

found in full in another column. After another selection by the orchestra, President Snyder conferred the advanced degrees, and then, as each senior filed past, called each by name and presented the diplomas. The following received degrees:

BACHELORS OF SCIENCE.

Agricultural graduates are designated by *a*, Engineering by *e*, Home Economics by *h*, and Forestry by *f*.

Allen, Mary Geraldine, *h*
Allen, Gerald Henry, *e*
Anibal, Ben Henry, *e*
Ashley, Myron Billings, *a*
Baumgras, William Jacob, *e*
Belknap, Leon Van Rensselaer, *e*
Belknap, Leslie Howard, *e*
Bignell, George Andrew, *f*
Bowerman, Myron Ralph, *e*
Boyd, David Leonidas, *e*
Brodie, Robert Chester, *a*
Burroughs, Fay Farnham, *e*
Cameron, Bertha Clifford, *h*
Cavanaugh, Joseph A., *a*
Clark, Briggs Lyman, *e*
Cobb, Charles Cary, *e*
Colby, Zenas Eugene, *e*
Crosby, Amos Hale, *a*
Dains, Frank H., *e*
Dickson, Robert Emmett, *f*
Dunlap, Charles, *e*
Edwards, Charles William, *a*
Edwards, Charles Herbert, *f*
Emery, Clyde Lamont, *e*
Esselstyn, Helen Martha, *h*
Fairbanks, Oscar William, *e*
Fisher, Stacey Stephen, *e*
Frazer, William David, *e*
Garcinara, Alfonso, *a*
Gardner, Shirley May, *h*
Gilbert, Arthur Glenn, *a*

(Continued on page 2.)

The M. A. C. RECORD

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TUESDAY, JUNE 22, 1909

NINETY-EIGHT RECEIVE BACHELOR DEGREES.

(Continued from page 1.)

Gorton, Clyde, e
Graham, Olive Estelle, h
Graybill, Jacob Light, a
Grenhoe, Claude, e
Hall, Florence Louise, h
Harrison, Howard Hestand, e
Hartman, William Henry, e
Hoopingarner, Roy Gabriel, a
Hopphan, Karl Earnest, e
Hubbard, George Freeman, e
Hubbard, Nelson Blood, e
Hudson, Edith Fannie, h
Hudson, Mary Ethlyn, h
Hulett, Edwin B., a
Hutchins, Alem J., a
Hyde, Leta Hannah, h
Ingall, Harlow Dewey, a
Jerome, Ben, e
Kamps, George Bernard, e
Kempster, Harry Laverne, a
Kierstead, Friend Hans, e
Kline, Justin Harold, e
Knight, Seth Fred, e
Koch, Catherine Elizabeth, h
Kurtz, Raymond Lapp, e
Lapworth, Charles William, e
Latson, Alice Leoni, h
Lindsley, George W., a
Lyon, Roy Robert, e
Martin, Grace Irene, h
Mason, Charles Wilkin, a
McCadie, James Henry, e
McCullough, Nelson, e
McDevitt, Justin John, e
Mitchell, John Alfred, f
Moss, Walter Neil, e
Murdock, Russell Alger
Nash, Lawrence Claude, a
Oviatt, Charles Jay, a
Parker, Frank, e
Perkins, Laverne Lewis, e
Pokorny, Otto Arthur, e
Postiff, Walter, a
Pratt, Burr Bartram, a
Pratt, Hubert Cushman, e
Pratt, Judson Edward, a
Raynor, Alleen Camille, h
Reynolds, Robert Morley, a
Roberts, Benjamin Hulbert, a
Robertson, James Earl, e
Severance, Myrta Henrietta h
Smith, Leroy Clarke, e
Sobey, Albert, e
Sprague, Milton W., a
Spurway, Charles Henry, a
Stafford, William Rogers, e
Stephen, Glenn Hough, e
Tanner, Russell Vaughn, f
Taylor, Charles Chandler, a
Taylor, Floyd Clyde, e
Taylor, Reese, Warner, f
Towar, Max Leonard, a
Trout, Winford Carlisle, a
Valentine, Floyd Herbert, e
Webb, Frank Kline, e
Welles, Jacob Sloat, a
Wood, Frank Esler, e

ADVANCED DEGREES.

Bennett Edmund Roswell, M. Hort.
Brown, William Rutherford, C. E.
Craig, Albert George, M. Hort.
Howe, Frank William, M. S.
Moore, James Garfield, M. Hort.
Richmond, Ernest Alfred, M. E.
Williams, George Whitney, M. E.

SOCIETY REUNIONS.

According to the program for commencement week, two nights, Friday and Tuesday, were reserved for the society re-unions. An unusual number of alumni were present.

The Union Literary Society gave a reception in their rooms, which was followed by a banquet in Wells Hall. After the banquet a special car was taken to Pine Lake, where the dancing occurred.

The Columbians gave their reception in the parlors of the Women's Building Tuesday night, followed by a banquet in the dining room. The dancing was held in the large rooms on the second floor of the engineering building, which were specially decorated for the occasion.

The Hesperians held their party in the armory Tuesday, and introduced a rather novel feature by having the banquet served in Wells Hall at 10 o'clock. No toasts were given, the party returning directly to the armory again for dancing. A part of the commencement decorations were utilized.

The Olympics held their party Tuesday night in their rooms in Williams Hall and the Columbian rooms adjoining, both of which were prettily decorated for the occasion. The banquet was served in Club A. Boos' orchestra, of Jackson, furnished the music.

The Eclectic Society gave their party in their building in Oakwood Tuesday night. The reception and banquet filled the time until midnight, which was followed by dancing until 5 a. m. A large number of out-of-town guests were present.

The Aurorcan reunion was held in Lansing, Friday night. The banquet was served in the dining room of the Hotel Wentworth, which was followed by a program of toasts. The dancing was held in the K. P. hall.

The Feronian party was held Friday evening in the Armory. The music was furnished by Finzel's orchestra, of Detroit. Prof. and Mrs. J. F. Baker were patrons.

The Ero Alphan party was held in the Engineering building Friday evening. About fifty couples were present, the patrons being Pres. and Mrs. Snyder and Director and Mrs. Brewer.

PROF. HEDRICK RECEIVES PH. D. DEGREE.

The many friends of Prof. W. O. Hedrick will be pleased to learn that on the 24th he received from the University of Michigan the degree of doctor of philosophy.

Prof. Hedrick, in 1903, was granted a one-half year's absence, which he spent in study at the university, and has since spent several summers at the University of Chicago. The subject of his thesis was, "The History of Railroad Taxation in Michigan."

Prof. Hedrick has justly earned the reputation of being one of the hardest working men on the M. A. C. faculty. His achievement is a matter for congratulation.

Eighteen young people took the examinations for the four year courses Tuesday and Wednesday.

FORESTER'S ACCEPT AP- POINTMENTS.

Messrs. G. W. Hendry, J. A. Mitchell and R. W. Taylor have received their appointments from the U. S. Forest Service. Mr. Hendry will report in Washington, Mr. Mitchell in San Francisco and Mr. Taylor at Odgen, Utah. These men will receive \$1,000 per year and all expenses from East Lansing. Their work will consist in locating boundaries, mapping, examining and estimating timber and aiding to carry on the regular routine work connected with the national forest.

Foresters in the employ of the U. S. Forest Service have an excellent opportunity to travel extensively and see a great deal of the west. The work for the first year usually takes the man over a great deal of territory; during the summer the work is in the northern part of the U. S., Wyoming and Montana and adjacent territory. During the winter the positions are usually shifted to the south and southwest, extending to southern Texas and southern California.

Forestry graduates have an opportunity to come in touch with western conditions and to take part in the promotion of forestry in the west. There are few college graduates who have such excellent opportunities for training and experience along their lines as these men. They come in touch with every phase of life; they are in mining camps and in lumber woods, irrigated districts and the plains, and are usually called into the head office at Washington at least three months during the year, thus coming in contact with the office and the business side of the work. Even to a man who has not definitely made up his mind to follow forestry as his life work this experience would be invaluable.

The total number of new men taken on by the U. S. forest service through this year's civil service examinations was 53 out of a total of 159 taking the examination.

As indicated by this examination the forestry course at M. A. C. ranks third among the 18 universities and colleges giving definite forestry work.

Each of the two institutions ranking above M. A. C. are universities and each have a total enrollment exceeding this institute by approximately 2,000 students.

INTERESTING EXPERIMENT COMPLETED.

An experiment in the production of baby beef which has been carried on at the college for three years was concluded last week, and the results, which will soon be published, will go a long way toward settling that much mooted question of the relative advantage of pail fed and suckled calves. Each year there were two lots of cows set apart; one lot being allowed to suckle its calves, and the other having their calves weaned as soon as they were born and raised on the pail. Of the first lot, a complete individual record was kept of all the feed that the cows who suckled their calves consumed and also the amount of supplementary food that the calves consumed. In the second lot, the young calves were fed whole milk for the first

ALUMNI

The following alumni were in evidence about the campus during commencement. No doubt there were many others who escaped our attention:

'89.
L. A. Clinton.

'91.
Allen Stone.

'96.
G. W. Williams, J. Tracy.

'01.
M. L. Ireland, C. A. McCue.

'02.
Burt Wermuth, W. J. Gieb, D. S. Bullock, E. A. Richmond, F. G. Carpenter.

'03.
J. G. Moore.

'04.
L. T. Clark.

'05.
Paulina Raven, V. R. Gardner, Bernice (Jackson) Gardner.

'06.
Frank Liverance, Harriet Angell, Ray Potts, A. V. Robson.

'07.
Phillip Goldsmith, Gordon Dudley, Helen Ashley, E. J. Krause, Neil Perry, C. P. McNaughton.

'08.
C. E. Merwin, Bess Covell, S. W. Horton, Jas. Dice, Floyd Borden, Neina Andrews, N. J. Hill, Amy Hurlbert, Lora Hyde, Grace Owen, W. M. Rider, Walter Small, Mary (Pratt) Potts, J. W. Wilbur.

'09.
C. F. Austin.

six weeks and were then fed on skimmed milk until they were seven or eight months old. They were also given grain and hay, a careful record being kept of all food consumed. The cows of the second lot were milked and individual records kept of the amount of milk and butter fat produced and also the amount of feed consumed. The calves of both lots were fed very liberally with the idea of marketing them at eighteen months of age, as "baby beef" in the finished condition. Last week the experiment ended with their shipment to the Charles Kline Packing Company, of Buffalo, where they were slaughtered. The fourteen young cattle in the lot weighed before the slaughter 14,620 pounds or over 1,000 pounds to the animal. When dressed the lot weighed 8,507 pounds. The hides weighed 965 pounds and the tallow \$77. Prof. H. W. Norton had charge of the experiments and saw the animals dressed in Buffalo. The results show that calves raised on skimmed milk are as good when mature as those suckled by the cows. The first year it cost two cents more a pound to produce a finished animal that had been suckled than it did to produce a like animal when fed on skimmed milk. Besides this a profit of \$27 was realized from the damms of the pail-fed calves as against no profit from the damms of the suckled calves.

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ABOUT THE CAMPUS

Miss Caroline Holt will attend the summer session of the Teachers' College in New York, taking a course in art and design.

Prof. French gave the baccalaureate address at North Adams Sunday evening and the commencement address at Wyandotte, Wednesday evening.

Miss Ethel Sheets, formerly department stenographer at the college, was married Thursday, June 17, to Mr. Frederick L. Waite. They will reside at 434 Pine St., South, Lansing.

Mr. C. H. Harper has accepted a lucrative position at the Chestnut Hill Academy in Phila. as teacher of drawing and mathematics. Everyone regrets Mr. Harper's going, as he was a very popular and exceedingly successful teacher.

G. S. Bullock, '02, who since graduation has been in Chili, S. A., has presented to the museum a rare collection of birds and mammals. The collection of birds consists of some 130 specimens representing over 50 species which are new to the museum.

The vacancies in the instructing staff of the drawing department have been filled by the appointment of Mr. C. C. Cobb, who graduates this year in mechanical engineering, and Mr. Paul N. Ford, a graduate of Cornell college, Iowa, with the degree of C. E., a man of considerable practical experience and who comes to us highly recommended.

Instructor Leffler sailed Saturday for Europe, where he will spend the summer vacation.

Prof. V. T. Wilson goes to Urbana, Ill., shortly after the close of college to arrange for a new edition of "Notes on Practical Mechanical Drawing."

In a recent relay race on college field G. H. Allen ran the quarter in 51 seconds flat. This is the best time ever made on college field, though it can stand only as an unofficial record.

Plans are under way to secure for next year a lecture course of exceptional merit. It will be in charge of a committee of the liberal arts union. It is proposed to bring several well known lecturers to the college, as well as musical talent. The program will be arranged and the tickets on sale at the opening of the school year.

Mr. R. S. Wheeler and Mr. I. G. Gilson, juniors in the forestry course, have accepted positions as rangers in the Kootenai national forest, with headquarters at Libby, Montana. This work is taken up to secure knowledge of conditions in the national forests and to secure practical work along forestry lines. They will receive \$75.00 per month and expenses while in the field. Their work will be examining and mapping timber. Each will work with an experienced ranger, under the supervision of the supervisor. They will return in time to take up college work in the fall.

LOST.—On Friday evening, June 18, at the armory, a silk striped Roman shawl, blue and white. Finder please leave at Woman's building.

Colorado has by law forbidden secret societies, fraternities, and all similar organizations in the elementary and high schools of the state.

There is some talk next year of uniting the inter-scholastic meet, the May festival, and the exhibition of public school drawings, and making a gala time, perhaps adding a dance or students' play.

The silver mounted carving knife donated by the class of 1911 at the occasion of the first annual hallowe'en barbecue, which was organized by that class, is now in the library and will be handed down from class to class.

If the one consideration, to know nothing about the conditions, is as essential in college government as it is to be an ideal jurymen, then the advice appearing in a recent editorial in a Lansing paper should be carefully heeded by the college authorities.

Several of the junior foresters have already accepted positions in lumber camps in northern Wisconsin, this work to be taken up at the close of the summer term, July 28. There are still several positions open for summer work in mills and lumber camps for students who desire them. Such positions offer excellent opportunity for practical experience.

JUNE WEDDINGS.

Frank E. Liverance, '07, and Miss Iris Ennis were married on Wednesday, June 16, at Laurel, Md.

A. N. Robson, '07, and Miss Grace Maude Kittans were married on Wednesday, June 16. At home to their friends after July 15 at Lake George, N. Y.

O. H. Skinner, '02, and Miss Norma Augusta Searing were married Wednesday, June 16, at Lyons, Mich. At home at 52 E. 18th St. Indianapolis, Ind.

Burt Wermuth, '02, and Miss Katherine Ann Stevenson were married on Wednesday, June 23d.

PLAN WAR AGAINST MOSQUITOES.

The hordes of mosquitoes which infest the campus every spring may be no more, if the plans of Prof. Pettit and his assistants can be brought to a successful completion. The reason for the great number of pests is said to be the number of stagnant ponds in the vicinity in which they breed. The plans are to locate all such ponds near the college and either drain them or else treat them with fuel oil. Fish which have an appetite for the young mosquitoes will also be introduced into the breeding places. If funds can be had the annoyance may be abated.

CLASS WILL.

BY M. B. ASHLEY.

I hardly suppose that the enthusiastic band of preps, which so vigorously raided the sanctum sanctorum of our President in the fall of 1904 realized that their life as a class was limited to a short five years. I am sure that even after a number of terms' acquaintance with a slide rule or Atwaters dietaries that they fail to realize the full significance of the fact even yet. Yet it is a sad reality. Tomorrow at eleven-thirty the class of 1909, as a unit in the college community, will have passed into the great beyond. Individually, though, some of us may even yet receive a life preserver in the form of a "con" in French or a flunk in "Bedology."

Experience has taught us that the most effective method of finding out whether we are eligible to receive degrees tomorrow or not is to go down to the book store, and if you are allowed to buy an alumni pin, you may graduate, and if you can't, you won't.

About the time of the agitation concerning our bedecking ourselves in caps and gowns for these impressive ceremonies, some fertile trained senior generated the idea that instead of slipping out of this community with nothing left behind us but a scorched place in the atmosphere, that through the medium of a class will we leave several mementos of our existence here to our successors.

In a moment of indiscretion, the very worst they ever had, I was elected probate judge, and instructed to make an appraisal of all goods and chattels of whatsoever kind and description belonging to said class and to draft an iron clad will which even Mr. Baker in foundry could not break, for the disposition of said goods and chattels in accordance with their desires and wishes.

So far the judge has found the appraisal of the class property to be the more difficult. For instance, I found a large amount of senior dignity on the front row in the Bijou, and a senior derby floating down the Red Cedar, an excellent target for Wells Hall sharpshooters. A senior table in club G. was found full of young ladies, and an engineers thesis was used by his Ag. roommate for shaving paper. Such were the trials and tribulations of your humble judge, and he is exceedingly thankful that his term expires tomorrow.

THE WILL.

The supreme powers now governing us, having decided that five years from the birth of a new class into our midst, that they should sing their swan song, and inasmuch as five years—years marked by mile stones of accomplishments and paved with the love of friends—have passed into the dim, dark distance since the class of 1909 first gazed with wondering eyes into the broad sun of knowledge which light our college world, it becomes a pleasure as well as a sorrow to read to assembled friends and relatives of this class its last will and testament.

The class prays that the recipients of its humble legacies may accept them in the spirit of brotherly love in which they are given, and that they may be cherished, not for their intrinsic value, but for the use which may be made of them.

We, the class of 1909, having reached the full age of college existence, and acquired a freedom of action bounded only by the limits of the campus, about to take our departure forever from this sphere of college life, having been examined by the powers that were, are, and forever shall be, and declared to be

sound in mind, though slightly weakened in body, with an unfaltering memory for the joys and sorrows of our varied existence among you, and only a hazy understanding of how we come to be here today; we do hereby make and publish this, our last will and testament, revoking and making void all other wills heretofore or at any time made by us; the mandates of the Dean and Prexy notwithstanding.

We have several requests which we hope will be carried out.

First. We ask that our funeral services be conducted with all the pomp and dignity which our station as seniors would warrant.

Second. We ask that the mayor of East Lansing and the rest of the Hort. department see that our grave is kept decorated suitably with a Scotch thistle and a tomato can.

Third. We desire that Prexy fire the first handful of mud into our grave.

Fourth. We ask that the faculty be comfortably seated on chemistry stools during our funeral services.

Fifth. We would suggest that the three cents we have so generously contributed each term to the English department be used to purchase a new hat for Mr. Mann.

As to real estate and personal property, we make the following dispositions, viz.:

Item: To all, whosoever they are or wherever they may be with whom we have come in contact in class room, or athletic field, at the study table or on the campus, we bequeath to such persons the fullest measure of good will and kind feeling and the most earnest wishes for future successes.

Item: To the outer world which we are about to face is freely given our entire fund of cheerfulness and knowledge that we may make each community we enter brighter and better because of our having lived in it.

Item: The characteristic senior dignity, whether worn in green shoes or under a peach basket hat, is freely willed to the juniors, who from present appearances seem to be capable of wearing it most becomingly.

Item: To any one who can use it to advantage and do credit to Father Lung, Mason's worthy example, we bequeath an unlimited right to draw on any visible supply of senior bluff.

To the juniors the following items are freely willed, trusting in the hope that they may acquit themselves with all due respect for their new property.

Item: We first of all bequeath to them a new social committee to be composed of Professors Shaw and Kedzie and Dean Bissell. They may do as they think best with the old one, though we would advise suspension for creating too much disturbance.

Item: The power of swaying by your dignified examples at the senior tables in the clubs, the politeness and good manners of under classmen, is now yours.

Item: To certain more or less fortunate of your number we bequeath the arduous and dangerous tasks that accompany the position of dormitory inspectors. May you settle all fines imposed upon you with promptness, and do please prevent the boys from shouting from the dormitory windows.

Item: To those of you who need the five credits and take an interest in the work, we are proud to leave for you further efforts toward protection, a well drilled regiment, upon whom we feel sure your energy will not be all wasted. With this bequest goes the right to slave till midnight preparing for military hops.

Item: To a faithful few of your number we leave the privilege of occupying

the front seats in chapel. May your new fall suits gather even more dust therefrom than did ours.

Item: We take pleasure in giving to the junior co-eds the much respected and popular privilege of going without permission to the library evenings, that they may gain much valuable information and knowledge of human nature.

Item: To you of the male sex of said class is willed the most distinctive and dignified custom of wearing stiff hats about the campus; in winter a most excellent mark for snowballs, and in summer the danger of being mistaken for a member of the sub-faculty.

Item: Last Thursday evening we handed down to you with all due ceremonies, the student banner which, we trust, will be zealously guarded, so that in future years the custom may be kept alive, and the memory of each class which places its numerals thereon, may have a warm place in the hearts of succeeding classes.

Item: To the Demosthenes of your number we yield the honor of representing the college in the State Oratorical league the coming year. May the honors he will win be those most worthy of conscientious effort and unflattering college spirit which will be a source of inspiration to him in his labors.

Item: It is with deep sympathy that we are forced to leave with you, the engineers of 1910, the difficult task of putting in a hundred hours of thesis work. We can only hope that you carry a little more inaccurate instrument for measuring time than did some of us.

Item: To the literary stars of 1910 we proudly hand down to you the positions on the *Holcad* staff, feeling sure that you will appreciate the vast influence which our periodical can be made in forming and cherishing college spirit.

Also to the fatherly individuals of your class, whom you have honored with positions on the student council, we leave to you a noble work, well begun, yet still requiring that intense interest, self sacrifice, and loyalty which typify the best college man.

Item: We also leave to those of you, whose wisdom has reached the far seeing eyes of the faculty, certain most remunerative positions on the teaching force now held by us.

Mr. Sobey earnestly desires that the class of Preps., to whom he has been showing the intricacies of quadratic equations, be not too rudely awakened from the spell under which his bright eyes and sunny hair have cast them.

Our eminent zoologist, Mr. Gilbert, prays with downcast eyes and penitent heart that his successor will not disillusionize his freshmen girls by telling them that their hearts are no different than those of any other class of vertebrata he ever taught.

For his chicken's sake, Mr. Kempster hopes that his successor will be another white man.

In front of Prexy's residence we will plant a catalpa to be watered by the faculty and kept alive by the enthusiasm with which they fire the students.

To the class of 1910, we wish them only the truest success; that which is attained by honest, conscientious toil, in everything they may undertake, whether it be in the school room, or on the athletic field.

To the remainder of the student-body we freely will and bequeath the room occupied by our Fussers, in those secluded spots so few of us know, between the White Elephant and the old log on the North River Bank.

The front row in the Bijou will hereafter be entirely yours to keep and cherish as only you know how.

To the college we feel proud in being able to leave the accomplishments of

several individual athletes whose work needs no praise from me, as well as equally satisfactory results in the other departments of college life.

We also leave a record of having secured four successive class athletic championships, of which we are duly proud.

We do humbly pray that the faculty of this institution will accept our most sincere thanks and gratitude from the members of the class of 1909, for the many sources of inspiration and help you have been to us, in the class room and wherever else we have come in contact.

And from each and everyone of you, from Dr. Beal's white head to the enthusiastic Prof. Baker, we part tomorrow with a deep feeling of reverence and of thankfulness for having been permitted to live for four short years in the atmosphere made sacred because of these, the noblest men we will ever meet.

To the college community, although we leave several boyish pranks, we hope a lasting impression of serious earnestness, tempered with the leavening power of good nature and a thorough appreciation of things worth while will remain behind long after "Charley" Oviatt's silver tongue has been silenced or "Jerry" Allen has come down the last home stretch.

To our fellow students of the past, success and good luck, to our faculty a hearty handshake and a sad farewell; and to our Alma Mater, a place which we have all learned to dearly love, we leave with an undying devotion to the traditions and ideals that have been so indelibly impressed upon us here.

To you, one and all, friends who have assembled here upon this, the last day of our college life, we bid you one and all a sad but sincere farewell.

All the remainder and residue of our property of whatsoever nature kind and quality it may be, and not herein disposed of (after paying our debts and funeral expenses) we leave to purchase a new steed for Dr. Blaisdell.

And we do hereby constitute and appoint President Snyder the sole executor of this, our last will and testament.

In witness whereof, we, the class of nineteen hundred nine, the testators, have to this, our last will, set our hand and seal on this twenty-first day of June, anno domini, one thousand nine hundred and nine.

Codicil.—We, the class of '09, leave to the college a tree, "catalpa spuiore," which will be formally planted in front of Prexy's mansion on the hill, to grow and thrive under the beatific atmosphere. Any under-class men who attempts to emulate George Washington's example will be graduated by request.

'03.

William Morton Barrows, for the past two years instructor in zoology and geology at the New Hampshire State College at Durham, N. H., has been appointed acting assistant professor in the department of zoology and entomology of Ohio State University, Columbus, and will enter on his duties there in September.

'06.

W. Neilson has resigned as instructor of C. E. at the U. of M., and has accepted a position as assistant engineer of the Wayne County Good Roads Commission. His address is 9 Ward Place, Detroit.

Secretary and Mrs. Brown, Mrs. Bissell and her sister attended the graduating exercises at Ann Arbor Thursday. Miss Hearty Brown was one of the graduates.

INDUSTRIAL EDUCATION.

Commencement Address, Michigan State Agricultural College, June 22, 1909. By Charles S. Howe, President Case School of Applied Science.

In the past, education has meant the training of the mind only. Pupils have been taught reading, writing, arithmetic, history, grammar, etc., and it has been considered that these were the only subjects to be taught. In many ways our system of education has not changed very much from generation to generation; it has been thought to be fixed and what was good enough for one generation must be sufficient for another. In too many cases we have made this education a study of the things of the past, forgetting that the child we are training is to be a citizen of the present and not of the past; that he is to live the life of today and that in order to do this with profit to himself and with beneficial results to those about him, he must know the political, the social, and the industrial life of his own time. That the old type of education, which trained the intellectual only, was efficient in the past, no one can deny; that it ought to remain fixed and unchangeable for the future, few would now attempt to prove. Our system of education, while in many respects good, has not kept pace with the scientific progress of the age. Education should mean the training of the child for the work he is to do in life. This means that he is to learn certain things which will be useful to him; it means that he should learn where to find other things that may be necessary for him to know; and it means a development of mind that will enable him to grasp, understand and solve problems which he will come in contact with throughout his entire life.

The education of the past has been the training of the mind, and of nothing else; but more than ninety per cent. of the young people who attend school will later earn their living, not by their brains, but with their hands, and until within a few years we have considered it absolutely unnecessary to give any training to the hands. Even now we do but little, comparatively, in this direction. Some thirty years ago, systems of manual training were introduced into a few of our schools. During the past decade, the number of schools where this work is done has largely increased, until now in nearly every large city more or less manual training is given. Many people have come to believe that it is necessary to train the eye and the hand of the child as well as the mind; that this is a part of true education and that intellectual growth and culture may come through this kind of training as well as through that which has prevailed in the past ages.

I doubt if we have yet reached the point where the full value of this training is understood. We are still learning, and, in the process of learning, we must grope our way and do the best we can, trying to find out the relation of this new education to the other, and its influence, not only upon the child, but upon the nation. Manual training, as already stated, has been introduced into a few schools. Nearly all the larger cities give a little of it in the seventh and eighth grades,

and they give some work, which is called manual training, in all the grades—from the first to the eighth. In many other cities and towns, the manual training work is confined to the high school, where a slight amount of it is given in connection with the other work.

All of this is useful as a part of education; but it has not yet been developed as it will be in the future, neither is its full value thoroughly understood. If manual training work for the boy, or girl, is to reach its full value in the development of the mind and in the increase of knowledge, it must start with the design of something, no matter how simple, and proceed through the several steps until the finished product is reached. Suppose, for instance, that a boy wishes to make a simple table. He first makes a rough sketch of what he has in mind. If possible, this rough sketch should embody something original, something that he, at least, has never seen before. He should then make, with his instruments, a working drawing of the table, in plan and section according to exact dimensions, so that it would be possible for any cabinet maker, or carpenter to construct it. Then the boy should decide upon the kind of wood that is to be used and should make the table itself in all of its parts. Finally, he should finish and polish it. In this process, which is carried out in full in very few places, all of the work, from the original design to the finished product, is done by the student. He has learned how all objects, which are made by man, are brought into being. He sees that, first of all, there must be the imagination, which conceives the object before it has existed in any form, and he learns that he may use his imagination in a profitable way—if it is directed toward some work which can be carried out; but he also learns that this imaginative faculty must be curbed and restrained by processes which come later in the development of any project. In the first flush of his imagination, he makes a rough sketch of something which he wishes to manufacture, but finds that this is not sufficient; for it is necessary to make an exact drawing before anything further can be done. He also learns that this drawing defines the complete object and that it determines whether the thing under consideration can be made. For, if the drawing is accurate and if the object can be placed upon paper in various forms and positions, it can be constructed by the mechanic. In making the drawing, the student learns the elements of projection and of perspective, as well as the processes used by the draftsman. The next step, which he takes up, that is the process of manufacture, requires of him, first of all a decision as to the kind of wood that he will use. The complete course in manual training gives him a knowledge of the different kinds of wood; where they grow; the time of growth and the way in which they should be cut; the method of sawing to bring out certain results; the adaptability of one kind of wood for one purpose, and of another kind for another purpose; and so on, until he is thoroughly informed about this sort of material. He forms the object, and so learns to use tools. He learns that the eye and hand must work together; that he can acquire skill with the latter, but only when it is subordinated to

the former. In finishing and polishing the table, he will be taught, of course, the various methods of treating wood for their preservation and so as to bring out their beauty. The work for girls is similar, but has to do with occupations which belong to women. Multiply the mental and industrial training obtained in carrying out a process like this by a hundred or more, and the benefits loom large in educational results. Many men, who have not received an industrial education, have very little conception of the different processes which must be gone through with before the simplest object which they use, or which other people use, is finished. They are absolutely ignorant that the different processes just mentioned, from the original concept to the final coat of varnish, are performed; and they do not know how much of imagination, and knowledge, and skill are necessary to produce a useful or an artistic object.

The student, who, through a course of manual training, learns these things, has not only received useful knowledge, which will be of benefit to him during his entire life, but he has become impressed with the dignity of labor, with the belief that it is as honorable for a man to work with his hands as to work with his brain; that the man who works with tools has the same thoughts and feelings that he has; that he has the same hopes and fears, and, within certain limits, the same ambition. When manual training work is required in all schools, the great gulf which now exists between the college graduate of wealth and social position and the mechanic, who began to be a wage-earner when he ought to have been in school, will be, in part bridged over, and we shall not hear as much as we do now about the different classes of society and the antagonism that exists between them.

Some of this manual training work should be done in the grammar grades and is done there now, for it is advantageous to have a boy learn to use his hands as early as possible; but in the developed industrial education, of which I am speaking, there will be more than this. In some of our cities, we now have manual training high schools, or technical high schools. In many instances, they are ordinary high schools with some manual training added; in other places, they are totally different. Cleveland, for instance, has a technical high school which is intended to fit boys for manufacturing life. A few years ago, an educational commission, made up of twelve citizens of Cleveland, was appointed by the Board of Education to study the complete system of education in the city. This commission recommended, among other things, that a manual training high school be established. They said, in effect, that there were six high schools in the city giving the ordinary courses which were supposed to be broad enough to prepare a student for his life work, or to fit him for college, but that all the high schools were of one kind and were doing the same grade of work; it seemed desirable that, in a great manufacturing city, there should be one high school which would fit boys for the manufacturing life of the city. By this, it was not meant that trades were to be taught, but that there would be combined with a rational course of

study, a large amount of manual training work. Soon after the report of the commission was made, the Board of Education voted to adopt the plan for such a school and bonds were issued for the erection and equipment of the building. Last fall, the building was ready for use. Mathematics, English and science are taught to all students. The ancient languages, botany, zoology, astronomy, psychology, and a number of other subjects, which are taught in the ordinary high schools, are omitted. One-half of each day is given to recitations and one-half of each day to practical work in laboratories, drawing rooms or shops. A good course in mechanical drawing is given, followed by, or coincident with, courses in joinery, pattern making, forging, foundry work and machine shop practice. During the senior year, a boy may specialize in any one of these subjects, according to the work which he wishes to take up after graduation. The school does not fit for college. It is possible, by making certain selections, to prepare for a technical school; but it is expected that a large majority of the boys will go from the high school to manufacturing positions. There is a separate but similar course for girls. The practical work for them consists of cooking, dressmaking, millinery, household economics, decorative art work, etc.

So far as I know, this kind of a technical high school is unique. It has been recognized for the first time, I believe, that it is not necessary to have all high school courses alike; that the "high school course" is not a sacred patented article that is fixed and immutable, but that it can be changed to suit conditions and necessities. The majority of the committee, which originally laid out the course of study for this school, were manufacturers, and they studied this problem as they would study any problem connected with their business. It is time that the business and professional men of this country gave some thought to educational affairs. We are accustomed to leave these things to the educator—just as we leave legal matters to the lawyers. The educator knows the technique of his profession; he understands the theory of education, how to impart knowledge in a given subject, and its bearing upon other subjects; but, as an educator of many years' experience (for I have held a college chair long enough to be eligible for a "Carnegie retiring allowance"), I wish to say that every intelligent citizen has a right to discuss the things that should be taught, and, moreover, it is his duty to do so. If, in the development of our civilization, it has become necessary for every person to have some understanding of industrial processes and methods, the man to first perceive it should be he who is using industrial processes and methods in his own business, and he should not hesitate to express his opinion and to urge upon educators and upon boards of education, the necessity for adopting these modern ideas into our school system.

Industrial education, in its broadest sense, includes agricultural education. I have spoken at length in regard to manual training and industrial high schools because I am more familiar with them than I am with the development in agricultural training, but I regard the latter

as important as the former. The soil is one of the natural resources of the country. It cannot be destroyed or completely used up as can the forests and the coal, but may become so exhausted as to be nearly useless for agricultural purposes. We are a great manufacturing nation, but we are a still greater agricultural nation, and if we are to furnish food for our population and send our grain and cotton to the nations which need them, we must learn a lesson from the past and take the necessary steps to preserve the fertility of our soil. Under the agricultural methods in use at the present time, some sections of our country produce only a half or third as much as formerly, and other sections are almost worthless. Under a rational and scientific system of agriculture their fertility would have remained unimpaired.

It was formerly thought that anybody could become a farmer. If a boy had not brains enough to be a professional or a business man, it was thought he could go on to a farm where all he had to do was to plant the seed at the proper time and gather his harvest in the course of events. This practice might answer for a number of years on the virgin soil of a river bottom, but most soils will not long retain their fertility if the crops raised upon them are sold to distant markets and the soluble organic and inorganic substances taken from the soil are not replaced. A farmer may learn many things by experience, but, as a rule, he does not understand very much about agricultural chemistry and botany and biology unless they have been taught him in some kind of a school. During the past few decades we have been slowly coming to the conclusion that the farmer must be educated in agriculture if he is to be successful. That this has been the conclusion is evidenced by the fact that during the past twenty years, fifty-five agricultural high schools have been established and sixteen private colleges and schools have begun to give instruction in agriculture. Over a hundred state and county normal schools among which are several in Michigan are doing more or less to train teachers in agriculture, and several hundred public and private schools of various grades give more or less instruction in this important branch. I do not mention the agricultural colleges for they are institutions of higher education and should be classed with other professional schools.

It would be too much of a task to enumerate all that has been done to teach elementary agriculture in this country. I shall therefore mention only a few instances. Alabama was, I believe, the first state to establish an agricultural school in each congressional district. It now has nine such schools. Georgia has eleven congressional district agricultural schools, all of them very fully equipped with buildings and apparatus. Wisconsin was the first state to establish county agricultural high schools, and her example has now been followed by many other states. Michigan organized its first county school of agriculture and domestic economy at Menominee in 1907. California has recently established a polytechnic school where boys and girls are given "a training in the arts and sciences which deal peculiarly with country life—the life of the home, the farm, the orchard, the dairy and the shop." Agriculture, domestic science and mechanics are therefore important parts of the course of study.

The Massachusetts Commission of Industrial Education has included agriculture among the subjects to be taught in the schools which it establishes. At

Northampton a school has been opened by this commission, which will give a four years' course in agriculture, mechanical work and domestic science. The curriculum will include soils, plants, animal husbandry, rural architecture, blacksmithing, carpentry and mechanical drawing for boys; and cooking, laundrying, sewing, floriculture, home management and decoration for girls. In the limited time at my disposal it is impossible to speak of the short courses at the agricultural colleges, of the university extension work in agriculture, and many other methods which are being used to give trade instruction in agriculture to those who intend to become farmers, but who are unable to secure the complete course given in an agricultural college.

This is not merely an educational question, it affects not only the child, but the nation. Industrial education is only a part of vocational training, and this opens up a wide and fertile field of inquiry. Eighty-five per cent. of the children, who enter the schools, never get beyond the grammar grades; about sixty-five per cent. never go beyond the sixth grade; the majority of these go to work picking up whatever they can find to do. Some of them learn a trade, but many of them are unskilled, and remain so throughout their entire lives. If some system of vocational training can be inaugurated, which will make the man who now earns a dollar and one-half a day, worth three dollars a day, it will produce a vast increase in the wealth of the nation. There is not a manufacturer in the land who would not rather have a three-dollar-a-day man than a two-dollar-a-day man. The former will turn out more and better work than the latter and will make less trouble. There is always work for the skilled mechanic, because he is the better producer. The question of training the workers of the future is an economic question, and it must be faced by the manufacturers and business men as such.

But this is not the only question. Our privately endowed institutions of learning, and our state universities, provide thorough courses of study for the boys who come from wealthy or well-to-do families. Through public or private aid these receive an education in the profession which they intend to follow. Their fathers, even though possessed of ample means, do not pay the bills, for nowhere in this country does the student pay to the college more than one-third of what it costs to educate him. He is, therefore, the recipient of the bounty of some one during his educational life. But the poor boy—the boy who must work for his living—whose people are not able to pay even one-third of the expense of educating him, is turned out into the world at an early age uneducated to make his own living, because no one has thought it worth while to train him. I have spoken of the economic value of industrial and vocational training, but I believe in mankind more than I do in economics, and so I say that industrial and vocational training must come for the sake of the boy; that he has a right to demand, and some day will demand in tones which cannot be ignored, that society give him a training which will fit him to do something whereby he can make, not only an honest, but a substantial living. The system of industrial and vocational training, which I believe in, and which I am now advocating, looks forward to such results.

This new education, broadly called industrial, may be divided into two parts: That which is connected with the ordinary school life, which we generally call industrial, and that which

comes later and which should perhaps be designated as vocational. Some of the features of the former I have already touched upon. For the boy who leaves school when he is fourteen, whether graduated from the grammar school or not, there should be furnished schools, probably night schools, similar to the continuation schools of Germany. These should give the boy elementary instruction in the various trades, at the same time teaching him practical mathematics, language work and some elementary science. He might take the work in these schools while he was serving as an apprentice or while he was working at unskilled labor. In the course of two or three years, the boy would learn enough to fit himself for a higher grade of work. He would no longer belong to the absolutely unskilled class, although he would not be a journeyman in any trade. In Germany, these continuation schools are compulsory. In this country, we have a few of them, but they do not bear this name. The various Y. M. C. A. courses, the night courses of the Industrial Commission of Massachusetts, of mechanics institutes and other organizations, are striving to fill the place of the required school abroad. And these schools of ours are doing splendid work as far as they go. Great credit should be given to the men who have furnished money for and those who are devoting their time to this kind of work. But these schools have only touched the outskirts of the problem. The thousands of boys in every city not attending school, many of whom are not working, or if they work during the day are turned loose at night—boys who are making almost no progress in educational or trade development and who in many cases are learning more evil than good—may become a serious menace to our country, and certainly are not lifting it to any higher plane of citizenship. I am sure that every one present recognizes the truth of what I say and believes that an education, which would fit these boys for something better vocationally, would not only be of great advantage to them, but to the community in which they live. The remedy for this idleness, this lack of training, these incompetent, unskilled men, lies in vocational education and it must be promoted by the educated classes. One of the first duties of a community is to see that every boy has a chance to earn an honest living. If you determine that the boys, who are growing up to manhood, shall be taught something useful—something which will enable them to come up to a higher standard of living and create a greater amount of wealth for your city and your state, as well as for themselves—you can see that it is done. I believe that the remedy not only lies with educated men and women, but that one of the greatest duties before them is to see that this work is done. Men, who occupy the highest positions in manufacturing and business affairs, have deep civic responsibilities as well, and they are beginning to recognize these responsibilities and to assume them. It means some labor; it means some trouble; occasionally, it means some money; but when the civic conscience is awakened these individual sacrifices for something which will be of great benefit to the community will seem small.

Industrial education in the restricted sense in which it is frequently used means then manual training in the grammar schools, manual training in the high schools, manual training in the evening or continuation schools. Industrial training in its broadest sense includes, also, vocational training or instruction in the trades. Many years

ago, boys were apprenticed for a term of years to learn a trade. Probably this system of instruction originated in the guilds of Germany and of England, where all those of one craft formed an association and determined the conditions upon which any man should be admitted to its practice. Apprentices were bound for a term of years to a master, who taught them, in time, all that he knew. This system continued for many hundreds of years, but the division of labor and the introduction of machinery materially changed it. Owing to these causes, the apprenticeship system is entirely different from what it formerly was. Then, each man learned the whole of his trade and became, so far as his own qualifications allowed, a skilled journeyman, capable of doing every part of his trade, and doing it well. Today a boy enters a shop, is taught to use one machine and never learns any other. It is considered cheaper and more economical to keep him at the thing he has thoroughly learned than to give him any instruction along other lines. If the work for the particular machine with which he is familiar gives out, he is out of a job, although there may be a scarcity of men for other classes of work in the same factory. Knowing but one part of a trade, he has little appreciation of, and takes little interest in, the other parts. He has become a machine and, like a machine, he stops promptly at the blowing of the whistle, stands idle so far as production is concerned until time to begin work the next morning, and takes no interest in what the establishment is trying to do. There are some all-round skilled mechanics in the country, but very many of these were trained in Germany. The American method is turning out very few of them at the present time.

Most manufacturing establishments have no apprenticeship system. A few years ago I wrote to four hundred manufacturers in the State of Ohio, asking them for certain details in regard to such a system. Only fifty-seven had any at all and nearly all of these were very incomplete. One firm only out of the four hundred answered that they turned out by their system first-class, all-round mechanics. Some of the large companies like the General Electric, the Westinghouse, the New York Central, and the Allis-Chalmers have worked out apprenticeship systems by which they train men in a very thorough way for their own work. They have apprenticeship schools, and the boy who enters one of these schools is given some book instruction in practical arithmetic, etc. Then he is taught the various branches of a trade so that he is able to take hold of any part of it when he becomes a journeyman. These systems are most efficient and most thorough. The best place to train a boy for any trade is in the shop where that trade is being pursued by experienced workmen, provided the manager of the shop is in thorough sympathy with the system and gives adequate instruction to the apprentices. If, however, it is the policy of the company to require apprentices to take part in the work of the shop with the sole idea of getting as much out of them as possible from day to day, without any regard to their development or the training of skilled mechanics for the future, the apprenticeship system will be a failure. Many manufacturers are broad enough to look beyond the present day to the next year, or to the next decade, and these men will see that the apprenticeship system is maintained. Again, it is necessary that the foreman who instructs the apprentices should not be so driven with the routine of his work that he cannot

give them any attention. During the time which the foreman gives to the apprentices he is the teacher and the apprentices are in a school, but if he neglects his work with them on account of other and more pressing duties, the school feature is entirely lost sight of and the apprentice sinks to the same level as the man who learns to handle a single machine only. At its best, the apprenticeship system is the true way to teach the workman of the future; at its worst, it is not an apprenticeship system at all. There is no reason why an apprenticeship system should not be developed in every factory. If the manufacturers were willing to consider the interests of the boys as well as their own interests, they would see that this was done even if it did involve considerable trouble and some expense; but until the manufacturer realizes that we are training the workmen of the future, and that unless something is done to change present conditions we shall continue to obtain many of our skilled mechanics from Germany, the present system will continue.

This is a great manufacturing country, endowed by nature with the raw materials for agriculture, mining and manufacturing. We have built up a material prosperity which is the surprise and wonder of the world. Our natural resources are so great that we have not considered their economical use because the question of their exhaustion has seemed to be a long way in the future. There has been so much to do that we have had work for every man, and on account of immigration and the old system of training apprentices, we have been able to keep a great many skilled mechanics in our shops; but the time has come when we can look forward to the exhaustion of our natural resources; when we can see a dearth of skilled workmen, and if we are to maintain the high standing which has been and is, to a certain extent, ours, we must change our methods in regard to these two matters. If the manufacturers will not train skilled workmen and the necessity for them still exists, we must find some other method. The method, which is foremost in the minds of many who have studied the problem, is the establishment of trade schools or vocational schools. Certain states of the Union, have enacted legislation which permits boards of education, or other boards especially appointed, to establish trade and vocational schools, either with or without public aid, and other states will undoubtedly follow until every section of the country has the right to maintain schools of this kind. There are some who doubt that a trade can be taught in a school; they say that in order to teach a trade it is necessary to have a boy under shop conditions; that he must work with experienced workmen; that he must work on actual commercial work; that he must learn to come up to the manufacturer's standard; and that these conditions cannot be obtained in a school. These manufacturers say that in a trade school the boy learns, of course, how to handle tools so that when he goes into a shop his term of apprenticeship may be somewhat shorter, but they claim that a year or any other period in a shop is very much better for an apprentice than the same time in a school. The laboring men also seem to think it is impossible to teach a trade in a school. Hence, they look with some suspicion upon a movement to establish trade schools in connection with the public school system. The experience of certain trade schools, which have been in existence for a number of years, would seem to show, however, that it is possible to teach trades in this way. The William-

son Trade School, the Winona Institute, and the Trade School of Milwaukee are all, as I understand it, turning out journeymen. Many, if not all of their students, receive the pay of journeymen as soon as they graduate.

Perhaps the attitude of the manufacturer is not strange because he is talking about a school as he understands a school; that is to say a school room with about forty school desks and a school ma'am who hears recitations learned from books; but it is needless to say that this is not the kind of school we have in mind. We are giving a new meaning to the word school; we are creating something which never existed before. We call it a school because its primary objects is to teach, but probably the manufacturer who happened to wander into it, without knowing what it was, would think it a shop. For instance, the school for machinists will be in a building which in every way resembles a shop. It will have the same kind of machines that are found in a shop and they will be as modern and complete. It will manufacture certain articles just as the shop does, and the teacher will be a first-class foreman from a machine shop whom the school has secured because it will pay him more than the manufacturer will. As the school will have the same machinery, the same kind of a teacher and will do the same class of work as the shop, I can see no reason why it cannot turn out the same kind of journeymen. In the shop, the principal object of the foreman is to get out the work. He teaches the apprentices in his leisure time. In the trade school, the foreman will give all of his time to teaching, and it is evident that the apprentices will be better trained than they would be in a factory. It is also evident that, if they give their whole time to learning and not to the problem of making money for the manufacturer, they ought to learn their trade in a shorter time than in a factory. If the product which they make is to be sold, it must reach the same standard in value as that turned out of the shop. I do not believe the amount manufactured in such a school will ever be so great as to seriously interfere with the sales from regular factories, but the standard thus set up would establish a quality which is necessary for the proper training of a student.

This, then, is my idea of a trade school. Perhaps it would be more accurate to say that it is a factory school or an apprenticeship shop. At any rate it is doing the same kind of work as the shop, but its prime object is to teach a trade.

The trade school, if properly conducted, would give a broader and better education in the trade than is ordinarily obtained by the apprentice. As a usual thing, the apprentice in the machine shop learns how to use the machinery of that shop, but nothing more. I am not speaking now, of course, of the best apprenticeship schools in large establishments, like the General Electric Company, but of the ordinary apprenticeship course in a moderate sized factory. The trade school, if properly conducted, would give a student much more than the mere work of his trade. It would see that every apprentice learned enough of drawing so that he could easily read drawings and so that he could place upon paper, in an intelligent way, any ideas of his own in regard to machinery. If he wanted to learn the machinist's trade, he would be given a little joinery and pattern making, some work in the foundry, some work in the forge shop—not with the idea that he would ever become a workman along any of these lines, but because he would be a more intelligent mechanic if he

knew and understood, to a certain extent the operations of other departments of the factory in which he was engaged, and because knowledge and skill in one direction would be helpful to him in every other direction. Information along the lines I have mentioned would be of great assistance to a man who had the natural ability to become a foreman or assistant superintendent. Then, again, the student would be taught the finer parts of machine work which the average machinist does not learn; in some cases, because he is not capable, but in the majority of cases, because he has never been taught. If he works in a shop where the coarser kind of machines are turned out and where none of the fine details of his trade are necessary, he does not have occasion to learn them. If he is, at any time, thrown out of a job, and it becomes necessary to seek a new one, he is limited entirely to the class of work which he has formerly done. In the highest sense of the word he is not a skilled mechanic. The same would be true of every other trade. The majority of men working as brick-layers, as printers, as pattern makers, as plumbers, are not skilled in all the parts of the trade which they profess to follow. If you have work to be done in one of these lines, you will find that the foreman, or superintendent, gives the finer parts of this work to one or two men in the establishment, because they are the only ones who can properly do it. The trade school would teach the finer parts as well as the coarser parts of the trade to each student. This would place him on a higher level than the ordinary workman; as a rule, it would secure for him better wages than the ordinary workman receives, and it would give him a greater respect and liking for his trade.

Many workmen follow their trades simply for the purpose of earning a living, not because they have any vital interest in the work that is done. I thoroughly believe this statement to be true, but I also believe it is true only of those workmen who do not know the finer parts of their trade. As a rule every man likes the thing which he thoroughly understands and can do well, and the artisan who knows the fine parts of his trade is proud of this knowledge and proud of the work that he is capable of doing. He does not look down upon himself or the trade which he follows.

In order that the trade school may be a success, it must be patterned after the shop very largely. Ordinary educational methods must be eliminated. The word "culture" must never be pronounced within its walls. It will not be a school for mental training only. There will be no cultural studies. It will be a practical school, designed and operated by practical men. Its principal and its teachers will come from the shops and the trades. No one knows better the things which a skilled mechanic should understand than the manufacturer and the skilled mechanic. The manufacturer looks at the question from his side—the side of production, and the mechanic looks at it from the side of the workingman, who is to do the work. As these two classes are the best judges of what the student in the trade school should be taught, they should be the ones to determine the course of study. I do not believe any trade school will be a success unless it has an advisory board of manufacturers and of skilled workmen. This advisory board should make suggestions in regard to the course of study, the outfit necessary, the teachers, the length of the course, and the tests of efficiency. I feel sure that manufacturers will welcome this kind of a school as soon as they understand its scope, and that they

will cooperate with the boards which are trying to establish it.

There may be some doubt in regard to the attitude of the workingmen. I believe, however, that any opposition which they may have at first, will be wholly overcome when they understand what the school is trying to do and especially if they are represented upon the advisory committee. Several of the leaders among workingmen have said that if a trade school taught the trade thoroughly, and did not attempt to turn out journeymen in a short time, and its students were not used as strike-breakers, they would be heartily in favor of it. I think laboring men would soon see that this school was of more benefit to them than to any one else, for it would be the school which would train their boys to a better knowledge of the trades than their fathers had. The kind of trade school will depend upon the needs of the community. In a steel and iron district, boys would be taught foundry work, machine shop work, etc. In a community where woolen goods were the principal articles manufactured, the preparation, dyeing and manufacture of wool would be the subjects taken up in the school. The manufacturers of a city would naturally indicate the trades to be taken up.

Such trade schools would give evening courses where apprentices and even journeymen could be taught. The journeyman would learn parts of the trade which he perhaps had never had occasion to use, and so had not learned; while the apprentice would be given subjects both directly and indirectly connected with the work which he was doing in the daytime and which would make him a broader and a better workman. Manufacturers could cooperate in this latter work by requiring every apprentice to attend a night trade school for a certain number of months, and I believe it would be to their advantage to pay the tuition fees. The additional value of the apprentice in the shop would more than repay them. Some manufacturers might say that the apprentice probably would not stay with them after completing his apprenticeship, and so they would not reap the benefit of this course of study. To a certain extent that would be true, but if all manufacturers were following this plan, each one of them would retain some of his own apprentices, after they became journeymen, and he would secure some trained in a similar way in other establishments; and so he would be benefited either directly or indirectly.

I have outlined in this short address some of the features of industrial education. It has manifestly been impossible to give much detail; still, I have endeavored to mention specific things and to make some definite suggestions both as to the type of schools and the things which should be taught. At conventions, both of educators and of manufacturers, where industrial education is discussed, the greater part of the time is usually taken up with a theoretical presentation of this subject, the necessity for industrial education, its bearing upon other educational work, and the cultural value to the child; but very few definite suggestions as to methods and organization are given and rarely do we hear a description of anything that has been done. Now, this method has been necessary in the past for we have been learning and it has been essential to discuss the subject from all points of view in order that the facts and principles might be thoroughly understood; but the object in doing this has been to attain some practical end and, in my opinion, the time has come to cease talking and to do some-

thing. I believe it is time we established trade schools as distinctive institutions. If this cannot be done by our present boards of education, or other boards established for that purpose by legislative action, then manufacturers themselves should establish these schools. It is entirely feasible for the manufacturers of any city, who can use patternmakers and foundrymen and machinists in their factories, to form a board of trustees and establish a trade school of their own, pledging a sufficient sum of money to pay its expenses for perhaps three or five years. A thorough test of the methods which might be employed and the results to themselves and partly, at least, to the community, would thus be made. If this process were efficiently tried out in one community, the example would be followed by others and we should soon have a system of small trade schools in our cities.

It may be necessary to start trade schools in this way, on account of the indifference of the general public, but I have no doubt that in the end the trade schools will come under public control, for the public can do this work for large numbers in the community and thus benefit all who stand in need of such education. In some states they have the machinery for this work in the legislation already enacted. Commissions on industrial education or public school authorities are authorized to establish such schools and the state co-operates with the cities and towns in paying the expenses. I do not believe that industrial schools giving a certain amount of cultural work with some manual training will ever meet the need. They are useful as far as they go and are especially helpful to the boy who has left school, but who is not old enough to begin to learn a trade; but the dearth of skilled journeymen in all trades can only be supplied by a system of schools which thoroughly trains such journeymen in all branches of their craft and fits them for the immediate practice of the trade.

In the future there will be trade schools in agriculture as well as in the mechanic arts. As I have already stated, the necessity for these schools has been clearly seen in some places and the work has begun—but it is only a beginning. Most of our agricultural communities are entirely without them. The boys are still leaving the farm for the city, whereas if they only knew it there are great opportunities for them at home as in the shop. If we can train our farmers as the old apprenticeship system trained mechanics, agriculture will offer inducements to thousands of young men who now despise and look down upon it. For the properly educated man agriculture is in many respects an ideal occupation. The soil calls in strong tones to every man who has a love for nature. Most business and professional men at some time in their lives buy a farm, or at least a small place in the country, because they cannot resist the attractions of the soil. They do not intend to become working farmers perhaps, but they love the country and its life, and they like to see animals and plants in process of growth. I believe, therefore, that in the future there will be a great development in agricultural education as well as in trade education. This will come through appropriations by states and by the nation. The Davis Bill, introduced in the last session of congress, would, if passed, extend the benefits of agricultural education to almost every community. The bill had some defects, and probably ought not to have been passed in the form in which it was introduced, but these defects will be corrected, and in the future this or some similar bill

will be enacted into law and the national government will have as active a part in agricultural education for the masses as it has in agricultural education of the higher type as given by the institution which I have the honor of addressing today.

In the past, education beyond the grammar grades has been for the few; in the future, it will be for the many. In the past, it has been for the fifteen per cent. who could afford to take time and money to secure an education of great cultural value and, in some instances, of great practical value. In the future, it will be for the eighty five per cent. as well, and it will give them a practical education which can be used in their every-day lives. The audience, which I have the honor of addressing, belongs to the fifteen per cent.—to the class which has had a monopoly of education in the past. This class can do much to extend the benefits of practical vocational training to those who need it. Education of this kind is coming whether the fifteen per cent. is willing it should come or not, because the eighty-five per cent. will soon demand it and they are in the majority. But it is proper for educated men and women, who recognize the advantages of knowledge to all classes, to assist in this new education because they have been benefited by the old education which they have received. They can understand the advantages of all kinds of training, whether mental or manual, whether mechanical or agricultural, and their influence and help will count for much in the development of the future. Vocational education is of great interest to the engineer and the trained agriculturist. The engineer designs—he creates, but his designs can only be put into practical form through the efforts of the mechanic, and the greater skill the mechanic has the better he will be able to appreciate and to follow the designs of the engineer. The trained agriculturist will be at the head of great agricultural enterprises, or he will be a scientific worker along agricultural lines, but his plans can only be carried out in full when the men who till the soil have been given trade instruction along the many lines into which practical agriculture is divided. This new education—this vocational training,—is for the benefit of the public as well as the individual and I believe that the graduates of our engineering and agricultural college as well as the educated public will in the future do their utmost to promote and foster it.

A FINE SOUL.

(Preamble to the Address by Rev. Isaac C. Ketter, Pres. Grove City College, Pa.)

(And Moses hid his face, for he was afraid to look upon God. Exodus III:6.)

God reveals himself at high altitudes. The mountains have always been conspicuous for divine manifestations. Sinai, and Horeb, and Carmel, and Hermon, and Nebo have all felt the tread of omnipotent feet. Indeed we are prone to associate the majesty of the mountain with some fine display of divine power, or grace. It harmonizes with our conception of God to think of Him as occupying a high throne in the universe of things. Heaven is always some high plane, some exalted, celestial sphere, some place of divine glory and fulfillment. It may be but a conceit, a dream of childhood, a fiction, a fancy, yet somehow or other it does seem as if God, when he would lift us out of our lower self into some high place of aspiration or service, reveals himself at unwonted heights. And height, even in dearth of all other considerations,

has ennobling tendencies. The high headland, the cloud-circled cliff, the sun-tipped minaret, and especially when the "Call to Prayer" trembles out upon the dilating air, beget in us a manner, (a mood), and indescribable something,—a feeling which is akin to worship.

I am quite inclined to say, that God reveals himself upon the heights. The De Profundis Cry,—the cry from the deeps,—the soul in the toils of a sensual and depraved environment,—humanity groping in the dark, yet raising the voice of its infinite need, must look to the hills for help. And there is help in the hills! David the hymn-singer of the ages, found help in the hills,—"To the hills I lift mine eyes!"

The truth is, the dreamers have always indulged themselves in significant metaphors,—the mountain of the Absolute, "the high plains of the Infinite," "the empyreal heights of God!"

The poets, and the prophets, and the seers, and the singers have found inspiration in the hills,—the horizon is wider, the view less restricted, the pure air abates the miasms of low associations, the blood prickles and tingles,—my brother, there is help in the hills! There is quiet and repose, and there is rest, and there is sweet communion in the hills. God is in the hills!

I like the Psalms of David, immortal mosaics in the limitless realms of song! They reveal all the heights, and all the depths. And I like the One Hundred and Thirtieth Psalm. It goes down to the deeps,—it finds us on the lowest plane of human frailty, and it says, "Out of the depths do I cry!" I like the One Hundred and Twenty-First Psalm. It is the "evening song" of the Pilgrim band, sung in the last nightwatch, as wandering footsore over Judean hills they pitch their tents, while Mount Moriah rises clear in view. I like this Psalm. It says, "Up, up, my brother, to the hills, to the hills!"

This is poetry, and because it is poetry, it is true. It is the poetry of the Old Testament's greatest lyricist. He was singing the song of Israel's dearest hope, and Israel's hope was in the hills. He was putting into rhythmic words the glad triumph of the spiritual over the base things of earth. He was saying in tuneful cadences what the universal heart feels, that there is hope in high altitudes,—that there is help, and succor, and deliverance from the carnal things of life. And his song was a poem. But what is poetry? It is the language of truth. It is the voice of humanity, when humanity comes nearest speaking the truth. It is the linguistic expression of mood. It is the truth and no lie! What is poetry? It is life, lived on high planes, my brother! It is man at his climax. It is the "head of gold" o'er-topping the thighs of brass and the feet of clay. It is the soul giving expression to itself, when it lives its best, in the purest, noblest acts, and in the finest forms of human speech. And fine poetry only lives in fine souls. Moses had a fine soul, and his life was an epic poem. One day God came in upon him like a mighty river. The vanity of earthly flame flooded his soul. He had heard the call from the hills. And he said, "I will no longer be called 'the son of Pharaoh's daughter,'—I will be a son of God! I will cast in my lot with the people of God. I will choose rather to suffer affliction with the people of God than enjoy the pleasures of sin. I will forsake Egypt with its earthly gains and low ideals. I will not live on these low Goshen plains,—I will turn my face to the hills."

And Moses left Goshen and dwelt in the land of Midian. One day shepherding the flocks he saw a burning bush, and turning aside he heard the call of

God. And the record is, that Moses hid his face! It was the instinctive attitude of a fine soul.

My theme is a fine soul. Moses at the Burning Bush is an instance of a fine soul. He fled from Egypt because he had in him the elements of a fine soul. A fine soul will not live on a low plane. It has a divine, an instinctive, appetite for a higher level, for the things which ennoble and build up. In the midst of a low spiritual environment Moses aspired. He aspired to the higher altitudes. He was spiritually awake to some purer air, some wider prospect. He found no response on a low level to the best impulses of life. He had felt like the evening zephyrs the breath of God upon his soul, and a new life opened before him. With holy passion and a fine disdain he turned from the lure of worldly pleasure. He craved the bracing air, the life-giving ozone, the prickling, tingling sensation of the towering peaks and high mountain ranges,—he wanted to feel the thrill of the wider prospect, the cloudless, boundless glory,—in a word, the spiritual uplift and illumination of the hills!

I hesitate to say it, but it is true,—the majority of men and women live on low planes. They would be miserable at high altitudes. Their respiratory system would not easily adjust itself to the pure air of any far seeing height. They are the habitues of a noxious atmosphere,—indigenous to lower levels. Their teeth water for leeks, onions and garlic. Many men are sore bitten with a rabies for wealth. It is no epithelial or surface malady. It is a disease of the blood. In the social organism the symptomatic markings are pronounced worldly tendencies,—a virulent mania for pleasure.

Society viewed from this standpoint is in need of a universal remedy, some cleansing, saving potion, which will absorb, cleanse, purify, wash out these base humors, and bring once more health and marrow to the bones.

This is an uncanny picture, disturbing, disquieting. He who paints it awakens suspicion of certain despondent tendencies. It savors of low faith, pessimism, misanthropy. It suggests personal chagrin, disappointment, unrequited service. We are tempted to think the artist has had his ups and downs, his failures, his hard lines. We would much prefer, that he dip his brush in less sombre colors,—set forth the facts of life on some higher level,—at least turn his easel to the sun!

And this suggests a better view, a brighter picture. It suggests, that there are yet fine souls in this world of ours,—men and women gifted to see, that low ideals are low, and that high ideals make for eternal happiness and gain.

Moses had a fine soul. He was gifted with superior mental qualities. He had more than natural sight. He had the spiritual discernment to see, that there is a world of infinite depths and meaning lying back of this material order. This supreme quality in a fine soul, this subtle grip of fundamentals, this esoteric, (inner), view breeds high disdain of mere earthly fame and splendor. It reveals to the spiritual man, that on this lower round there are no vested rights, no permanent estate, no unfailling treasure. San Francisco shaken down like an ant hill warns men besotted with wealth that there are no certain tenures this side the pearly gates. It speaks in the spiritually awakened soul, and it says, "I will no longer be called the son of Pharaoh's daughter,—I will be a son of God! I will not live on a low plane,—I will ascend the heights! I will not anchor destiny to wealth. I will not surfeit my life with earthly gain,—I will not serve the Mammon-King,—I will enrich my soul!"

I. My first point is this: A fine soul recognizes a spiritual realm back of this shadowy, shakable world.

A burning bush has no significance for a carnal nature. All things are just the same to him,—there is no supernatural sight, no divine voice, no spiritual presence, no uplifting vision, no holy ground. But I refuse to conduct this discussion in a pessimistic mood. The plains of Goshen are infinitely beneath us. Our text calls us to the heights. It says, there is light, and there is hope, and there is joy, and there is sweet communion, and there are grand visions, and high inspirations, and profound meanings on Horeb. It says to you, my brother, whether in wealth or in poverty, that God is there only waiting to be gracious.

My sermon is Christocentric,—it has Christ for its center; therefore I refuse to paint the shadows. I refuse to dwell much on sin abounding, when I know, that grace does not much more abound. Every prophet from Moses to Malachi made God's grace and not His condemnation the burden of his message. A sermon which paints shadows only is a Christless sermon. This sermon has Christ in it. It sets forth Christ as the hope of men.—it calls to Horeb and the Burning Bush. It says to men and women on the Goshen plains. "Up, up, my brother, my sister, to the hills, to the hills!"

Moses had a fine soul, and he proved it,—he chose God! He chose to suffer affliction with the people of God, and in that choice stood on the heights where God might meet him face to face. Do you know, there are great possibilities at high altitudes! That is, when men rise above the thought of gaining the world, for the world's sake; that is when they let go of despicable, unholy life-plans, that is when the Egyptian ideals are purged, washed out of their soul, by the incoming flood of a holy purpose in life. This sermon is intended to encourage, and not discourage men. There are Horeb heights for every man, where God will meet him face to face. There are mounts of blessing where men may enter into fellowship with the spiritual and unseen. There is an open door to fellowship with God,—Christ is the door! It swings wide on its hinges. No man is shut out who comes with an obedient faith in Jesus Christ. God forbid, that I should limit any man's possibilities in the spiritual life. I believe, that, as a rule, men and women are better than they seem,—they are nearer to God than they seem, they have higher ideals than they seem, they care less for the world and material things than they seem. In quiet hours and in secluded nooks, where no eye save God's may see, and where only His ear may hear, in the very abandon of holy communion they draw nigh unto the Burning Bush.

I call upon you, my brother, by the supernatural occurrence on Horeb to open your eyes to the supernatural about you. This material world is but a time-shadow,—the spiritual is the only abiding, the only real. These earthly things for which we toil and moil, and plow and sow and reap, are but the ephemera which flood the air on a cloudless night in June. They pall on the taste, or perish with the using. In no sense do they enter into the essence of life. They are pithless plants, empty husks, fruitless rinds. These earthly ambitions which lead us such a rapid chase across the Goshen plains only starve our souls and disappoint us in the end. They are mere air-castles of the listless day, disturbed, disappointing dreams of the night, fleeting, dissolving pictures, without reality, without substance.

What a dream life is! What a shin-

ing show! What a mirage, fata morgana, will o' the wisp, miserable decoy is the poor, foolish lust for fame and pleasure! Swift-winged and remorseless is the flight of years,—we have no abiding city here! Like the shuttle in its inter-threading flight across the loom we pass from stage to stage, and our day is done! He who grasps the truth, and works it into the plan of his life has the distinguishing mark of a fine soul. If you have spiritual eyes, that is, spiritual discernment, and grasp this point,—if you are gifted to see, that worldly estate is a ruined chrysalis, when the death summons comes, that the soul must stand naked before God, then magnify the gift. Come to the heights of blessing,—God is on the heights! And Christ is there of whom Moses was a type,—the Jehovah of the Old Dispensation, and He says, "I am the God of thy father!"

You see, my brother, that Christ was on Horeb,—Jehovah of the Old Testament, and he spoke to Moses out of the Burning Bush. Now then, my sermon has Christ in it! No sermon can have power that does not have Christ in it. Give me Christ and you give me the saving doctrines of all the Scriptures. Give me Christ, and you give me an ideal which will lift me from the lowest Goshen plane to the highest Horeb height. Give me Christ and you answer the cry of a troubled soul. Give me Christ into my life, so that I am alive and aware to the spiritual forces which burn and blaze in every bush, and you give me a fine soul. Give into my soul a thirst for God, as the hart pants for the water brooks, and I thereupon am become a fine soul. Give me Christ and you give me that which abides. Give me Christ and I face the storms of life unblanched by fear. Give me Christ and the regenerating power of his death on Calvary, and you give me more than ten thousand worlds like this can bestow!

II. My second point is this: *A fine soul fears God.* Moses hid his face for he was afraid to look upon God. Undoubtedly the truth here lies on the surface. There is no need of any strained effort at exposition. Moses feared God. He was a sinner before God. He was suddenly face to face with the absolute righteousness and holiness of God. He had come all the way from Goshen to Horeb, spurred on with the high purpose of serving God. He had scaled many a rocky steep in the mountains through all those strangely silent years, shepherding the flocks of Jethro. He had communed with his won spirit in the vast solitudes, and at night by the folded sheep had looked up into the Syrian stars, and re-dedicated himself to a high calling,—and vowed he would be true. There is no doubt that a noble calling sanctifies us. There is no doubt, that the fixing our eyes on some high goal elevates the tone of our lives, makes us to see the wide gaps between the high and the low, and determines us to the choice of some higher path than men usually travel. And yet the anchorite's life is not a high ideal. Mere meditation on the sacredness of duty without the life which exemplifies it,—cloister faith or ethics, which finds no open field or vent for its play,—the spiritual isolation, (pietistic aloofness), begotten of the pharisaical feeling,—that now we are an elect race, a royal priesthood, remote from the passions and lusts of a lower level,—all this, I fear, savors of spiritual pride. It begets in us all too certainly a sense of personal righteousness, a dangerous presumption of special privileges. This is an offense against all spiritual decency, and calls loudly for some Horeb Bush to burn into our souls, the awful fact, that

we too are sinners before God. Moses was a sinner, but he never felt himself so much a sinner, so deeply dyed and helpless in the sin and guilt of his lost estate, until he was brought face to face with the righteousness and holiness of God. This undoubtedly is the root, the mainspring, the major premise, of all high and effective service,—men must have a proper sense of God. God is great, and God is righteous, and God is holy. No man is fit for any high service or mission who does not live in reverential awe of God. Moses hid his face. He was afraid to look upon God. It is the proof of a fine soul. A fine soul fears God.

Moses fled from Goshen because he thought he had a mission. For forty years he had talked about his mission. He had prayed about his mission. He had dreamed about his mission. But the truth is, he had no mission. No man has a mission until he recognizes his true relation to God. Moses had no mission down in Goshen. No man has a mission who lives on Goshen plains. State craft is not a mission. Commerce is not a mission. No craft, or cult is a mission until in its final purpose it rises above the low level of Egyptian ideals.

Angelo's Moses is an impressive, a colossal figure, (some here may have seen it). Moses is at the height of leadership. He was no longer a wandering nomad, feebly aspiring to some helpful service for men. It is the impressive attitude of one who has attained. I wish that such a figure might be found in every treasure-house of art! But I like the other figure better,—that is, Moses at the Burning Bush. I like it better because the fine character of Moses is so much more in evidence. I like it better, because it is so human,—Moses is so conscious of sin and ill desert. I like it better, because of its spectacular accompaniments,—the Burning Bush, etc., and because God speaks in such fatherly tenderness and compassion, "I am the God of thy father!"

Somehow, I feel that God always wants to speak lovingly and tenderly to men when they feel that they are sinners. Just as when children in the dark cry out in fear and in terror, (and parents speak to allay their fears), so God speaks with assuring compassion, "Be not afraid,—it is I. I am the God of thy father!"

The story of Moses is a fine romance. Godly parents placed in a little wicker basket their darling child, not fearing the commandment of the king, and sent it adrift on the broad river of God's infinite providence and care. Eighty years pass, and the child of parental solicitude now stands in abject fear at the Burning Bush. It is like Matthew Arnold's story of Sohrab and Rustum,—father arrayed against son in the heat of battle, but how different the sequel. On a Persian battle field Sohrab and Rustum meet in deadly strife, neither knowing the relationship of the other, until the father's hand deals the fatal blow. And Moses feared God, not knowing it was Jehovah—God, whose covenant with the parents includes the children!

This scene on Horeb epitomizes the Gospel of Christ, my brother. It is a whole system of theology in itself. The doctrines and justice and grace all center here. It is a concrete instance of God's love in Christ Jesus. Here is Moses with the appalling sense of his own guilt and fearing to look upon God. And there is God,—Jehovah God,—whose atoning blood, sprinkled on the lintels of the heart, removes the guilt, calling out from the Burning Bush in all the compassionate tenderness of infinite love, "I, I am the God of thy father!"

This scene brings to the heart of the believer a strangely beautiful meaning, it is the infinite tenderness and love of Jehovah-God for a world in estrangement. Moses at the Bush has his limitations. He cannot understand how God can be otherwise than displeased with him. In his own sight he is a sinner,—how can God love a thing so mean and low? You and I, my brother, have had the same feeling. In the disquieting sense of our sins we thought we could read on Jehovah's face the darkening frown and hear Him say in reproving words, "What a man sowed, that shall he also reap!" We trembled because we were thinking of our sins. We had lost sight of the scarlet thread. We forgot, that Jehovah is a covenant-keeping God. We hid our face, so that we could not see the bleeding wounds, the ensanguined brow.

And God on Horeb seemed to have His limitations,—I say "seemed." He had seen on the lintels of Moses' heart the sprinkled blood, and his heart yearned for the lonely shepherd son of Amram.

Let me paraphrase in human words Jehovah's pained surprise! "Is this not Moses who fled from Goshen? Why should he fear me,—why hide his face? Am I not his father's God and his mother's God? Is he not a child of the covenant?" Did I not choose him to be a vessel meet for high and holy service? Do I not see, even now, written on his heart the scarlet thread? "Fear not, for I have redeemed thee!"

My brother, my sister, are you also afraid to look upon God? He is not angry with you. He is not now the vengeance-taking God. He speaks to you out of the Burning Bush, and he says, "Don't fear me, don't fear me! Love me, love me,—I died for you!"

III. My third point is this: A fine soul sees and improves its opportunity to serve God.

I question if any man has a calling, until he is called of God. This is a strange world. I am free to admit. Much of the progress the world is making along most lines is blind and irrational, the outcome of conflicting and opposing interests mostly selfish. Paul was quite right,—as a rule, "all seek their own, not the things of Jesus Christ." And I am not so sure, in such a complex organism as society is, that this is a necessary evil. I fear, if in the economic world men should neglect their own affairs to attend to other people's business, that things in general might come to a speedy halt, a disconcerting standstill. No, I rather like the thought, that the world moves on without the superintending intelligence or benevolence of men. I like this view better than any other. I like it better because it puts God back of all things, where he keeps watch, that the untoward conduct of men shall in no wise defeat his beneficent plans. Whilst on this hither side of things, this theatre for the play of human passion,—avarice, pride, lust for gain,—things seem to come and go at loose ends,—the motives, aspirations, deeds of men at painful variance, until the whole world seems like a mock drama with its puppet-marionettes and wooden actors, yet God in his infinite wisdom is back of the scenes, is back of the marionettes and puppet-players, playing off this one against that one,—man against man, saint against saint, devil against devil, this nation against that nation, until as an outcome we rise in the social scale from generation to generation!

Undoubtedly this is the way we must regard the ongoings of society on the Goshen plains. There are not any high ideals down in the pit, where the bulls and the bears force the markets, and

where "the spirit of murder works in the very means of life!"

I am content to believe, that there is not much fine moral action, not much of high initiative here. This, I think, is because there is no opportunity here. God has nothing for us to do here. He sets us no tasks on low planes. God has nothing for us to do here which cannot be done after the puppet fashion I have been describing. But when like the Psalmist we turn our eyes to the hills; when like Moses we refuse to be called the son of Pharaoh's daughter; when we esteem the reproach of Christ greater riches than the treasures of Egypt, then and only then may we become personal factors in the mighty things of God.

I say, a fine soul sees and improves its opportunity to serve God. *Servi Deum*, (serve God), is a motto fit to write above any portal. It is a motto fit to engrave on the fleshly tablets of every red-ripe human heart. It is a Latin motto which has but one translation. It is this: "Uplift your fellowmen!" Undoubtedly Abon Ben Adhem was right,—"he loves God who loves his fellowmen!"

There is nothing you can do for God, so pleasing to God, as the service you render your fellowmen. But there is no service for God which does not have its beginning on Horeb heights. God gives wages only to the men of His choice, and His mark is upon them. They must wear beneath their vestment-garment the scarlet badge of a redeemed and holy life. The Burning Bush must blaze into a man's face before he may take up any high and holy service for God,—"Created in Christ Jesus unto good works" is a distinguishing doctrine of the Pauline creed!

Wilberforce served God by serving men, poor black men, victims of the world's open sore. Harriet Beecher served God by serving men. William Lloyd Garrison, Wendell Phillips, Abraham Lincoln served God by serving men. These served a single race and a single generation. I present as the incomparable exemplar of high, disinterested service, our great all-racial Brother Jesus Christ, whose serving and saving grace is limited by no race and by no age!

I say, if we would serve God we must come up on the heights. There is no divine calling on the Goshen plains. God has no shrines, no temples on the lower levels. Whether we are farmers, or merchants, or bankers, or mechanics, we must transfer our craft to the hills.

My text is a great text,—it is shot through and through with a scarlet thread. Now the scarlet thread is a symbol. In a dark age it was bound in a harlot's window. And Joshua's army marching against Canaan recognized it, and saved the strumpet Rahab. In those far-off times God indicated by this sign, that he would save a sinful world. The scarlet thread was used because it is the color of human blood. When I took this text I saw the scarlet line. I saw it running out from the Burning Bush, and down through the history of the Jewish people, and down through Ruth and Boaz, and Jesse and David, until on Calvary it was lost in the living outflow of the Redeemer's blood. And as the stream widened in its flow I saw in its carmine depths the faces of the Redeemed out of every kindred and tongue and people and nation. I saw in this text the promise of a redeemed race, and of a new heaven and a new earth, and how this stream as it gains width and power will wash the old Canaan world and make it white.

My dear young people, this world, and the fashion of it must change. The old Canaan life of pleasure and gain must give way before the triumph of God's

grace in the social and economic world. A kingdom of righteousness will be established. In due time God will marshal His leaders, men and women of fine souls, antitypes of Moses, and Joshua, and Jael, and Deborah! Already we can see the broad, golden bands of the approaching day. It is an optimistic view. We are on the battlefield of contending forces, and those who carry the crimson flag will triumph. The victory is certain. The Wellingtons may blanch and waiver, but the Bluchers are near! Already in the distance we can hear the multitudinous murmur of the advancing hosts. A day labors up the eastern sky which is pregnant with spiritual promise. It means the triumph of mind over matter, and the spiritual over the base things of life. May it not be the peaceful federation of the world? This Canaan age of ours so plethoric with the love of pleasure will pass and an era of spiritual values will take its place.

I am told that in the British navy every rope, or bit of cordage, is interwoven with a crimson thread. It is a declarative mark, that this is the property of the crown. Let us shoot this thread into every fabric we weave and into every house we build, so that every brick in the walls shall be a dedicated brick, and every life that goes out therefrom shall be a dedicated life.

The church is one. It is made up of the blood-bought of every name. You are the church, if so be, that you have been washed in this blood. You are to be the uplifters, the saviors of men. Into your hands is committed the redemption of the race. The vision is upon you,—the call is upon you,—the ends of the earth are upon you. Lift your eyes to the hills! There are high ideals in the hills; and there is inspiration, and there is help, and there is power there!

Of one thing, my brother, you may be assured, the blood has not lost its power. The sinner needs this blood as much as it was needed a thousand years ago. God will save men and He will save you, if you are washed in this blood.

CLASS DAY ADDRESS.

BY PRES. G. H. ALLEN, '09.

It was with varied feelings that I received the intelligence from the committee on arrangements that I was booked for a talk this day. I asked very humbly what I was to talk on—never having attended class day exercises in any form—and they replied in the usual stereotyped form, "O, talk on anything."

Now I have great ambitions as a public speaker. I should like to give an address today that would be full of pithy advice; something that would be cherished in the bosom of every '09er for the remainder of his natural life, but it grieves me to say that I cannot. I am too severely handicapped, having neither the silver tongue of Hoopinsgarner nor the flow of thought of Willie Mason.

Again I have found that the life of a senior class president in the spring time is not a bed of roses, in fact it borders on the strenuous when class meeting occurs daily and committee meetings almost hourly.

Today is class day—M. A. C.'s first class day—and we are gathered here to listen to the usual exercises. In past years classes graduating from this institution have done so without any of the little formalities which add so much to the occasion, and which are taken advantage of by other institutions, making a pleasant formality of graduating instead of the cut and dried affair that it has been here in the past.

'09 has taken the initiative in many moves and here again it is our move. We hope class day will be a success and will be seen regularly on programs in years to come.

As we look back at our four or five years of college life we cannot but realize how much they mean to us. Many have had a hard fight of it and the successful completion of their college course means the winning of the hardest fight in their lives.

Some of us have been sorely tempted to give up the fight at times, and a few have had to, after battling against overwhelming odds. The lack of the necessary where-with-all is not unknown to many of us. Sickness and accidents play their part in making the college career hard for some.

However, we are thankful that these cases are few and far between, for there are not many colleges that have a more healthful environment than ours; due mainly, I think, to a moral standard far above that of any other institution of its kind. Some have found the preparation of their lessons extremely hard, due to inherent dullness. Such a student finds his life here one long grind, and to him who graduates under these conditions is due the highest credit of any.

Leaving that side of our life; to nearly all of us these have been and will continue to be the most eventful days in our lives. Here we have developed our personalities, here we have formed habits, and here we have made friendships to an extent that we never will be able to again. Besides all this, most of us have got more downright pleasure out of life while here than it will ever be our opportunity to have again. College life, fraught as it is with its varied activities, develops much good in the worst of us. So we have much to be thankful for.

Let us then look back on our stay at M. A. C. and call to mind the satisfaction of beating Albion 58-10 after suffering a defeat—moral as well as physical—of 4-0 from their hands the year before. Let us remember the wild joy of beating Wabash after she had shattered the hopes of many of the largest colleges in the west. And above all let us remember the pleasant chats when four or five of the boys blew in—books were pushed aside—and all talked on any and every subject in turn until the night was well advanced and someone would remark, "Well, wife, let's go to bed; the fellows want to go home." Those were pleasant times and will be remembered long after we have forgotten whether we got a C or an A in calculus, dendrology, ag-chemistry or domestic art, as the case may be.

Speaking of domestic art makes me think that I must give special mention to our '09 girls. We, as a class, are peculiar in the fact that we have had the loyal support of our girls from start to finish in everything. Never have we had a class meeting nor a class game without the little contingent from the coop, and this loyalty on the part of the girls I think has gone a long way in making us a class—first in class spirit, good fellowship among ourselves, and loyalty to our alma mater.

There is a very fine collection of historical paintings in the national capital at Washington; grand paintings of battles on both land and sea, but an entire absence of anything relating to the giant civil war is noticeable. When a guide was asked the reason for this he replied, "That part of our history is to be forgotten," and so I think it should be with us. We have had many and some very serious differences with the faculty, due mainly to misunderstandings on both sides, that took much time and effort to straighten out. Let us for-

get that strife and think only of the men who have guided us through our college course as men who have tried always to be fair and square with us, even when we did not realize it at the time. Let us think of them as men who will be glad to help us when we get out in life, and glad to grasp us by the hand when we visit our alma mater.

We all are glad that '09 is going away from here with the best of good feeling toward everyone on the grounds. Only the Lansing papers have remained antagonistic to us to the bitter end. As men their guiding spirits are beneath our notice, but it gives us to think that the Lansing people should be forced to hear through an ear so distorted that it cannot appreciate one bit of good in the student-body here.

We are sorry to leave this beautiful campus and pleasant environment, but we have had our turn and must now make room for the other classes following us.

'09 has had her day and I hope we all have used it to its best advantage.

Let us, when we go out into the world, bring credit to our alma mater and our class.

CLASS HISTORY.

BY FRANK E. WOOD.

For five years the class of 1909 has been a definite quantity in the life of our alma mater. Freshmen have come and seniors have gone, while 1909 has been following her orbit with the precision of one of the planets; yet her passage has left an afterglow which will endure for many a year and tinge coming events with kindly remembrance.

Our tasks have not been easy, but comradeship and friendly co-operation have done much to make their accomplishment possible and successful. Still the work has been hard and our play times few and well earned. But play times and hard work are what make history for a class. Let dog-eared books and neatly copied notes tell the story of our herculean labors, and let what is written recall only a few of our pastimes leaving the future to show the fruits of honest toil in the record of worthy achievement.

The fall of 1904 saw the campus gloom dispelled by the arrival of a number of individuals remarkable, not only for their individuality, but also for their recency. New York and Oregon, Houghton and Mexico and all between gave them up—a glaucous galaxy of viridescent hopefuls willing to learn, yet eager to teach—yes, eager and anxious.

The first thought—a place to eat and one to sleep in, brought on a search for rooms and board whose close found most of us members of little groups scattered among the homes in Collegeville far from the "dorms" and their hidden pitfalls.

Our class has always been noted for the boldness and originality of her moving spirits and the prep. year was no exception. Of our own volition we sought to organize into a body politic. Bolder than bold one of our number called the first class meeting and then, for the first time, we felt the guidance of the kindly influence and the carpet heard our prerogatives defined.

Our associations as a class have not been entirely free from differences, both as to opinion and policy; but, owing either to the diplomacy of the dissenters or to the fair mindedness of the class as a whole, these differences have led to no open break. Our first season of football caused the first and only division in the camp. At this time the classifica-

tion was so arranged that it was impossible for both engineers and ags. to team out at the same time. Both departments had good material, so both proceeded to organize a football team designed to uphold the honor of the class of 1909 in the inter-class series. The rivalry became acute and culminated in a game between the teams of the opposing factions. Owning, perhaps, to the feeling that Right was fighting on their side (for surely the valor and skill were not lacking in their opponents) the engineers won, thus closing the incident for good and all.

From then on we became a storage battery, imparting—and imbibing—knowledge both good and evil, only pausing in the winter term to administer a sound trouncing to the freshman class of 1908 on the indoor track. It must have been a slight overcharge of evil which led numerous preps. to participate in the class rush during which our beloved and respected Dr. Marshall became entangled in Pharaoh's sad plight, which differed from the old familiar dilemma in that the overwhelming waves were students.

This year saw us lose the final base ball game in the inter-class championship contest to 1906 by a single score.

The beginning of the freshman year is of utmost importance to any class. For then it is that we receive an accession in numbers that gives the momentum to carry us through to the end with flying colors. Yes, the four year people were new and this later growth almost brought back the pristine viridity and freshness. However, under the careful tutelage of worldly wise classmates and all-wise 1909 sophomores became amalgamated into one solid phalanx that was smiled upon by Victory not only in trials of skill and strength but in the class rooms as well. What of it that the subtle strains of, "Please go 'way an' Let Me Sleep" buzzed insistently through the atmosphere of the physics lecture room, or that "gum extracted without pain" was the rule at the opposite end of the old white brick. These were mere trifles in the way to spur us on in a steady progress as relentless as time, as unfaltering as the tides. This year saw us victors in baseball, both indoors and out, in basket ball and in track meets in the contests between classes. In passing, it might be well to state that at one time we gained quite a reputation through our soap eating propensities.

This year we appeared with '09 emblazoned in gold on caps of the postage stamp variety, but, to our chagrin, preceded by scurrilous notices upon the sidewalks of the campus placed there by some naughty upper classman.

Now there occurred in this our freshman year, a battle which will doubtless go down into history as the fiercest ever fought on the campus. So classic was the incident that it well deserves classic language for its recital. Thus it is written:

Now it came to pass in the days of Jonathan, ruler of the country round about, that there dwelt in the land James, the Arenacite. Now James was a mighty man of valor, and he was the son of Codie. Now this man dwelt in the parcel of land called Jenison's; and there were gathered vain fellows to James and they went out with him. And behold, as they went they set up a great cry that the children of 1908 were upon them and were like to destroy them. And those that were in the camps made answer and came forth until many were gathered together. So James passed over unto the children of 1908 to fight against them, and he smote from eight o'clock even until eleven. Now one of the enemy stood forth and said unto the children of 1909,

"Why are ye come out to set your battle in array? Choose you men for you and let them come to wrestle with other men whom we shall choose. If our men prevail against your men, then ye shall be our servants, but if your men be able to wrestle with our men and throw them, then will we be your servants." And behold, the children of 1909 were not dismayed, but sent forth four mighty men of valor to wrestle with four others of the enemy and behold the victory was with the children of James, son of Codie and there was rejoicing in the camp.

As sophomores we were sufficient unto ourselves and also to many first year men. We trust we were not unduly harsh with them. At times since we have almost thought our efforts had not been sufficiently strenuous to tame their fiery spirits. We all remember that struggle which occurred on the drill grounds. '09 and '10 met in a battle royal. The fight was furious. It raged back and forth from armory to faculty row. Victory was with the victors. '09 decided the contest in their own favor.

This year we fell short of the football championship in the final game of the series by losing to the famous 1907 aggregation. However, the fact that our team came closer to crossing their goal line than any other had done was some consolation.

Sophomore sweaters—oh, what fond memories cling around them. The purple and gold—a genuine feast of color skillfully combined into a harmonious whole, well calculated to excite the envy and provoke the despair of classes above and classes below. But they answered the purpose, and we distinguished ourselves in their effulgent glory.

Under the impetuous leadership of Frank Sweeney, our sophomore year passed all too quickly and its record is more fully shown in our memory books as party programs and soap shots.

The beginning of the Junior year saw Chas. Taylor at the helm. He was the choice of the class, for have I not said that diplomacy was one of the main attributes which 1909 claims for herself?

Our athletic teams were excellent and we were very near to the class football championship when Nemesis overtook us in the form of Pat O'Gara and we lost out in the final game. However, Fortune gathered in the first of four successive class championships.

Now comes the crowning triumph of our college life—The Junior Hop. Words would fail to convey an inkling the combined effect of decoration, beautiful music and softened lights. And so it seems best to leave it to the memories of those who were so fortunate as to be present to recall the finest, best managed, and on the whole the most successful J Hop that the Michigan Agricultural College ever saw. In passing it should not be forgotten that 1909 was the first class to hold this function in Lansing. The Hop itself was not interfered with by the other classes and the only sufferers were those who roomed in the dormitories. These found their rooms stacked to perfection.

In the spring we Juniors organized and led one of the most successful night shirt parades ever seen here. The devil and his cohorts were present in full force and did not hesitate to play their hellish tricks upon the most sedate of our august faculty.

For this, our Senior year, we have chosen Gerald Allen to lead us. And a worthy choice it was. Amid the vicissitude of successes and disappointments he has led us as a skillful pilot; always at the front but ever watchful for the rear. This year has been a busy one, not merely on account of our work, but because our outside interests have so

broadened. Some of the fellows seem to have been trying to master the home economics course in this one year. Whether they did so or not remains to be seen.

The fall term was spent for the most part, in adjusting ourselves to new responsibilities. However, we took time to gather in the second successive class championship through the good work of the best balanced class football team ever seen on the campus. The winter term saw us victors, for our basket ball team wrested the championship from the Juniors. The battle was fast and furious but our team was invincible. The tennis championship in the spring term rounded out four successive class championships for 1909, a record which will stand untouched for years to come.

We are all familiar with the matter of the senior party, which was projected for the winter term, and its ludicrous but untimely end. The following has been suggested as a fitting theme for a most touching ballad: Did the Social Committee Rise? or Who was Fooling the teacher?

The events of this term are too recent and perhaps too painful to record here. They may be recorded in the future when time has softened the high lights and shadows, but still, Lethe is a blessed stream.

As a class we have stood together through thick and through thin, not only for ourselves, but for our alma mater. No matter what phase of her life came within our sphere, we have given the best we had. The men of 1909 have made enviable records for our college. They have composed the winning debating team, wholly or in part, for three years. They have been the leaders in M. A. C.'s athletics almost from the first. Time does not permit me to mention names or events, but we feel confident that our alma mater and her interests have always been first.

Thus closes the opening chapters of the history of the class of 1909. Let the years to come be as happy, if not as care-free, as those gone by have been, and let none forget his alma mater. Let us remember that in honoring her we shall be honoring ourselves, and that in honoring ourselves we shall honor her.

PROPHECY.

Scene, Dean's office in a woman's college. Time, June, 1929.

Enter dean with telegram.

Ed.—The fifth telegram I have received today. I wonder whom can this be from. (Reads.) "Delayed in Ann Arbor. Will arrive tomorrow. H. L. Kempster." I wonder what could have detained him. I looked for him all day yesterday and he didn't come. But that is just like Harry. You never could tell what to expect of him. I remember a queer custom he used to have. He had pictures of all his old girls, and every time one of them got engaged he put her picture up on the mantel, till finally he had them all up. But I hear that later a new one appeared, and Harry was very happy when he put that one up.

(Reads.) "June 23, 1929." It doesn't seem twenty years since we were back at M. A. C. as students. It will seem good to meet and talk over those old times. I saw Harry for a few minutes last month at our anniversary at the college, but we didn't have time for any visit at all. I wonder when he will arrive. If he comes today, he should be here by now. (Ring.) I wonder if that is he.

Well, Harry, you finally arrived. I'm so glad to see you.

K.—Hello! Ed. Yes, I finally got

here. Say, it seems good to see you. Had an awful time finding this place. Hunting up this girls' school is just like finding girls used to be at M. A. C. It was a long weary road. And this is the first time I ever called on the dean. Suppose I will have to be careful around here.

Ed.—What happened to you? I looked for you all day yesterday. I was entertaining Grace Martin. She lectured at the auditorium last night on the subject, "Married Men I Have Met." And Myrta was here too. She and her husband stopped here for the day, but they couldn't stay longer. You see strawberry season is now on, and Floyd had to hurry back to the farm. They were so sorry not to see you.

K.—Well Ed.—Miss Hudson. I was sorry not to be able to be here, but I stopped over in Ann Arbor to attend Ingal's wedding. If it had come off as scheduled I would have made it all right, but old Ding. failed to show up at the appointed time and when Bignell, the best man, hunted him up he had just started shaving. That is why I am late.

Ed.—Ingal just married? Why, I thought he was to be married right after we graduated.

K.—O well, he has just got around to it.

Ed.—Were there any other M. A. C. people at the wedding?

K.—Why yes. You remember Nick Carter? Well, sir, the reverend Nick tied the knot, and he did a good job, too.

Ed.—Carter a minister? Well isn't that strange?

K.—Well rather. Myron Ashley was there, too. That old bald head of his showed up in the distance. You see it has been a long time since Myron put aside sentimental reasons entirely, and the poor fellow shows it all the time. Alem John Hutchins was there, too. He was master of ceremonies, and he showed by the clever way in which he performed his duties that he had been through the mill. John has got to be a great man now. His fame as a scientific investigator of the cause marriage has gone all over Southern Michigan, and no doubt he has solved it to his own satisfaction. Geo. Hubbard was there, too. He and Bennie Roberts acted as ushers. We had an M. A. C. meeting after the happy pair, amid showers and shoes, made their way to their future resting place. Say, who do you suppose I saw in Detroit on my way through?

Ed.—The Allens?

K.—No. I stopped there, but they weren't at home. But as I was coming down Harper Ave. what should I see coming down the street but a circus parade, and I'll be hanged—I beg your pardon, I meant I'll be jiggered—no! no! no! Well at any rate I saw Eddie Hulett leading Bailey's band.

Ed.—Yes, I knew he was connected with that Bailey's aggregation, but I was fortunate in finding the Allens. I called there on my way back from the college anniversary last month. Mary is very busy delivering a series of lectures on "Wild Birds I Saw During My Tramps." She gained a great interest in that work under Prof. Myres during the spring term of her senior year. And Flossie. I visited her, too. They have the prettiest home, and are so happy. Flossie is always running up to Charlie and saying, "O Charlie, aren't you glad you're living?" But Flossie says she still loves all the seniors. You didn't see much of the girls at M. A. C. at the anniversary did you? But you surely saw the cross country run?

K.—O yes I saw that. Wasn't it comical how Kate came trailing in after Mary and Alleen had crossed the line?

I presume Kate's corn hurt her something fierce—I should say considerable.

Ed.—It was amusing, to say the least, but I suppose the climate did not agree with Kate after living out west. And the men might have made a difference, too. I understand there are no men allowed on their reservation. Bertha was there, too. She was talking all the time about their girls down there. She says Koch's school for girls is a grand success. She is head of the bacteriology department.

K.—Is that right? I have lost track of the girls, but I have done better with the boys. Did you see that Holcad article about James McCadie? It was the one that read like this: "Pres. James McCadie of Wellesley responded to a toast at the 1929 banquet on 'Freshmen Girls.' Jim, like Glenn Gilbert says he loves all freshmen girls. Say, Ed—I mean Miss Hudson, you remember Claude Nash, don't you? I can. It seems but yesterday since we were in college together. I can remember how he said he would like to be speaker of the house some day; where do you suppose he is now? It is funny—I mean queer—No, no; strange how some times things turn out just the opposite to what you expect. Claude is living on a forty acre farm down near Flint now, and his wife she is speaker of the house, even if he does hate to leave her. That was another feature of the anniversary.

Ed.—The girls were telling that at the spread. You didn't hear about that did you? We had it in Kate's and Myrta's old room. Olive engaged it for us beforehand, because she is the only one near there. I wonder if she will ever leave the English Dept. I don't believe they could spare her, and I don't believe she would care to leave.

K.—English Dept? Why I thought she was connected with the Economics Dept.

Ed.—O, well, since they both use the same office it doesn't make any difference. We had a splendid time at the spread. A regular old fashioned time. It didn't seem we had been teachers for so many years, and especially heads of departments. I guess we didn't show it by our actions. Alleen didn't.

K.—Alleen there, too?

Ed.—Yes. She drove in with a rig from Hamilton. She had an excuse for being late that time.

K.—Hamilton?

Ed.—Yes. Didn't you know she lived there?

K.—No. How long since?

Ed.—Nearly ever since she graduated from college. Ethlyn could hardly get there at all. She had to attend Pres. Bill Edwards' grand ball the evening before and hadn't gotten over the effects of it yet. That is what one gets for going in high society. I warn my girls every day in regard to it, but they don't seem to appreciate all the trouble they would save if they would follow my advice.

K.—So Ethlyn has been received at last into the four hundred? Well I knew she would make a hit in high society where there was always something doing.

Ed.—You ought to have seen Helen. She acted the least like an old person of any of the crowd, and she said she had a dilly time. It seemed so good to have the bunch together again.

K.—That is just like Helen. She always would.

Ed.—Would? I should say she would, even if there were three fellows around.

K.—Speaking of Helen makes me think of Nelson Hubbard. Poor old Hub. I called around to see him the other day. He is a lonely old bachelor now. You see Hub in his younger days was always so generous with his girls. He was always letting the fellows go

down and see his girl. And one day he woke up to the fact that too much generosity don't pay. I don't know what Hub does for canoeing now.

Ed.—Tisn't often you find a man as generous as that.

K.—No. But Reese Taylor went one better than that. Reese had such good luck in helping girls to get engaged that he conceived the idea of managing a matrimonial bureau. What an interesting life work. Think of the happy homes he has caused to exist. Think of the many bashful boys he has nerved up to the proper stage so that the asking was a cinch. Think of all the demure damsels dancing delightfully over the fact that they have at last landed a man.

Ed.—Well, Chan Taylor wasn't that kind.

K.—I should say not. Chan is making good, though. He has a great reputation now. His book on "What to Feed the Pig," has caused much comment. Chan gained considerable interest along that line while at college, and his work is no doubt the result of careful research and study. His nearest neighbor is Dub Emery, who has followed Chan's example and is living on a farm at Albion.

Ed.—Well isn't Ray Burroughs on a farm too?

K.—I think so.

Ed.—I understand that since prohibition has been put on tobacco he has started up a mullen plantation. And McDevit, too. He wasn't noted for his generosity along that line. As an old German professor of mine used to say, "He knew Vedder he wanted her or not."

K.—Yes, we could all see that. And there was Bill Frazer, too. When it come to generosity in regard to his girl, Bill didn't know what that was, even if he did give away his society pin during the spring term of his senior year.

Ed.—Bill Frazer? Did you hear about little Bill? They say he is the champion quarter at Yale. He has the attention of the sporting world at present. He has always been a source of delight to Shirley, and his father, too, who don't hesitate to tell about how they used to do things at old M. A. C. back in the days of 1908 and '09.

K.—O, well, here was one good thing about Bill. He would never let you fuss Shirley. In fact he would never let you do a thing if he could do it himself. I can remember how Charlie Oviatt caught it once for butting in down there. But he has since made peace with the Frazers. That is peace part of the time.

Ed.—Poor Charlie. You remember how we had to assure him that we wouldn't say much about him in the prophecy.

K.—And Ding Allen was afraid of us, too. Hasn't Gerald made good though?

Ed.—His daughter is one of my girls, and she is not the least bit haughty, even if her father is secretary of the treasury. Oh, by the way, Huber Pratt stopped at the college the other day.

K.—Huber Pratt?

Ed.—Yes, you remember him. He was agent for a cap and gown firm, and his convincing arguments almost persuaded the girls to adopt them, but the girls all thought they would look like the girls at Emery College so they voted them down. He said he had just sold an outfit to Postiff and Spurway to be used in their vaudeville work. They were the hit of the season at Baird's all last year in their play, "In the Lime-light at our American College."

K.—Postiff and Spurway in vaudeville after the hit of last year? Well, Spurway always had a hankering—I mean a desire for that sort of business while at college.

Ed.—Speaking of players, our class came in for its share. You remember Leta Hyde?

K.—Of course. Is she in that sort of business, too?

Ed.—Yes, I saw her in Paris, starring in grand opera. She was the hit of—I should say she was a grand success there. No doubt she will be able to decide on who she wants for a husband before long.

K.—Isn't Alice Latson abroad, too?

Ed.—Why yes. She is head of the chemical department at Strassfurtburg. She has already made important investigations which have rendered valuable service to the scientific world. But I understand that of late she is paying more attention to a certain chemist than to chemistry.

K.—Well, who would have thought that of Alice? Say, it does beat all how all the bunch have scattered and what they are all doing, too? There is Jake Welles. His fame as an originator of an entirely new breed of cattle has gone all over the country and made the name of Welles famous. And Burr Pratt. He is a second Burbank. I hear that he has been successful in originating an entirely new variety of Canada thistle. I saw Burr in Benton Harbor the other day. He was so excited he didn't know where he was at. He had a telegram in his hand which had been sent to his firm. It read like this: "O please let him come." It was signed "Sam." and he went in a hurry.

Ed.—Yes, and Walter Moss. He has come to be a second Hobson. Everywhere he goes the girls are endeavoring to kiss him like they used to kiss Hobson. Moss was always a ladies' man, so he will be right in line there.

K.—Stacy Fisher. Nobody ever thought he would be a prof. in astronomy. Or Hoopingartner prof. in oratory.

Ed.—And Amos Crosby. All his children are Howell ing successes.

K.—And Charlie Edwards. All the missionary publications of the country are filled with good reports in regard to the wonderful work Charlie is doing to those dear little "Filipinos."

Ed.—Did you hear the latest about Willie Mason? For almost twenty years he has had charge of the school for deaf and dumb, but his longing for an opportunity to devote his energies to a sphere of unlimited usefulness for more devout things has caused him to make arrangements to join Verne Perkins and Red Dickson in the missionary field.

K.—Les Belknap beats them all. A number of us were at the exposition at Denver. As we were walking through the nursery department, where the people check their children for the day, who should we find in charge but Les Belknap. Never saw Les happier in my whole life. He was so proud of his little nephew, Leon's youngest. Every

opportunity he got he would run right up to it in order to *Pet it*.

Ed.—By the way, what time is it?

K.—A quarter after seven.

Ed.—Well I promised to chaperone the girls and their friends at Prof. Mitchell's dancing academy this evening. I must dress for it before long.

K.—What, Mitchell still entertaining deans at dancing parties.

Ed.—Why certainly. You had better come along. He will certainly be glad to see you.

K.—O—well—O I will be glad to go Miss Hudson. I wonder if he will have any dark dances. He used to favor them at college.

Ed.—If you will excuse me I'll go and get ready. Just make yourself at home. I will be back in a short time. (Exit.)

K.—Well I suppose I am in for it. Haven't had such a talk for a long time. Makes a fellow just sort of stop and think where he is at, and where all the bunch is and what they are doing. Last I heard of Vaughn Tanner, he was fussing a new girl at Pine Lake, and Al Sobey was keeping him close company. And Garcie hadn't yet made up his mind which of the American girls he wanted.

Wouldn't it seem good to see Charlie Oviatt, Big Nick, Curley Kurts, Lee Boyd, and all those old boys once more. It was a great old bunch we had back at M. A. C., and when I think of all they have done since they left old M. A. C. I can't help but feel proud that I was one of them.

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