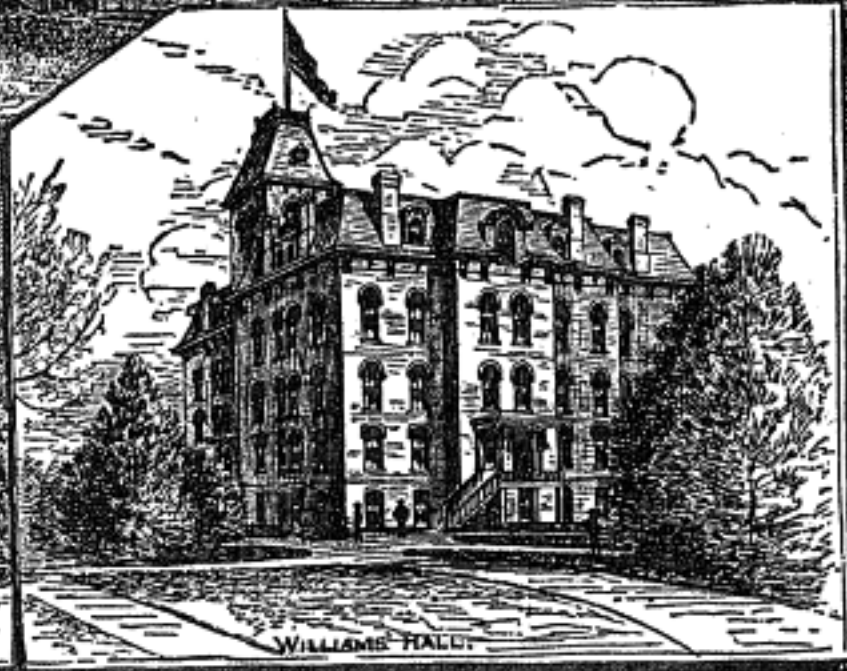


JUNE 1, 1886.

COLLEGE

SPECULUM.



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THE COLLEGE SPECULUM.

VOL. V.—No. 4.

AGRICULTURAL COLLEGE, MICH., JUNE 1, 1886.

WHOLE No. 20.

The Needs of Technical Education.

PAUL M. CHAMBERLAIN, DELTA TAU DELTA
FRATERNITY.

In this country of vast resources, the question how rising generations shall employ themselves to their own, and to their Nation's highest good, is one which, until comparatively recent times, has not occupied the thoughts of the American people. As the opportunities for securing low-priced farming lands become more rare year by year, and the amount of capital necessary to carry on farming is growing greater because of expensive machinery, it is wise that we turn our attention to other branches of industry which may add to our personal and our National culture and prosperity.

No people with a country so rich as ours in its resources has been slower to profit by her natural advantages. Were we obliged to do without the many manufactured articles imported from other countries, we would be at great loss, for a time at least, to know how to supply the deficiency.

The cotton fabrics of American manufacture are superior to those of foreign make, yet because of the skill of European designers, dyers, and printers in producing more striking designs, finer colors, and a more beautiful appearance—which is all owing to their art training—we import large quantities of foreign prints.

Nine-tenths of all instruments of precision, a large part of our finer cloths, porcelains, designs in pottery, glass, and a thousand nameless articles of luxury are imported, the material for much of which was produced in our own country. As a consequence the skilled labor of Europe receives the benefit of this immense increase in value, while many of our laborers remain without employment because they have not the necessary skill to command it.

Russia, as well as England, had at one time severe laws against importing articles that could be manufactured at home. They have since found a better way of protecting home industries, as may be seen by the recent establishment of numerous schools of technology and mechanic arts. The prosperity of France is phenomenal when we consider her repeated devastations, yet it may be traced directly to the expertness of the French artisan, who is trained in schools supported by the government. It is worthy of note that national aid to technical or industrial schools in France is never contested.

A few years ago England, seeing the advantage France was gaining in manufactures, appointed a com-

mittee of prominent men to investigate the French system of industrial education. This investigation resulted in the establishment of technical schools throughout the kingdom.

The American taste for luxuries has kept pace with her prosperity, and if we would retain the money now spent for articles of European manufacture, it becomes a necessity that we should educate workmen to manufacture them.

The industrial classes, must, to a large extent, rely upon trades; as before noticed, the opportunities for possessing farm lands at a small cost are rapidly decreasing. The custom of apprenticing in this country is almost a thing of the past, and to find a journeyman who applies scientific principles to his work is the exception rather than the rule. Other things being equal, the intelligent or educated workman is the one most in demand. It is an established fact that a young man taught in the best schools may in two years become more expert than a man who has worked for years in the regular line. We have space only to mention the fact that the training of the eye and hand in connection with study helps the mind, and visa versa. It has many times been noticed by those who have had opportunity of observation, that a student hitherto inattentive and lacking application in his studies, would, with the stimulus given by that which his outward senses could readily grasp, become a student in the true sense.

We often hear the cry "Let us have practical education, no more dead languages and higher mathematics," or, on the other hand, "A man is a man in proportion to the amount of Latin and Greek he knows." The "golden mean," as in most cases, doubtless lies between these extremes, and a wise statesmanship should find it. All men cannot be measured by the same standard, and the opinion that some minds may profit fully as much by other courses of drill as that furnished by the study of the dead languages, is constantly gaining ground. There is an idea which has been somewhat prevalent with a certain class of people, that to be a gentleman one must live either upon the interest of money accumulated by some hard-working father, or enter one of the old professions, but, happily, that idea is rapidly passing away.

There is as much field for the exhibition of ability in industrial or technical lines as in any occupation in the world.

To see the number of doctors and lawyers, compared with the demand for them, is truly discouraging to a young man who thinks of entering either of those pro-

fessions, unless he has qualifications above his fellows in that line.

The more varied our occupations and pursuits, the more prosperous our Nation. The field for applied mechanics is large. It is interesting to look over the lists of graduates of technical schools in the East. Almost without exception the graduates are occupying positions of trust and honor, for which their technical education fits them. The demand for skilled workmen, shop foremen, draftsmen, designers, bridge builders, electricians, architects, and naval, civil, mining, mechanical engineers, and practical scientific men in every branch of industry, is greater than ever before.

It is to be hoped that both private and public aid will be liberal in preparing the way for the supply of this demand, which in all probability will constantly increase.

Indiscriminate Alms-Giving.

GEO. S. FRENCH, UNION LITERARY SOCIETY.

Benevolence is a quality to be commended, and should be cultivated. No one would wish to curtail the generosity of the heart. Well directed alms-giving is always to be praised, but the great amount of misdirected charity is lamentable.

In London, according to one authority, after a winter when the sufferings of the poor had been unusually severe, and alms-giving correspondingly profuse, every gift of a shilling had done four penny worth of good and eight penny worth of harm, the four pence represented the food taken and the eight pence the premium to their wasteful and improvident habits. Another writer states that of the funds given annually to the poor in New York City, over one half is not only misapplied, but does much harm. It is quite probable that a larger per cent of charity donations are wasted in New York City than in the smaller cities and the country districts, yet it is certainly true that in every community a large portion of the alms-giving is worse than useless.

There is hardly a place in the United States that has not its full supply of tramps and beggars. The statement, that the necessitous poor never beg, seems incredible to the uninformed. Although the experienced testify that there is very rarely an exception to this rule, yet people continue to give something to every vagrant who appeals to their sympathy. Many are in the habit of giving only because they find it the easiest way of ridding themselves of the dreaded tramp; and they not only overlook the evil effects of their thoughtlessness, but are quite apt to credit themselves with generous impulses. Perhaps the greatest cause of indiscriminate giving is the fact that people too easily allow their sympathy to be aroused, and use very little reason and judgment. Many are generous hearted, but either lack the time or are too lazy to ascertain the true character of an applicant for help. Such we may say are invariably the victims of the imposter. The professional beggar, and most of them are professional, can tell the

most pitiable and heartrending stories, can imitate the lame and deformed, and is an expert at all methods of exciting pity. People often withhold money or gifts that are not plainly a necessity, but have not the heart to refuse a meal of victuals. Surely, they say, no one should be turned away hungry, but they certainly should in the majority of cases. In nine cases out of ten the tramp has had nothing to eat, only because he is too lazy to earn money enough to buy his meals. If he has earned anything, it is saved for the saloon-keeper, while he depends upon charity for food.

If he who is so free to give will take a little pains to investigate, he will soon be convinced of the folly of miscellaneous charity. The true character of the vagrant, when subjected to certain tests, is often plainly evident. If he is sent to the superintendent of the poor, or to some person who is known to give only to the worthy, he never gets there. It is remarkable how an ever ready wood-pile waiting for some tramp to split it will keep them clear of the premises. A family who believe in such a convenience feel thankful that the days of tramps are passed, while their next neighbor who prides himself on his generosity never lacks an opportunity to exhibit it. The investigator finds that the sorrowful tale usually told by the beggar is a product of the imagination. He finds that the vagrant follows his shameful course either because it is profitable or because he knows of no easier way to get a living.

The desire for public applause has much to do with the generosity of certain classes, and there are but few of us who are not influenced more or less by the opinion of others. The desire for praise may not be uppermost, but we often have great fear of appearing stingy. Our reputation must not be sacrificed. In giving from such motives as these, we seldom take the trouble to ascertain the results of our supposed deeds of charity.

Our philosophic friend advises us to be careful how we refuse those who ask for aid. He says, that when we refuse the beggar we do it at a sacrifice of that kindly feeling which we should maintain toward all humanity, that this quality should be cultivated and not impaired in any way, that it is better to give for our own improvement than not to give at all. A person must be cultivating a queer kind of generosity who takes pride in giving when he knows nothing of the results. We should not only have good intentions, but it is our duty to know that what we give will reach a proper destination. If anyone really wishes to cultivate generosity, they can find plenty of opportunities without giving indiscriminately.

If indiscriminate charity could be abolished, poverty would be reduced to a minimum and the vagabond would be among the list. The more careless people are in giving the more they will be asked to give. The wealth wasted by this kind of charity must be enormous, and the vice and crime engendered is no small item. Holland has well said; "It is true that wealth in nominally Christian hands were bestowed

upon the weak, the needy, and the suffering, from higher motives than a compassionate impulse or desire for public applause and private satisfaction."

He who has the time to spare can do no better than be his own almoner. If giver and receiver became acquainted, there is but little fear of unwise giving. If a person lacks the time, let him depend upon some one whom he knows will investigate all cases.

Only enough aid should be given to supply the actual want, and should never be of the nature of a pension. The chief aim should be to remove the cause that has led to poverty and to educate the poor to become independent. He who is successful in this kind of work is doing a lasting good, and may well be praised.

The Power of Habit.

J. J. BENJAMIN, ECLECTIC SOCIETY.

In our associations with the different people with whom we are daily brought in contact, we are led to ask the question, why are people so different? What is that which makes one man so much different from another? It is true that men are created with mental faculties widely different, yet every man that has ever been the president of our country might have made a total failure of this life by simply, while young, acquiring habits of a different nature. On the other hand many who have never reached the first mile-stone towards this exalted stage, by acquiring more studious and energetic habits, could have been one of the men that our country is so proud to possess.

Anything which we do often, we become more and more apt to do. A boy while learning to smoke, at first has a dread of a cigar, but as he becomes more accustomed to it he acquires a habit over which he has hardly any control. Swearing begins in an occasional fit of anger, but ends in mingling itself in ordinary conversation. The drunkard begins by taking an occasional glass, but ends in taking a glass whenever he can get it. Just so with any habit; it begins by an occasional performance of the act, but as one more frequently does it, it becomes so fixed that he loses all control over it.

Habits skillfully and wisely formed may be of very great moral and intellectual advantage, while if injudiciously formed may cause the destruction of mind and body. How we notice this in our college life. A person's success depends almost wholly upon the habits he forms when first entering. If he acquires the habit of being prompt in all his duties it will cling to him throughout his course, while the same is true if he is always neglecting and putting off that which he has to do. In the one case he goes through college at the head of his class and is an honor to himself and the institution of which he is a member, while in the other he just manages to crowd through, and instead of being an honor is a disgrace.

A man's real character is determined by his habits.

If we wish to know what a man really is, we are not content to know what are some of his occasional freaks or his speculative opinions. We insist in knowing what he habitually thinks, says, feels, and does. If we know this, we know what are the resultant forces of his life, while if we do not, we know nothing of his real character.

We are unconsciously forming habits at all times, though it is only by the greatest effort that we rid ourselves of them. Even while the tendency to do a thing is increasing, especially if it be that of a degrading character, the pleasure is, by the blunted sensibilities of the bodily organs, diminished, and although the desire may be irresistible, the gratification is nothing. This makes it still more wonderful that so many bad habits are formed. No man who is addicted to the use of liquor ever has one of his drunken sprees without cursing himself for it after he gets sober; yet he will continue to repeat the same process, although each time he will form resolutions not to do so.

As it is what a man was that lives after him, what he did that repeats itself in the ages following, what he said that is said after him, it is therefore important that we do nothing in youth which we would not like to carry with us through life, as the success which we have while here and the influence which we leave behind when we pass from earth depends upon the habits which we form while young.

SCIENTIFIC.

The Lansing Tornado.

At four o'clock P. M., May 14, a tornado passed over the north part of Lansing. The only feature of the storm observed at the College was a dark cloud hanging low in the northwest between 3 and 4 o'clock P. M. The storm at its nearest point being four miles from the College, the tornado proper was not seen by any one on these grounds.

The afternoon was somewhat close and sultry, the temperature at 2 o'clock was 72 degrees, rising to 74 degrees in the afternoon. The temperature of dew point or complete saturation at 2 o'clock was 60 degrees, but it was 65 on the 13th at the same hour, and 64 degrees on the 12th. The wind blew only one mile an hour from 4 to 5 P. M. The mean height of the barometer for May at the College is 27.917 inches; at 2 P. M. on the 14th it was .241 inches below the mean height, there being a sudden fall of .165 inches from 7 A. M. to 2 P. M.

The meteorological conditions for the afternoon of the 14th may be summarized as follows: A still, almost stagnant air, moderately high dew point, and a sudden fall of one-sixth of an inch in the barometer. Yet no one recognized any alarming condition in the state of the weather, and when it was announced that a "cyclone" had passed within four miles of the College, there was a general feeling of surprise,—almost of incredulity.

The tornado first formed near Jones' lake, about a mile northwest of North Lansing. It was seen in its very beginning by Mr. Wood, who says "it formed like a dust whirl, and was not more than a foot in diameter at first. It was blue-black in color and revolved in the same direction that the hands of a watch turn. It was funnel-shaped with the small end touching the ground, and seemed entirely independent of the clouds above it, apparently not touching them at all. It stood still for a minute in the road and then moved steadily to the northeast. As it went on it gradually increased in size and velocity, and the peculiar roaring noise grew louder. Until it struck the De Witt road it did not move any faster than a man could walk, but revolved with great velocity. As far as I could see it, the cloud did not bound or jump from the ground, but seemed to hug it closely."

The statement that the rotation was "with the hands of a watch" at the beginning of the storm must be an error, because the rotation after the tornado was fully developed was in the opposite direction, or "against the sun."

I visited a part of the path of the tornado on Saturday, May 15, and again on Monday with my class in meteorology. The unanimous verdict of the class was that the tornado was well up in all the modern improvements of this storm. We visited the track about three miles from its starting point, examining a large barn demolished by the storm, and the orchards and forests overturned by its fury.

I tried to get the people to describe the tornado in their own language, its looks and movements. Mrs. Shetler, whose barn was destroyed, said "I looked out of the window and when I saw all the trees falling I didn't want to look no more,"—showing the Greek intensity in the use of negatives. Mrs. Crouse said she saw it coming across the fields, a boiling, funnel-shaped column like black smoke, full of flying bodies, branches, boards, leaves, and dust, and moving over the ground very rapidly. "How rapidly? Would a horse running at full speed represent this rapid motion?" "Oh, not at all! When it passed over the house the flames poured out from every crack and opening in the kitchen stove." The Crouse habitation was a little south of the central line of the tornado, and was not seriously injured; the orchard was almost entirely uprooted, and the trees were thrown to the northeast. The east side of the barn roof was torn to fragments, only one rafter remaining. Another barn further south lost the lower half of the roof on the east side.

The destruction by the tornado where it crossed the Downer road, which separates the Shetler and Crouse farms, was mainly on the south side of the centre of the whirl. At this point the destructive influence extends north 80 yards of the centre of rotation, and 275 yards south of this centre were clear evidences of the whirling motion towards the central line. Passing northeast into a large wood lot, the evidence of a wider path, as

shown by the lofty forest trees overturned or beheaded, was readily found, but the south side was nearly twice as wide as the north side.

The east side of the wood lot dips down into a deep ravine. On the west bank of the ravine the trees are piled in together in wildest confusion, thrown in every direction. The impression that they were pulled into a central vortex as the whirling column moved over the still air in the ravine, is convincing.

One man in the track of the storm suddenly found himself surrounded by the dark and whirling mass, with no hint which way to run for safety. With great presence of mind he secured as great absence of body as possible by throwing himself into the roadside ditch, and held himself there by grasping the willow bushes, holding on for dear life. The storm whipped and threshed him soundly for a few moments, but could not lift him out of the ditch, and he escaped unharmed.

The path of the tornado was northeast, and was about eight miles long. But little rain fell with its passage, and there was no electrical disturbance apparent. During the afternoon one-quarter of an inch of rain fell at the College, and nearly an inch the next day. There was a thunder-storm on the evening of the 12th, the electrical disturbance being quite marked, vivid lightning and heavy thunder for some hours, but only one-twentieth of an inch of rain fell at the College.

The temperature fell after the tornado very decidedly. The minimum temperature on the 12th was 52 degrees, on the 13th it was 55 degrees, on the 14th it was 44 degrees, on the 15th it was 36 degrees, and on the 16th it fell to 34 degrees. The minimum thermometer was four feet above the ground.

The most noticeable feature of this tornado is that it appears to have commenced near the ground like a dust whirl, and not to have had any connection with the clouds during its formative period. The moderate fall of the barometer preceding the storm, the absence of extraordinary heat, as well as the moderate rainfall attending the tornado, are matters to be noted.

By the forethought and skill of two members of my class, Stanley and Hooker, six characteristic photographs of the storm-track were secured before "things were put to rights," and the salient features of the tornado obliterated. These show the characteristic features of the storm, the direction of motion on the opposite sides of the track, and the sudden changes of both direction and force in close proximity. These photographs are preserved as reminders of the Lansing tornado.

R. C. KEDZIE.

Singular Disease Among Cattle.

AGRICULTURAL COLLEGE, MICH., June 12, 1886.

To the Editor of the Speculum,

SIR:—During the latter part of last February I was called upon by a prominent breeder in Shiawassee county of this State, to examine an ox which was suffering from a disease which has previously carried off

some other animals upon the same farm, and which was an unknown complaint in the district referred to.

Upon my arrival at the farm I found the animal already dead, but after getting a history of the case, and of other animals, I at once felt that I had a very peculiar disease to deal with; however after making a post mortem I concluded that it was a malignant form of catarrhal fever, and indeed the resemblance to that disease, as described by many writers, was most striking, although some of the symptoms differed from it. Another disease which it closely resembled, is Russian cattle plague, or Rinder pest, at the same time many of the characteristic features of Bovine mucitis, (the name which I give to the disease in question) are very different from that dreadful plague.* In order that the readers of the SPECULUM may recognize the disorder should it visit their locality, an outline of the leading symptoms of it may be interesting.

The first thing generally noticed, is a stiffness of the voluntary muscles, the animal moving with considerable reluctance, or it may be lame, this is accompanied with, or closely followed by rise of temperature, say to 107 Farh., the pulse becomes rapid, about 100 per minute; breathing accelerated and often accompanied with a moan, or grunt. The eyes become glassy, or opaque, and tears are discharged profusely from them. In the course of 24 hours these symptoms become aggravated, the nostrils have a discharge from them, and their lining membrane is much inflamed, sometimes the skin of the muzzle, and even lower lip will appear sore or ulcerated, the lining of the mouth will also become abraded, and froth or saliva may emanate from it in variable quantity.

The condition of the bowels varies, sometimes the fœces will be frequent, fluid, and foetid, at others they are not much affected.

The urine also varies, at times it is highly colored with blood, at others it will be about natural.

The appetite is lost soon after the first symptoms manifest themselves, and rumination is suspended. In about 3 or 4 days, if the creature does not get relief, death usually closes the scene during a paroxysm of convulsions.

In the early part of the present month, I was called upon to investigate this disease officially, as State Veterinarian, and had a very good opportunity to watch its progress in one animal, and may say that the outset, course, and termination, resembled the others which had been previously attacked, in almost every particular; further, I have now had an opportunity of holding a post mortem in two instances, one last February and one last week, and have to say that they both presented, substantially, the same characteristic lesions, *which were inflammation of the various mucous membranes throughout the entire animal economy.* As to the cause of this complaint, I must admit that it is wrapped in the greatest obscurity, but look upon the disease as a zymotic fever due to the presence of a ferment, the

nature and source of which will require further investigation.

With regard to the treatment, I may say it has been most unsatisfactory up to the present, but after the general comfort of the animal has been attended to, would recommend those remedies which are calculated to destroy the germs of such disorders, such as cinchona or its alkaloids, but I think to be of any avail they must be given in the very earliest stage of the disease, but may say further that the limited number of cases which have as yet been brought under my notice have not given me very extensive opportunities for experimenting with the remedies used in such maladies. Trusting that I may be able to speak more encouragingly in the near future as to the cure of the complaint. I am sir,

Yours respectfully,

E. A. A. GRANGE.

Johns Hopkins University.

Though but ten years since first opened to students, Johns Hopkins University occupies a leading place among the universities of the world. Its position is remarkable for one so young but it is the logical outcome of well digested plans and wise guidance.

Johns Hopkins was an eccentric bachelor merchant of Baltimore who left his property of over seven millions of dollars for the endowment of a hospital and a university. The trustees are practically untrammelled by conditions in the ministration of this educational trust and have been free to follow their own ideals. Instead therefore of adding one more to the long list of American "colleges" or so-called "universities" it was determined that the institution should be primarily a *University* with advanced courses of lectures and fully equipped laboratories, with professors of acknowledged eminence, and true scientific spirit. It was intended they should be furnished with an ample corps of assistants, should be freed from routine work and elementary instruction and left to devote themselves to investigation. Men of eminence from all over the world are secured to deliver courses of lectures in their specialties. As a result the University has attracted a gradually increasing stream of students, mature, earnest investigators, graduates of other colleges, who, as well as the professors have given the University the reputation on both sides of the Atlantic, of being the most active and prolific in the world.

Less attention has been paid to buildings than to men and equipment. Much of the work has been, and is still carried on in rented rooms—old dwelling houses. The first two buildings occupied by the University were two dwellings, and are still used. But there are now erected special buildings for the library, and for chemical, physical, and biological laboratories. These are of the best character, and supplied with the best equipment attainable. An excellent gymnasium is also provided for the students.

In many ways the University follows the German customs. Instruction is given almost entirely by lectures. Graduate students are free to attend such lectures as they wish and when they please. In many subjects the classes are very small, from two to six, perhaps. The professor comes in, and almost immediately begins his lecture, and when the hour is up, starts for the door, still talking, and is the first to leave the room. The under-graduate courses are given almost entirely by assistants in the various departments, while the professors confine themselves to graduate students. Of three hundred students present last winter, two hundred were college graduates. Each department has seminaries of special investigation as well as its own society and journal, which is intended to be one of the best of its class.

A series of fellowship and scholarship is given by the University, which carry with them free tuition and a certain sum of money. Fellows receive five hundred dollars per year and have certain duties to perform. Scholars, others than those from Maryland, Virginia or North Carolina receive two hundred dollars.

The libraries number some 30,000 volumes. The students have access to the shelves, which is of itself a great privilege. The library is divided into special libraries to a certain extent, and placed in the different buildings, as mathematics in the mathematical rooms, biology and chemistry in the biological and chemical laboratories respectively. While this arrangement is in some respects very convenient, in others it is inconvenient and the cause of considerable dissatisfaction. Some six hundred periodicals are taken by the library, and several hundred more are accessible at the Peabody library. Books may be drawn, and no limit is placed to the number, but it is expected that the privilege is not to be used except in cases of necessity, and then for short times only.

One very convenient feature of the library is the new book case, where all new books are stored for a time. The library acts as an agency for procuring such books as may be desired. In each new book the retail price and the price at which the library can furnish it, are marked, and thus the student is enabled to see and read the book before purchasing. The latest French, German, and English scientific books are sent by the importers to be placed on the tables for examination and for orders. In these and in hosts of other particulars one is struck with the arrangements, all intended for the convenience of the student, to facilitate his work and stimulate his energies.

The two members of the college who spent the winter vacation there, have occasion to speak in high terms of the University, both for the many courtesies extended and full privileges granted without charge by its officers, as well as for its facilities for study.

Rev. A. B. Baldwin, a brother-in-law of Professor Cook, and secretary State Y. M. C. A. of Iowa, preached here Sunday afternoon and evening, June 1.

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AGRICULTURAL COLLEGE, MICH., JUNE 1, 1886.

THE marking system in our schools and colleges has for many years been a matter of much comment pro and con, and it seems almost too old a subject to be discussed at this time, but action upon the subject taken by our faculty has thrown new light upon it. At a recent meeting, the above honorable body voted that at the discretion of the professor any student with a regular above ninety-five could be excused from examinations. This scheme if put in practice may or may not be a wise one.

At present the way in which students in many classes are marked would render the scheme very injurious to them, for nearly every one would then be enabled to pass the studies with but very little effort. So, under the present condition of things, we do not approve of the scheme.

The marking system is far from being perfect, and imperfect as it is, this scheme would cause matters of too much importance to depend upon it. Some professors hear recitations too seldom to give a student a fair average mark. If the student recites but twice, he is as likely to get zero as ten.

Some professors are too much inclined to be influenced in marking by their personal feelings toward the student. Partiality would be detected and much more trouble brought about under the new scheme than at present. The *resume* of the whole is that the marking is not strictly according to the actual merits of the recitation

and hence can not show the true standing of a student, and so long as it does not do this it should not be relied upon to excuse or not excuse a student from examinations.

If during the term the recitations have been carried on properly, examinations are of very little import after all, for unless they cover a large amount of ground they cannot indicate the amount of knowledge each student has of the subject, and if they do cover much ground, time is seldom given sufficient for one to answer all the questions in a satisfactory manner even if he were able. Generally, the longer it takes to learn a certain principle the more firmly does it become fixed in one's mind. Now if, during the term, all of nearly every hour is spent in lecturing, giving no time for questioning, the average student neglects the study of his lectures till the time of reviews, and then what has been given in ten weeks must hastily be learned in two weeks or less. Cramming for examination is then practiced and the knowledge thus gained is far from lasting. We believe it lies as much with the professor to fix a principle in the student's mind as with the student himself, and this can only be done by severe quizzing on the subject treated of the day before.

If at the beginning of the term it were understood that a regular of ninety or ninety-five would excuse students from examinations and that the professors would be close in marking, and severe and regular in questioning, there would be a strong impetus toward much more studying during the term and a more lasting knowledge of the subject in hand would be the result. Under these conditions we think that an examination would be unnecessary for those having an average of ninety or ninety-five.

THERE are several proposed changes in the SPECULUM, over which we have been and are to-day debating. One is, shall the paper be enlarged and the subscription raised to one dollar, or shall it remain with about fourteen pages and be issued twice a term? For the last two years the College has been making steady improvements. New departments have been added, students are rapidly increasing, and with these additions comes an increased amount of matter for publication. New societies are being formed and these must be represented on the SPECULUM board. If the size of the paper be increased, shall we publish an article from each society every time, or will the societies alternate in furnishing articles?

In a recent issue we spoke of issuing the paper monthly. Since then a new plan has presented itself—

that of publishing the paper twice a term, two weeks from the beginning and three from the end of each term. This would distribute the work so as not to have it come during examinations or just at the beginning of a term, and each issue could contain fresh news in regard to examinations, commencement exercises or any important events to take place at the College.

There being so many societies, rather than to have all represented in one issue, a part could furnish articles for one issue, and a part for the next. But there seems to be much dissatisfaction among the students in regard to these literary articles. Some think they should be left out entirely, while others think they should be much improved. We are aware of the fact that some are published that could rightly pass for common school essays; yet under the constitution each society must furnish an article, and good or poor, it must be printed. We are hardly in favor of excluding them entirely, but wish to see some means devised whereby they may greatly be improved.

If the paper were issued twice a term, and the number of pages did not exceed fourteen, there would be no necessity for publishing an article, good or poor, from each society in order to fill the paper. But by having each society hand in an article to an examining committee, and printing only those having the two or three highest marks, it seems as if the standard might be raised, and the articles be more read than at present.

Let the students and alumni think about this matter, for if anything is to be done it should be done now.

At a recent meeting of the students' organization, the SPECULUM constitution being supposed lost, it was voted to waive said constitution and admit a representative from the Olympic society to take the place of the one from the Natural History.

Inasmuch as the constitution has been found and is opposed to such a change, and inasmuch as the above motions were carried with little or no explanations and no opposition, we have deemed it a hasty and detrimental movement, and so have not recognized it in this issue. It may be proper in this instance to admit a society of six months' standing, but the constitutional precautions against the representation of mushroom societies are wise, and there are no reasons for putting them aside in this case, and so establish a bad precedent. We have no grudge against the new society; on the contrary we wish to see it successful, and reach a high standing among the College literary organizations, but we emphatically denounce the waiving or altering the con-

stitution for the sake of giving any society a public *bolster*. Furthermore it would be next to impossible for a student in any society to furnish the material that is now furnished by the Natural History representative, and this fact alone makes the change entirely injudicious.

AMONG the many habits that should be cultivated during a college course, that of always acting the part of a gentleman is of great importance. It is one which, if rightly cultivated, will ever stand out in bold relief and be of great service to one seeking positions out in the world, or engaged in any business with the public.

Yet important as it is, there are many seeking to cultivate the mind, who lose all sight of cultivating their manners. Many instances might be cited which show apparent ill-breeding or utter disregard for gentlemanly conduct. But that to which we wish particularly to call attention is the disturbing noises made on the grounds during public exercises in chapel. Many are the times when orations, lectures, sermons, or even chapel exercises have been in progress, some students not having enough public spirit to attend, have had enough of some other spirit to remain in the near vicinity of the chapel and sing, yell, or play some musical instrument. These very acts showed that the students committing them either had no manners, or they carelessly forgot that a meeting was being held.

In either case there is no excuse for it and we trust that hereafter every student will prove himself a gentleman on such public occasions.

WE wish to make a few remarks about the office of business manager. With a little examination it will be seen that the duties of business manager are the most unpleasant and onerous of any, yet he apparently receives the least credit. The success of the paper financially depends upon the zeal and spirit which he puts into his work. Subscribers must be obtained, and when they are secured it is no easy matter to collect the subscriptions. We must have advertisers, and their payments must be watched and followed up closely or the paper will fall short of money from that source. Combine with these unpleasant duties, those of mailing the papers, answering correspondents, and keeping straight the accounts, and what more can be asked gratis of one man? Would it not be well to have two business managers and divide the work, that all may be thoroughly done and not devolve upon one man? We wish to find no fault with our present manager, but our subscription list should be much enlarged. Every student should subscribe, out of loyalty to the cause, if for nothing else,

and perhaps by strenuous efforts many alumni and others interested in the College would willingly give their support if their attention were only called to the matter.

THE wheel of time in the journey of the SPECULUM has made one more revolution, and it now becomes the privilege of the present editorial staff to lay down their pens and surrender their chairs to others. We call it a privilege, for certainly it is; yet laborious as has been our task, we fully recognize the valued experience gained. We have publicly put our work before you to meet your approval or disapproval, regretting that more time could not have been put upon it. We desire to thank our many friends for the aid so cheerfully given us in various ways, and the editor-in-chief wishes publicly to acknowledge the hearty and able support he has received from his associate editors. We now take pleasure in welcoming to the position of editor-in-chief, Mr. C. B. Waldron of '87, who, judging from his other college work, we are sure will make an able man for the place. We wish him and his associates all success.

WE beg the pardon of our readers for the tardiness of this issue of the SPECULUM. We are quite provoked to think that circumstances should turn against us at the last moment, but a little explanation may throw light upon the subject. Without going into any details, we will simply state that the treatment received from the former printers, and the dissatisfaction given in many instances, warranted a change in the publishers of this paper. After much delay we have placed the work in the hands of Mr. Thompson, who undoubtedly will do satisfactory work in the future, and who will, to say the least, be a trifle more accommodating. The lack of type and presses that are ordered, and the hurry in printing, will account for any discrepancies in this number.

THE great question now agitating the minds of the seniors is "where are we to hold commencement exercises?" Many are afraid they are to be held in the armory, but as we have heard rumors to the contrary we will not take the space to put forth arguments against using the armory on the coming occasion. We will simply state that unless some changes are made it will be a very undesirable place in which to invite the public.

IT is gratifying to see that among our students sufficient talent has been found to form a good band. Under the leadership of Mr. Wisner, continued improvement can be seen, and we can only hope that the interest of the musicians will not be abated but that they will continue to practice and improve and so be able to furnish some excellent music as occasion requires, especially during commencement.

COLLEGE NEWS.

"Files"

Our last locals.

The gardens look well.

Fun-iors (yers) "kum."

Prospects for fruit, good.

Good bye, old SPECULUM.

An archery club among us.

New pumps at boiler house.

"'Tis hard to say 'Good bye.'"

Boys, try Culver's lemonade.

Let "Prexy's" cherries alone.

How did you spend vacation?

More fun in Agricultural class.

Twelve new students this term.

Commencement will soon be here.

Read the Librarian's library notes.

Ask "Robbie" about his "sour mash."

'86 has "class rings" and "class tiles."

Warm weather is very hard on students.

The State Board meets Monday, June 15.

How bad the lawn in front of Wells Hall.

The Ladies' Reading Circle is flourishing.

The Mechanical shop is full—of farm boys.

Why not have our new catalogues before long?

'87 has a junior suit which is both tasty and neat.

Mumps in College; several new cases at present.

Our foot ball team has had too much airing of late.

Avery, '89, is keeping "bach," in the half-way-house.

Waldron says the seniors are *tile-draining* their pockets.

Ask our worthy editor-in-chief about the pic-nic to Pine Lake.

Who, on "Faculty Row," received a catalogue of *small* carriages?

"Pic-nics," says one of the Profs. "quite as often as frequently."

Bartmess and "Doc" Stryker of '85 were on the grounds June 8.

The boys in the wood shop are working on bee hives for Prof. Cook.

Secretary Reynolds has "grown right up through the top of his hair."

Wonder who took that moonlight stroll on the campus the other night.

Room 13 Williams Hall is headquarters for Culver's "mineral water."

Hereafter all work in the shops will be done from our own patterns.

A new professor of agriculture at Purdue University. Ask us no questions.

Noticed—A senior overworked, from continually brushing his new "plug."

"How beautiful the lawn north of the greenhouse," is the verdict of all visitors.

Prof. Bailey and Dr. Beal rusticated and botanized at Pine Lake during vacation.

Sophomore class-meetings and faculty meetings are the special orders of the day.

Kinnan of '86 has broken the College record on running high kick—8 ft. 2½ inches.

F. C. Davis, '86, has about finished a map of the grounds for our forthcoming catalogue.

Charles, with '88, writes that he too has the mumps, and says "they've got him bad."

The sophomores in botany are making special drawings to exhibit at the State fair next fall.

Thursday and Friday, June 10 and 11, were half-holidays in honor of the Legislative reunion.

The chemical and mechanical laboratories are now connected by telephone communication.

Twenty-five cadets are wearing helmets, as a protection against the burning rays of "old sol."

Prof. MacEwan has charge of College Hall now, and proposes to keep things in first-class style.

The College recently received a large collection of birds, collected and prepared by Hobson of Ann Arbor.

Prof. in Agr. to Soph.: What is the sign of an early spring? *Soph.* (confident): An upturned tack, sir.

D. A. Pelton, D. A. Smith, "Joe" Gladden, and "Doc" Angier camped out at Pine Lake during vacation.

A freshman propounds the following conundrum: "Why does a junior carry a bottle?"—To feed his calves.

Dr. Kedzie reports 75 in elementary chemistry. There are about 150 students at work in the laboratory.

Mr. Stafford, who recently had his leg broken while wrestling, wishes to thank the students for their kindness.

At the next meeting of the State Board, a proposition will be made to make a target range for the use of the cadets.

Fifteen or more students from the Farm Department are working in the wood shop of the Mechanical Department.

Prof. McLouth has repaired the little equatorial telescope and mounted it. He intends using it as a comet seeker.

Our librarian says she spent the daytime of vacation at the College; but insists on remaining silent concerning the evenings.

Mr. Pattengill, editor of the *Michigan School Moderator*, teaches elementary rhetoric to our little freshman class of eighty-five.

Board in the various clubs last term ranged from \$2.00 to \$2.28. Board in "A" was \$2.19, "B" \$2.25, "C" \$2.28, "D" \$2.25, "E" \$2.00.

The steel tools, drills, cold chisels, lathes and tools needed in the shops are all made by the students belonging to the department.

Prof. MacEwan has changed the place of hearing of his classes to class room A in order, as he says, to keep the seniors and juniors cool.

The latest of the season: A box of caramels worth 16 cents, in a box 8 by 9 by 1 in., with best regards, sent Portland, Mich—postage 35 cents.

Mr. Avery has presented a great pike, or maskallunge *Esox nobilior*, to the College and it has been mounted and put in the museum.

A Zoological club has been organized, which meets every two weeks. It has at present 18 active members, the majority of whom are juniors.

Prof. to Senior in Botany: Mr. —, what can you say of orchard grass? *Senior*: Why, Prof., it is a grass which grows in everybody's orchard.

Milton, Burke, Dryden, Pope, Byron, Tennyson and George Eliot are contributing to the culture of the seniors with Prof. MacEwan as master of ceremonies.

Dr. Kedzie will read a paper on "the sources of nitrogen in plants" at the meeting of the Association for the Promotion of Agriculture to be held at Buffalo in August.

And behold it has come to pass that the junior in knee breeches, black hose, and low shoes, with bottle and net, spendeth the afternoons in idle pursuit of the "winged butterfly."

Pror. McLouth has a rousing class of 50 or more sophomores in mechanics. The professor says that he has a very choice and select class of nine seniors in advance astronomy.

Tuesday, June 15, we had a holiday in honor of the State Semi-Centennial; but are not to have any 4th of July. Sad, hey? First glorious fourth we have missed in a long, long time.

Brass casting will be attempted in about four weeks. The policy of the shops is to make the work in every feature as nearly educational as possible. Value of the products will be only a secondary consideration.

The Base ball team practices Tuesday and Thursday afternoons. That's right boys, go ahead, M. A. C. expects much of you. We hope you will prove worthy of the characteristic name, "sluggers."

Public speeches were delivered in the chapel, June 9, by Eldridge, of '86, and juniors Crandall, Deihl, Duffy, Humé, McArdle, and Redman. The orations were all thoughtful, earnest and practical.

A good deal of grading has been done in front of and around our new mechanical hall. Drives have been laid out; walks made, turfing done; and all in all, the approach to the hall is very much improved.

Prof. McLouth preached the Lansing high school Baccalaureate sermon at the Congregational church, Sunday June 13. He will also deliver addresses before the graduating classes at Hanover and Jackson.

The first lathe ever made by the mechanical department is finished, and is a very fine piece of workmanship. It has attracted a good deal of attention from mechanics of no mean ability. It is a 15-inch turrett lathe.

Prof. Cook went to his farm near Owosso during vacation. While there he had his 105-foot barn raised, and a new stone wall put under it. Mrs. Cook and Miss Cook were visiting in Ohio; Bert had to go to see the farm.

About 70 students stayed here during vacation: the great sport was base ball every night after supper. Nichols, '86, played short-stop in a manner which would have done credit to a Manning, a Brouthers, a McCormick or a Bennett.

Avery, '89, stands 5 feet, 7½ inches, and has a record of standing high kick 7 feet 4½ inches. This is 21 inches above his head, which is second best in the State. The best, being 22 inches, was made by a man named Smith of Detroit.

H. G. Jackson, our popular barber, advertises his business by means of a very neat and appropriate card. Boys, give him your work for he certainly deserves your patronage and encouragement; and further, he is a student among students.

President Willits will make application to the Board for the erection of a band stand to be placed just west of the pump near Williams' hall. The place is well suited for it as it can be seen from both Wells' hall and the library building.

"Prexy" has the consent of the State Board to put down a new hardwood floor in William's hall—if the necessary funds can be secured. This will be done before commencement. As it is, the corridors of Well's hall are to be kalsomined soon.

Maj. King and family, will visit Prof. McLouth some time about the middle of June. Maj. King is a brother-in-law of the professor's and is the chief of the seed department of the Bureau of Agriculture at Washington. His son is likely to be in college next year.

Mr. R. W. Edling, '86, has presented the College with two fine lake sturgeons, the scientific name of which is *Acipenser Rubicundus*. They were stuffed here at the College by Charley Cook, and are now to be found among the many curiosities of the museum.

The prospects are very good for a large class in the mechanical course next year. Prof. McLouth expects over 100, and if so, he says the department can only give work on alternate days, even if the class is only as large as the present one which numbers about fifty.

The boys in the machine shops are building four lathes as follows: one pattern-maker's lathe for wood shop, one 15-inch speed lathe for iron shops, one 12-inch engine lathe, six-foot bed, and one 12-inch engine lathe, four-foot bed. All these lathes are for use in the shops.

After bed hours one Junior was heard to say to another:

A May bug has no charms for me,
A lightning bug seems tame;
Our bed bugs have no wings, I see,
But they get there all the same.

Misses Eva Blackman, Jennie Miller, and Elvia Smith of Howell, visited the College during our field-day. Miss Smith is the sister of our popular athlete, B. B. Smith. The young ladies returned to Howell very well pleased with their trip to the College, and have promised to again visit the "Howell boys and other friends," in the near future.

We hear a rumor to the effect that the seniors are to have off the last three weeks of the term. We cannot say how true the report is, but at all events we trust it is so. It does not seem more than right that a senior should have a few days prior to graduating, in which to prepare for that happy event.

The subjects of the commencement orations are as follows: Miss Towar, _____; E. A. Whitney, "Change;" H. N. Jenner, "Our future population;" A. L. Nichols, "The real and the ideal;" T. A. Stanley, "Science in horticulture;" W. E. Gammon, "Unsettled questions in science;" J. B. Cotton, "The commercial spirit of the age."

Class '86, went on the usual geological excursion to Grand Ledge the last part of last term. They secured and brought back to the College several very valuable geological specimens. We understand that the trip was not without its fun at the expense of several of the party; especially is it true of the ones who had a little bathing excursion of their own.

The freshman class in mechanical course is pursuing a course in elementary physics under Prof. Frank Kedzie. Special work is being done in magnetism and electricity. The chemical laboratory has received some new apparatus which has been purchased expressly for the purpose of carrying on the experimental work in physics.

The College base ball team is organized as follows: Manager, E. A. Whitney, '86; Catcher, B. B. Smith, '88; Pitcher, Yerkes, '89; 1st base, H. B. Howe, '86; 2d base, W. E. Gammon, '86; 3d base, Canfield, '89; short stop, Bulson, '88; right field, Cordley, '88; center, Geo. Chase, '89; left field, I. B. Bates, '87. The team has won six games and lost two.

Interest in base-ball is reviving, not only in the sporting world, but in our little colleges, among our students and our professors. One of our most highly respected professors was seen edging his way up to another the other morning during chapel, and after a brief pause was heard to whisper: "Say, doctor, how did the Detroit's come out with the Philadelphias yesterday?"

"Hearing that several members of our esteemed faculty pride themselves on their superior skill in playing ball, the noble seniors do hereby challenge said faculty to a game of base ball to be played on the college grounds before Aug. 1st, the defeated party to furnish ice cream and cake for both, to be served in 'Club B,' at a time convenient to both." A. E. Brown, president.

A local game of base ball was played June 5 between the seniors and juniors on one side and the sophs. and freshies on the other. The sophs. and freshies won by the wonderful score of 20 to 17. The game was very much enjoyed by all present, and many brilliant features were noticed by the scribe of the day. Lack of time and space will prevent their appearance in this issue.

Messrs. Bartmess, Van de Vort, Gilbert, Root, and Dearden of the mechanical department are building for themselves three-horse-power engines. We are glad to hear that so many of our boys are fast becoming skilled workmen, and we trust that the day is not far distant when our graduates from the mechanical department will command as good salaries and as much respect as those from any other institution.

Prof. R. C. Carpenter spent the vacation in Chicago, where he went to attend a meeting of the American Society of Mechanical Engineers. He reports a very enjoyable time. He also visited some of the various machine shops of the city, including the shop at Pullman and Chicago Steel Works. Not satisfied with such sight-seeing, the Professor went to visit the slaughter shops, where he saw more than he had bargained for, as shown by the fact that the next morning the professor was too sick for any use.

Ponder over the following *Botanical Nuggets*, given as mottoes by Dr. Beal to his sophomore class in anatomical and physiological botany last term. The dose was one a day. Read them for they will bear reading: "No real progress can be made in botany till the student has learned to observe."—"Nature begets accuracy."—"A sloven has no business to use a microscope."—"Correct teaching of botany is simply giving the thirsty chance to drink."—"A trained eye is valuable in any kind of business."—"As an instrument of research, the microscope occupies a position second to none."

The officers of the various literary societies for the summer term are as follows: Delta Tau Delta—President, L. C. Bartmess; Secretary, James Wheeler. Phi Delta Theta—President, P. B. Woodworth; Secretary, A. B. Cordley. Eclectic—President, W. R. Rummel; Secretary, Chas. Hemphill. Olympic—President, W. G. Everhart; Secretary, G. C. Clark. Union Literary—President, J. B. Cotton; Secretary, L. H. Dewey.

Dr. Kedzie worked hard during vacation, on the analysis of super phosphates. This is a duty required of him by the State according to the provisions of the new law. The doctor says that he had a vacation one afternoon from noon to 4 o'clock. He went to town. He further states that he analyzed Colorado woods and water also, and that, in a word, his vacation consisted in making himself useful and agreeable generally.

It is said that some of our freshmen, and even sophomores, are getting to be notorious for "running in" the dinners and lunches of pic nic parties to our grounds. We trust that this is a false report, for the reason that we do not believe our boys would be guilty of repeatedly committing this offense. If such is the case, however, we trust that the perpetrators of such deeds will refrain hereafter from so doing for the reputation of fair M. A. C.

While in the shops the other afternoon we were shown two surface plates, each a foot square and weighing 35 pounds. One of the students, Mr. Pagelson, has been working some two months to bring them to a perfect level. The work is not done yet, but to give an idea of how nearly perfect they are, we have only to say that when one plate is placed over the other, it will when raised, raise the lower one with it. The pair is valued at about \$60.

Assistant Secretary Harry Baird visited E. D. A. True of '78, at Armada during vacation. He reports a very enjoyable time. While there he had the pleasure of witnessing the working of a potato planter invented by Mr. True. It is a machine propelled by two horses and operated by three men, and will plant five or six acres per day. Harry said he had the pleasure of riding on it around the field, and thus satisfying himself as to its merits.

President Willits lectured at Litchfield March 19, at Charlotte May 28, and June 11 he delivered an address before the Legislative reunion at Lansing on the subject of the "Schools and colleges of the State," June 15, he delivered an address at the State Semi-centennial on "agricultural colleges and agricultural education for the last 50 years." He also delivered addresses before the graduating classes of the high schools of Portland, St. Clair and Union city.

Dr. Beal and Prof. Pattengill have arranged so that one essay of the freshman rhetoricals shall be on some subject in botany. Dr. Beal has assigned the subjects so that each member of the freshman class will have two specimens nearly alike to examine. This is a move in the right direction. It will give ample opportunity for much original investigation, and therefore more independent thought. It will give opportunity to write essays from nature, rather than from books.

The day after the close of last term the College base ball team played at Greenville. The day was very pleasant, and it was with great expectations of an easy victory that we boarded the cars at Lansing for Greenville; but how vain often are the hopes to which mankind is heir! We reached Greenville; we met; we played; we were beaten. The following is the score: Greenville, 3, 4, 0, 7, 0, 0, 0; runs, 14; base hits, 9; errors, 12. College, 2, 1, 2, 0, 3, 0, 2; runs, 10; base hits, 11; errors 10. Pitchers Avery and Stone; umpire, B. B. Smith. We hope a day can be named that will be both agreeable and auspicious to the Greenvilles, when we hope to be able to return the compliment.

Rooms for new students are being fixed off in the tower of the mechanical building, in the tower of the botanical laboratory, and in the engine house. By this means twelve additional students can be accommodated. It is also intended to finish off the third story of the botanical laboratory and also of the mechanical hall with a view of fitting them for the use of students. President Willits anticipates a very large class next fall, and in view of that fact he has not been asleep to the exigencies of the case. The President intends to make such arrangements as to be able to fully accommodate 100 more students than the average class enters. What his scheme is we do not know; its workings will be an item for the next year's news gatherer.

Wanted,—a guide for visitors to the college. Say, have you noticed the many good looking damsels who have visited the college? Too bad we haven't a guide to show them around, for it would save so many of the boys from putting themselves to that trouble. W. H. Clemons is said to be the best guide for all good looking "school marms;" Waldron, however, claims excellence in this respect. To make a long story short, we ought to have a regular guide for this purpose.

Among the many flattering notices received from the press by the botanical department of this College, we notice the following: "The botanical department of the Michigan Agricultural College rejoices in the most imposing building especially erected for botanical instruction in the country."—"This laboratory has long been noticed for the observant and independent work of its students."—"Dr. Beal sets all his students to work, and the results of their observations form no mean contribution to botanical science."

All the old officers of the mechanical club were re-elected at the close of last term. For the two June meetings the following is the program: Steam engine indicator, Mr. Wiseman; Wm. Murdock, B. B. Smith; Robert Fulton, R. J. Cleland; Screw Cutting, W. E. Gilbert; Manufacture of Steel, R. C. Carpenter; Welding, W. B. Travis; Pattern Making, E. E. Graham. The society meets in the mechanical building the second and fourth Friday nights of each month. Everybody is cordially invited to attend.

Prof. Bailey is one of the five botanists selected by the State of Minnesota to make a botanical survey of the northern part of that State. The party will go by steamer to Duluth, July 14, from which place they will be conveyed by wagons to the uncivilized territory in the vicinity of Vermillion lake. From three to five weeks will be necessary to complete the trip, but Prof. B. thinks he will be obliged to return in four weeks, at the latest, as his presence here will then be very much needed. The SPECULUM wishes him a pleasant journey, and hopes he may return with a sound body.

A College foot-ball team has been organized with J. B. Cotton as manager. The following are the members: 1, W. C. Sanson, captain; 2, J. A. Thompson; 3, G. M. Van Atta; 4, J. C. Stafford; 5, A. B. Cordley; 6, L. H. Colburn; 7, J. W. Hirkson; 8, H. L. Chapin; 9, Guy Arnold; 10, W. K. Clute; 11, Herbert Thurtell; 12, W. C. Clark. A very neat uniform has been secured, thereby enabling the team to make a very fair appearance. And taking into due consideration the fact that we never before had an organized team, and also that little attention has ever been given to foot ball in this college, we cannot but feel proud of our infant organization even in its hour of defeat.

We are indebted to one of our most trustworthy sophomores for the following report:

AGRICULTURAL COLLEGE, JUNE 7, 1886.

FACULTY.

Per cent. of attendance at chapel during the past six weeks: President Willits, 97 2-9 per cent.; Prof. Abbott, 00 per cent.; Prof. R. C. Kedzie, 13 8-9 per cent.; Prof. Cook, 38 1-3 per cent.; Prof. Beal, 38 1-3 per cent.; Prof. Carpenter, 16 1-3 per cent.; Prof. Johnson, 75 per cent.; Prof. MacEwan, 97 2-9 per cent.; Prof. Grange, 2 7-9 per cent.; Prof. Bailey, 52 7-9 per cent.; Prof. McLouth, 50 per cent.; Lieut. Lockwood, 00 per cent.; Prof. L. G. Carpenter, 69 1-2 per cent.; Prof. F. S. Kedzie, 00 per cent.; Secretary Reynolds, 94 7-9 per cent.

Some of the mechanical boys are already building air castles for the future. A crew consisting of Bartmess, Perrigo, Baird, McDonald, and Chamberlain, is only awaiting the completion of Mr. Bartmess's engine, when a little lake boat will be fitted out, and laid aside for next vacation, and as soon as commencement is over and the summer vacation is at hand, this "jolly band of College boys" intends to float that little creature on the bosom of Lake Erie. Not content with that merely, they intend to go up the lakes to Port Huron, then on up through the Straits of Mackinaw, and into the broad waters beyond. Thus will they while away the short vacation. Amidst so many pleasant circumstances, among picturesque rocks and charming scenery, vacation to them will be as a bright summer's day, whose evening breeze wafts over the stilled waters, the notes of that dear old song: "We are a band of jolly college boys."

Our College band deserves much praise; Mr. Wisner is leader, and certainly possesses the qualities of a leader, for he is *all* music. At present the organization numbers fourteen pieces; and one, tho' little versed in music, can notice a marked improvement in its playing. Mr. Wheeler has been selected as drum major, and is just the right man in the right place. Since the military department has come to stay we have more use of a good band than ever before. And therefore we hope that the earnest, untiring spirit of hard work, now so plainly manifest, will ever continue to keep the organization in a healthy, growing condition.

On Thursday, June 10, the senior table of club B challenged the sophomore table to play a match game of ball for the ice cream for the club. So after supper of the same day the game was called. It was a brilliant game! Please notice the following score. It shows that the senior class still holds the championship, and can fly the pennant as long as she remains in College. All hail the victorious seniors. Score: sophomores, 0, 0, = 0; seniors, 2, 18, = 20. Game called at end of second inning on account of darkness. The umpire was exceedingly nervous, often being double in his decisions. He ('twas Canfield) came near being mobbed, and had to flee to the hall to save being taken to the river and drowned. The sophomores who were beaten were Staley, Learned, Perrigo, Smith, Hirkson, Palmer, Mayo, Hubbell, and Harrison. The triumphant seniors were Howe, Edling, J. Clemons, W. Clemons, Stanley, Whitney, Launstein, Nichols, and Cotton.

Roster, M. A. C. cadet corps: Colonel, Lieutenant J. A. Lockwood, 17th United States Infantry; adjutant, W. K. Clute. Company A—Captain, W. A. Kinnan; lieutenant, W. K. Clute; 1st sergeant, I. B. Bates; 2d sergeant, Wm. Sanson; 3d sergeant, C. H. Judson; 4th sergeant, ———; 1st corporal, J. J. Benjamin; 2d corporal, Guy Arnold. Company B—Captain, F. C. Davis; lieutenant, W. S. Launstein; 1st sergeant, R. W. Edling; 2d sergeant, W. H. Clemons; 3d sergeant, F. L. Wriggelsworth; 4th sergeant, H. B. Howe; 1st corporal, Chas. Whitmore; 2d corporal, C. L. Himebaugh; 3d Geo. Gladden. At the competitive drill not long since, between companies A and B company B carried off the honors. Captain Appleyard of the State militia did the marking. Out of a possible 1,200 on twelve movements, Mr. Davis's company made a total of 1,110, while Mr. Kinnan's company scored 1,090—only 20 less. After rendering the decision, Mr. Appleyard complimented the companies on their efficient drilling.

A four years mechanical course has been duly organized. During the last two years, French or German will be given. The taking of either of these will however be optional. The intention is not to offer these two languages till the department gets a junior class, which will not be for a year after the opening of our next college year. It is to be lamented that we can't have French and German, or Latin and German in our curriculum. Give us some Latin or German and less light studies, and we will show you better results. We hope all concerned in the management of the college will sooner or later see the practicability of such a scheme. Let us have an agricultural course, a general scientific course and a Latin scientific one. By this means the college, would double its number of students, without injuring its name and usefulness as a "*farmer's college*" or without lessening the number of students in the said agricultural course.

It is a notable fact that towns which have colleges near them are always willing to aid the boys in their sports. Undoubtedly is this true at Albion, for the committee on field day there, informed your scribe that the business men of Albion gave them over \$200 with which to buy medals and mementoes. But there is one marked exception to this rule, and that exception is Lansing. It is a fact undisputed, that the people of Lansing oppose every move made by the College and the College boys. One would think that the business men of Lansing, when they come to consider the amount of trade the College boys bring to the city, would be more liberal and more accommodating. It is only fair and just to say that some of the business men have done the right thing by the boys; and you can note right here that the boys know how to appreciate a kindness every time. We can not account for this state of affairs; it can not be because the boys are rude and unmannerly, for in our opinion, no city ever had as quiet a lot of college boys in its midst as Lansing.

Prof. L. H. Bailey has received a call to the position of botanist in the Wisconsin University. The offer is very flattering, and considering all things, is very tempting to our professor. However, we hear it rumored that he will not accept, and we certainly hope that the rumor will prove true, for in the event of his leaving, the College would have a vacancy not easily to be filled, and the consequent set back to the many progressing improvements and valuable experiments in the horticultural department would be very damaging. We trust Prof. Bailey will see fit to remain and carry on the good work.

Thursday, June 10, the newly-organized base ball club of Lansing came out to the College to do our "sluggers" up. We hear that this new team is the pride of Lansing, and that it had intentions of getting the Detroit league team to give them a trial game. It happens, however, that they met the "Agricultural College Invincibles," and returned home with shattered hopes and ruined prospects. Our boys were in fine shape, and went into the game with a fixed determination not to let a "Capital City" man cross the plate. The work of our team was brilliant. Ask the boys how "old Uncle George Chase" batted the ball for three singles, one two-bagger, two three-baggers, and a home run. Get them to tell how "old Howe" made a two bagger, and two three-baggers. Did you hear how the boys cheered when in the first and sixth innings, with a man on third and one on second, Yerkes and Gammon struck out three consecutive men in each inning. Come again, "Capital City," and be sure to bring some players with you. The following is the score:

Capital City:—

	A. B.	R.	B. H.	T. B.	P. O.	E.
Costegan, f. b.,	3	0	1	1	7	2
Jones, r. f.,	3	0	1	1	0	2
Black, p.,	3	0	0	0	1	7
Watson, c.,	3	0	0	0	8	10
Bennett, t. b.,	3	0	0	0	0	7
Smith, s. b.,	3	0	1	1	1	4
Collins, s. s.,	3	0	0	0	1	2
Manley, c. f.,	3	0	1	1	2	1
Tooker, l. f.,	2	0	1	1	1	1
	26	0	5	5	21	36

College:—

Chase, c. f.,	9	17	7	15	1	0
Yerkes, p.,	9	4	2	2	0	0
Gammon, c.,	9	5	7	7	12	0
Howe, f. b.,	9	6	3	8	7	0
Smith, s. b.,	9	4	2	2	0	0
Cordley, r. f.,	9	8	4	7	0	1
Bates, l. f.,	9	7	4	6	1	0
Canfield, t. b.,	9	8	7	7	0	0
Bulson, s. s.,	9	4	2	3	0	1
	81	53	38	57	21	2

Innings:—

Capital City,	0	0	0	0	0	0	0	=	0
College,	10	10	7	5	10	2	9	=	53

Earned runs, College, 15; home run, Chase; three-base hits, Chase 2, Howe 2, Cordley 1, Bates 1; two base hits, Chase 1, Howe 1, Cordley 1, Bulson 1. Passed balls, Gammon 1, Watson 9. Wild pitch, Black 1. Base on balls off Black, 4. Struck out, College 10, Capital City 1. Time, 2 hours 30 minutes. Umpire, McColloch.

OUR FIELD DAY.

Our field day was held Friday and Saturday, May 14 and 15. All the early part of the week the weather had been very good, not even a cloud was to be seen to obscure its brightness. Filled with bright hopes for the morrow, everyone watched eagerly the dawning of that week, and the rapid passing of its days. On the evening prior to the opening of the day of the contest, all eyes were turned toward the morning with the hope that it too might be all that one could desire. And in that hope we were not disappointed, for Friday morning was indeed a pleasant one. About seven in the morning the delegation from Olivet College, numbering about 30, arrived. A hearty welcome was given them, and they were soon hustled off to the various clubs in search of the wherewith to supply the "inner man."

The forenoon was spent by us in classes, as Friday was only a half holiday. The boys from Olivet spent the day pleasantly in visiting the various classes, examining the College stock, and in rambling about the grounds.

After dinner the sports began in earnest. The game of base ball between Olivet and the home team was called at one o'clock, with the Olivets to bat. The first four innings the game was very interesting, and very nice work was done by both nines. During the progress of the fifth inning, it began to rain, and time was called for three-quarters of an hour. During the progress of the shower all adjourned to the drill hall where the time was spent pleasantly in introducing visitors and talking over college times. At 3:15 game was again called, and then it was that the "big Agricultural College sluggers" got down to business. It was during the fifth inning that they ran in six scores, evidently seeming to want it all their own way. From this time the game was without any special interest, as the home team had too much of a lead for Olivet to again overhaul them. The game was called at the end of the seventh inning in favor of our home team. The following is the score: Olivet, 1, 0, 2, 0, 0, 0, 0, — 3; College, 1, 1, 0, 0, 6, 1, 2, = 11. Umpire, Douglass. To base on balls, Olivet 2, College 1; errors, Olivet, 3, College 2; time of game two hours.

According to the programme, the foot-ball game was next in order; but rain having evidently been postponed during the early and unimportant part of the week, now began to fall with such a dampening effect, that the game was postponed until the following day.

Early in the evening the visitors from Albion arrived,—a good-looking crew of about 35. After supper the College band gave an open-air concert which was much enjoyed by all. The evening was spent in various ways, too numerous to mention here; but if you desire to know, ask the Albion and Olivet boys and they will doubtless tell you. Telling college yarns, singing old-time songs, and playing banjos seemed to be the principal features of the evening.

Saturday morning was anything but promising, anything but encouraging; sports, however, were begun at 8:30 in the armory. In light weight side-hold wrestling Welch was the winner, throwing John Clemons twice out of three times. The light weight collar-and-elbow wrestling between B. B. Smith and Mr. Arkins of Olivet was, after half an hour's hard work, called a draw. "Old Needham," the College John Sullivan, found no opponent, and therefore was permitted to wear off a medal in peace. The standing broad jump was won by Yerkes, his record being 11 ft. 11 in. The running jump was won by Mr. Van Loo of Albion, who leaped 18 ft. 6 in. The running hop, skip and jump was also won by the last named gentleman. The running high kick found Mr. D. B. Waldo, of Albion, a former M. A. C. boy, and Kinnan, opponents. This contest was very close, but Kinnan succeeded in carrying off the memento, his score being 7 ft. 11. Avery won the standing high kick with a score of 7 ft. 4½ in. In the 100 yards dash Mr. Van Loo of Albion won the medal, Hemphill being a good second. During the forenoon the postponed foot ball game between Olivet and our boys was played. Inasmuch as the time of the games was limited, it was necessary to cut down the time for the foot ball game; hence two twenty-minute halves were played, in each of which Olivet secured four points to our none. The game was called at 10:30 in favor of Olivet by a score of 8 to 0. At 1 o'clock P. M. the base ball game between Albion and the home team was called. From the very start the game was a walk-away for our "sluggers," and the Albions were much in danger of being shut out, when a little innocent error of the catcher in dropping the ball just over the pitcher's head let in Albion's one score. Game was called at the first half of the seventh inning with a score of 16 to 1 in our favor. Umpire, McCulloch.

The threatening attitude of a youthful cyclone, followed by rain prevented, in fact *saved*, our foot ball team from getting a merciless pounding at the hands of the "Albion Rugby kickers."

Owing to the inclemency of the weather a good many sports had to be postponed indefinitely, among which were the tumbling and horizontal bar performances, sparring, sack race, tug of war between '88 and '89 class, relay race, and dress parade. Though the visitors voted our field day a success, it was not all that we desired. Had the weather been favorable a much better time would have been

had. We were very much honored by the presence of such jolly good crowds as came from Albion and Olivet. Our field day could not have been a success without the presence and manly efforts of both. We feel that this friendly meeting of college and college at field day contests does much real good. We know that it tends to foster a feeling of brotherhood which should exist in all colleges. The trials of skill tend to invigorate and elevate all concerned. Albion and Olivet, come again. Another year the Agricultural College intends to make it still more pleasant for all her field-day visitors. It is well for us to meet in friendly but spirited contests, for are we not "co-workers in the one and the same vineyard."

ALBION COLLEGE FIELD DAY.

It was our pleasure to be able to attend the Albion College field day, held June 4 and 5. Having been excused by our worthy faculty, sixty-four M. A. C. boys took their departure on a "special" train (an old way freight with an extra coach), for that pretty little city of Albion, with its pretty surroundings, its fine college, her fair daughters and friendly sons. The journey there was indeed a happy, a dusty, and a jolly one. It is strictly correct to say that there was not a single part of that whole train, but what was taken possession of, and occupied by, fun loving, innocent looking and earnest working (?) M. A. C. boys. With a "jolly band of college boys," time indeed is short; and the two hours' otherwise tedious ride was soon over. Ere long the steeples of Albion loomed up before us, the engine whistled, the brakeman "set" the brake; the cars jolted along, and bumped up against each other; the steam was turned off, the train stopped, and we stepped off to grasp the hands of friends. After hearty greetings with the members of the committee on entertainment, we were headed towards the rooms of the latter. Across the road and down the sidewalk we went; what a vast army! *Sixty five!* The Albion people no doubt thought they were taken; well no, not exactly, we were taken—and assigned lodgings for the day and the morrow.

Soon after arriving, and after getting a four o'clock dinner for one of the boys, we prepared our foot-ball team for "that sacrifice." Was it a *sacrifice*, my dear? It was a *sacrifice*. It was, in short, a defeat, an ignominious defeat. Hadn't you heard about it? Queer, its Albion's talk. Score, 79 to 0, in favor of Albion. Well, don't feel bad, we're only *infants* in that sport anyhow. We won't wear the belt this year.

After tea we strolled around the campus and were very highly entertained by the college band. At 7:30 we were escorted to the society halls and introduced to the "fair ones." After an hour's pleasant chat, the gay gathering was called to order by Mr. Springer, the president of the athletic association, and we were favored with a short but excellent address on "Athletics in colleges," by Mr. Gulick, of Jackson. This was followed by a violin duet, rendered very admirably by two young ladies. A short toast was then given on "The Agricultural College," by J. B. Cotton, followed by a toast on "Athletics in the Agricultural College," by E. A. Whitney. A clarinet solo by "Stub"—(what's his other name?) was received with much applause. Prof. Taylor of Albion ably and eloquently replied to the toast "Albion College," and last, but not least, W. C. Van Loo, in his happy manner, told us that the ladies of Albion are the best in the world, and as an evidence of his oratorical power we have only to say we believed him. After this we "toasted the inner man" to ice cream, cake, and lemonade. In a word the reception was a grand success, and the many kindnesses of the evening we are ever grateful for. We shall ever treasure up pleasant memories of that happy event. We have all honor for the "fair ladies of Albion" for the way in which they entertained the bashful, (?) diffident, blushing farmer boys of M. A. C. So passed the evening of our stay at fair Albion.

Morning dawned as bright and fair as morning ever dawned; yet in a short time it clouded up and rained,—*yes rained*; but the clouds rolled by, and all was fair and lovely again. At 8 o'clock the games were called. Yerkes carried off the medal in putting the 21-lb shot. His score was 24 ft. 9 in. Sanson won the memento by throwing the 14-lb sledge 31 ft. 6 in. In heavy-weight wrestling Needham, as in our own field day was his own opponent. Our light-weight wrestler, B. B. Smith, got away quick enough with his opponent, and hence took away a memento. Van Loo of Albion won the 100-

yard dash. Albion's long-distance runner, F. C. Snell, carried off the medal for the half-mile run. In the last two sports our boys offered no opponents.—we never could run. In the hitch and kick contest Messrs. Waldo and Kinnan again met, and after quite a contest, Kinnan again came out best with a better record than ever before,—8 ft. 2½ in. The running jump was won by Van Loo of Albion, was also the best at running hop, skip and jump, and standing hop, skip and jump. The standing broad jump was won by Yerkes who leaped 12 ft. 3¾ in. Waldo of Albion won the running high jump. In the boxing contest, light weight, B. B. Smith carried off the honors; while in heavy weight boxing Gale of Albion was clearly proven to be the champion. In the standing high kick Fisk of Albion and our "kicker" Avery were the opponents. Avery got the memento. The dinner bells began to ring, and the forenoon contests were at an end.

After reflecting on the base ball game at our field day, and duly considering our determination to return the compliment received in foot-ball, Albion concluded to give us the base ball belt without a contest providing we would play an exhibition game with a "picked nine" composed of three Albion-College players, three from the club in the city, and three from Jackson and Ionia. So after Albion threw the base ball farther than we did, the base ball game was called. For an innings or two our boys had things all their own way; but they finally concluded that there wasn't much at stake, so they let Albion run up the score till the game stood 9 to 4. Then the "sluggers" got down to work, and *they worked*, and *we shouted*; but after four runs had been made, somebody, getting alarmed over the near-approaching train time, struck out (third man out), and the agony was over. Score 8 to 9 in favor of the picked nine at close of 4th innings. We have no apology to offer over that defeat, no regrets to express, we cheerfully accept the result, let the credit go where it will. It was now train time, and all was hurry and scurry for the train. At the depot the boys committed the unpardonable offense of firing the base ball and foot ball managers (tiles, satchels and all), into the cars through the windows. Happily no ribs were broken. Soon the deep, sonorous "all aboard" was heard, the bell rang, and the train rolled away towards Lansing, leaving the "fair" and the "friendly" behind in all their glory. As a summary, we had carried away with us the prizes in ten out of the seventeen contests.

Thus ended our trip to Albion. To many of us it was our first visit, we fondly trust it will not be our last. We are only too happy to thank Albion for the hearty reception which she gave us. It will ever be our endeavor to return her compliment in the future as best we can. We feel that it was good for all concerned that college should meet college on the arena of field contests, and too, the ladies of Albion have a place in the hearts and memories of our boys. We trust, that as field days come and go, the intercourse between Albion and M. A. C. will ever tend to foster a more brotherly concern in each other's weal or woe. And to this end, let us look forward into the future.

We are sorry to state that the class-room in the botanical laboratory is, in summer, the most uncomfortable of any on the grounds. The building being of wood, becomes more heated than the brick buildings, hence the necessity of using every means possible to allow free access of air. There are plenty of windows in the room, but so few can be opened that the result is very unsatisfactory. If all the windows, especially the south windows, could be opened, we venture to say that the students would find it very much more comfortable.

As our very last editorial work, we desire to testify in favor of the rapid strides at advancement this College has made since first we entered her classic halls. *Then she was at the low water mark. Now she is nearing the high water mark.* May it be a high one towards which she will always be striving. In every department, marked improvement is noticed. In many ways has she been strengthened. M. A. C. has a bright future before her. She has a mission to perform, an obligation to pay. In the still of night, she hears a voice from the Future, imploring her to be true to her sacred trust. May coming years show that '86 went forth into the world

fully prepared for life's battle—for defeat or victory. May it be '86's privilege to look back with pride on her "Old Alma Mater."

The *student* loves to know the golden page
It brings him near the past of ev'ry age.
Lo! in these garbs the master men of time
Walk with, and teach him all things, Divine.
To him who thus with books doth oft commune,
There is no hidden Past; the silent tomb
Of Plato, breaks away—reveals the living man,
Who taught much truth to all that Grecian clan.

Turns he one page and sees there is no Past;
With awful fire, his pale cheek grows at last.
Before his sight there seems to rise to view
Yon walls, yon halls, yon streets that seem anew;
Ah, canst be true? They live who lived before;
Turns o'er one page, and lo, Rome lives once more!
And, too, the noble Cæsar lies in state,
And Anth'ny pleads to stay the traitors' hate.

The time to part is nigh,
Good bye, "OLD SPEC." good bye.

Library Notes.

The linoleum is on the floor at last; it furnishes the room quite handsomely.

The bill for a set of Linnæan transactions has just been received from Europe.

Four hundred bound volumes have been placed on the shelves since the opening of the spring term.

The Secretary of the Interior takes the duplicate documents in our library and sends us in return such ones as we need to complete our sets; the exchange is made with any college or individual, and the plan is a good one; any housewife having store-rooms and garrets full of public documents of which she would be relieved, has only to send her name and the number of volumes to spare, and she will receive the little card which will take the books to Washington free of charge; and they may be the very books we want on our shelves, so send them along.

More shelf room is the next thing we shall have to ask for.

PERSONALS.

The Editor of this Department desires the earnest co-operation of the alumni in aiding him to fill these columns with interesting items. Give occupation since graduation, what offices held, whether married or not, etc. Let this receive prompt attention from every alumnus.

C. E. Clark, '81, is married.

Bert. Woodmansee, with '87, married.

H. A. Haigh, '74, goes to Europe in three weeks.

Joseph E. Coulter, '82, is in the new Lansing wagon works.

W. O. Fritz, '77, is at College taking a post graduate course.

Glenn Smith, with '87, is teaching in the Portland high school.

Walter Ross is book keeper in John Webber's bank Portland.

J. O. Horton, '76, is at present engaged in farming near Owosso.

E. D. A. True, '78, was at the College to help celebrate field day.

Donald McPherson, '74, was recently married at Carlisle, Penn.

Prof. Latta, '77, reports a young, but promising assistant at his home.

F. B. Dickerson, once with '72, is publishing a new book by Miss Cleveland.

J. M. Hollingsworth, '82, has left Michigan and gone on a farm in Illinois.

C. L. Grimes, '84, is actively engaged in the establishment of Good Templar lodges.

Miss S. E. Wood has finished her course of study at the Harper Hospital, Detroit.

E. T. Gardener, '85, is principal of the Ryerson public schools in Muskegon county.

Clark Eldridge, '83, will graduate this fall, in medicine, at Dartmouth College, N. H.

W. L. Carpenter, '75, visited the College last week while in attendance at the supreme court.

Charles D. Phelps, '81, has removed to Manton, Mich., where he is engaged in the furniture business.

Eugene Gregory, '86, has not gone to Europe as has been reported but is now engaged in teaching in New York State.

John F. Mathews, '83, has removed to Ithaca where he is practicing law. His friends say he is about to be married.

Charles W. Gammon, '79, is largely interested in a gold mine in Mexico. He is in active business at San Francisco.

Bert Campbell, with '84 for a time, is now in Williamston in the drug business, a member of the firm of Hanlon & Co.

Charles Goodwin, '75, has sold his farm at Bennington, Shiawassee county and removed to a farm at Burns in the same county.

We are in receipt of a programme of the East Huron Teacher's Association, by which we learn that Chas. W. McCurdy, '81, is their president.

Prof. C. C. Georgeson, '78, has arrived at Japan and entered upon his duties as professor of Agriculture and likes it very much as far as he has got.

E. E. Vance, '84, is running his father's farm. He is as active in base ball matters as when in college, and is running all the clubs of Clinton county.

Rev. A. B. Peebles, '77, preached at the college last Sunday, June 6. He has been spending a few weeks among friends in the east, but is now on his way home.

W. F. Langley, '82, has procured some bees. Says that the care of them mixes well with teaching. He spends his odd hours to good effect in botanizing with his wife.

Lieutenant J. P. Finlay, '73, has just been the recipient of one of the most flattering honors. He has been made a Fellow of the Royal Geographical Society of England,

C. B. Collingwood, '85, has just closed his school year at Pewamo. He frequently makes a run down to M. A. C. Will spend a portion of the summer at his home in Boston, Mass.

O. C. Howe, '83, was married on Wednesday, April 14th, to Miss Jannie Long, both of Buchanan. Mr. Howe is still extensively engaged in handling sheep, which he finds very profitable.

A. C. Redding, '83, has just closed a very successful term of school at Hamilton, Allegan county, and is preparing to enter upon his duties as professor of chemistry in Findley College, Ohio.

W. E. Hale, '82, has taken the advice offered in our October issue, and taken unto himself a better half. It is very evident that '82, accepts the doctrine that it is not good for man to live alone.

Elmer McArthur, for a time with '82, is in the insurance business. at Charlotte. He lately lost his oldest child a boy of about two years old. His remaining child is a girl of about seven months old.

H. C. Brown, with '86, of Allegan has expended some \$5,000 in fixing up his large flouring mill at that place. If you do not find him at the mill look for him on the street pulling the reins over one of his 2:30 horses.

President C. L. Ingersoll, '74, has finally decided to remain at the Colorado Agricultural College, notwithstanding the much greater salary offered him by the board of the new Australian college if he would become its president.

L. A. Buell, '83, is thought to have discovered his true calling,—a grave business. He is driving a hearse at Minneapolis, Kansas. Is overrun with business; the people no doubt are in sympathy with his work and dying off to please him.

"Died, in the city of Shreveport, La., on May 12, at 12:30 A. M., of Pneumonia, Lois Rosett Delano, aged 5½ months, the only child of Mr. and Mrs. W. S. Delano."—Shreveport Daily Times. Readers of the SPECULUM will remember W. S. Delano as a member of the class '81, and now in the signal service, stationed at Shreveport, La.

F. A. Gulley, professor of Agriculture in the Mississippi Agricultural College, is attracting great attention to his branch and securing many students. His reports on experiments with ensilage have influenced many farmers to give it a trial.

In a letter recently received from James J. Jakway, three years with '86, and now in California, he says that he will return to college to graduate with '87. It is the earnest wish of his many friends at M. A. C. that he may not change his mind.

Charles Bush for three years with '83, and since then a graduate in the Literary course at Ann Arbor is now in charge of the stock department of a railroad in Kansas at a large salary. He will soon go to Georgia in the hire of the same company and in the same capacity.

Arthur F. Kinnan, '83, has engaged for another year as principal of the Fenton high school. Some believe that he is about to fulfil a more important engagement there at Fenton, compared with which the one given is only of trifling importance.

H. L. Avery, '89, has been in 90 contests for standing high kick and never been beaten. During our last vacation he contested the high kick with Henry H. Zimmerman, Canadian champion at Sarnia Ont, and was successful. Avery has a record of 21 inches above his head.

Prof. W. W. Daniels, '64, of Wisconsin University, we are very glad to learn is recovering from the poor health with which he has some time been afflicted. He attributes his recovery to his having purchased a farm near the University where he spends a portion of each day at work in the open air.

D. J. Stryker, '85, has returned from Iowa, and is now in company with E. A. Bartmess, '85, working some of the counties of Michigan for an anatomical study designed for the use of instruction in anatomy and physiology. The study is a most ingenious affair and the boys are reaping a rich harvest.

Ye editor lately visited Erwin N. Ball, '82, at his home in Hamburg. He and wife have started house keeping in a part of his father's large and commodious house. The large farm of six hundred acres is a well regulated and equipped stock farm in every respect worthy of the reputation it bears in the State.

E. M. Preston, '62, has lately presented the museum with a fine collection of opalized or silicified wood. Prof. Cook pronounces it one of the finest that he has ever seen. Mr. Preston also sends a large collection of ores, so selected as to illustrate all the conditions and stages of gold, from mine to the mint.

D. B. Waldo, once with '85, was present at our field day on May 15th and took part in the sports, entering the contest for highest kick. He was present at the meeting of the Natural History Society on the previous evening and favored the society with a very entertaining talk. Waldo is a member of the Junior class at Albion.

In looking through a catalogue of the Portland Business College, located at Portland, Oregon, we find the name of our old friend F. R. Osborn along with those of the faculty. Fitz is professor of the actual business and banking departments in the above institution. When at M. A. C. he was a member of '85, and when in the sophomore year was honored by the students with the editorship-in-chief of the college SPECULUM.

F. A. Bush, with '86, made the College a short call on Saturday, May 28. He has not yet forgotten the stirring scenes in which '86, figured largely in the fall of '82, and relates them with dramatic force, nor forgets the tragedy which was not always wanting in that period of '86's life. He is now reporting for the Detroit Trade Journal, and incidentally, as occasion offers, looks after the welfare of the salvation armyists.

We have received a letter from "Kid" Walton, with '86, in which he pleads not guilty to the accusation brought against him in our last. He says, "Most emphatically I am unmarried." "Kid" is in business at Three Rivers, in partnership with his brother, they having been established by their father with a \$20,000 stock, all paid for, and everything in good shape. He says he will be in Lansing during commencement if he can possibly get away from a very pressing business.

J. R. Newton, '85, finds work plenty on his father's farm at Pendleton, S. C. Since going home he has arranged the farm into permanent fields, tile drained thirty acres of land and put in 500 rods of ditch. He finds plenty of opportunity to keep up the spirit of study by entering into the work of the farmers' club, the Sabbath school and the church. Also finds time to work some for the S. C. Agricultural college and write for the home papers.

Miss Carrie M. French, '86, of Lansing, has been obliged to quit college on account of poor health. Although now considerably recovered, her physician has forbidden her returning to her studies this year. Miss French was a brilliant student and was honored with a position as commencement orator. In her leaving college, '86 sustains the loss of a most worthy member, but trusts she may make a complete and speedy recovery, and graduate next year.

COLLEGES.

The library building at Columbia cost \$400,000.

There are 78 cadets in the graduating class at West Point.

Hillsdale College has recitations Saturdays instead of Mondays.

Gymnastic exercise is now compulsory at the University of Pennsylvania.

Blackburn University is to be represented at the Inter-Collegiate by a lady.

The freshman class at Oxford is said to number 610; that at Cambridge, 865.

Only eight of New York's 36 representatives in congress enjoyed college training.

Rev. James W. Taylor, a graduate of Rochester, has accepted the presidency of Vassar.

At Lafayette, five points are deducted from a student's grade if he is found guilty of profanity.

A law library, containing about 4100 volumes, has lately been purchased by the Cornell University.

The North-Western University, of Evanston, Ill., has received a gift of \$50,000 for a hall of natural science.

President McCosh declares that he has averaged ten hours of study a day throughout his professional life.

Three mountains in California receive their names from members of the Yale faculty: Mounts Dana, Whitney, and Brown.

Of the eight principal colleges in the United States, the only one advocating a protective tariff is the University of Pennsylvania.

Dartmouth College has received a scholarship of \$4,000 on condition that no student who uses tobacco shall receive any benefit from it.

It is claimed that over 1,700 college students have been converted during the year, and that there are 2,270 candidates for the ministry in various colleges.

The graduating class at Hillsdale leave a memorial on the campus that will be one of its chief ornaments,—a large fountain, the total cost of which is \$300.

Cambridge defeated Oxford in the annual race on the Thames by a handsome lead. This is the seventeenth victory for Cambridge, to twenty-two for Oxford.

The University of Kansas is said to be considering the question of changing its weekly holiday to Monday, because studies are so poorly prepared for that day.

The German students at Hillsdale have organized themselves into a German society in which all the exercises and discussions are to be presented in the German language.

The schools of Austria have been forbidden to use paper ruled in square or diagonal lines, as such paper has been found to injure the eyesight of pupils. In future only paper plain or ruled straight across is to be employed.

A new system of college government has been established at Harvard. In the future its college affairs will be managed by five members of the faculty chosen by the president, and sixteen students selected by the undergraduates.

Mark Hopkins, the venerable ex-president of Williams, is eighty-five years of age. Though advanced in age, his natural force and vigor are unabated, and his mind is clear and steady.

The whole number of students attending the Vanderbilt University, for the school year of 1885-6, is 553. These are divided among the different departments as follows: academics, 165; theological, 34; law, 28; medical, 211; dental, 76; and pharmacy, 39.

Miss Kin Kits, a graduate of the Normal school, at Tokio, has been chosen by the Japanese government, to receive three years training at the government's expense, at the Salem, Mass. Normal school, for the purpose of taking supervision of the Normal schools of Japan. She will be the first Japanese to be educated at the government's expense in America.

The Inter-State oratorical contest, composed of the colleges of Ohio, Indiana, Illinois, Minnesota, Wisconsin, Iowa, Kansas, Nebraska, and Colorado, was held this year at Lawrence, Kansas, on Thursday and Friday, May 6 and 7. Each State was represented by one speaker. The first prize was awarded to E. C. Ritscher, of Beloit, Wis., who spoke on the subject, "Conservatism an essential to success." The second prize was given to H. H. Russell, of Oberlin, Ohio.

EXCHANGES.

The *Monmouth Collegian* of May 11, contains the prize oration of E. C. Ritscher, delivered at the Inter-State oratorical contest, at Lawrence, Kansas, May 6, 1886.

The following is clipped from the *Vanderbilt Observer*: We have just made the acquaintance of the *College Speculum*, and to say that it is good but mildly expresses our opinion. Its contributors show training superior to that expected from an agricultural school.

The *College Speculum* is one of our largest exchanges, and its local columns are among the most complete that we receive, showing that the local imp is up and attends to his department. Its literary department abounds with instructive articles, proving that there is good material in the College.—*Delaware College Review*.

The *College Speculum*, published by the students of the Michigan Agricultural College, contains quite a number of carefully prepared articles. We have but one fault to find with the paper, it is a quarterly, it should be a monthly, for the contents of all their issues is sufficient evidence that they are capable of publishing an excellent monthly.—*The Purdue*.

Of all the college papers that come in exchange for the *Speculum* none is more worthy of honorable mention than the *Acta Victoriana*, published at Cobourg, Ont. Its essays are carefully prepared on subjects that are practical. Its local and personal departments are ably conducted, and its general tone is indicative of the educational and moral standing of the institution it represents. The article prepared by the exchange editor, in the May number, should be read and considered by every student who is, or aspires to be, an editor of a college journal.

The *Student's Farm Journal*, published by the Agricultural and Horticultural Association of the Iowa Agricultural College, is a regular visitor to our table. It is purely a representative paper, containing departments devoted to agriculture, horticulture, veterinary, domestic economy, and botany. It discusses subjects that should be of interest to students and patrons of an agricultural school; and in this respect it is an excellent paper. The May number contains an interesting essay on the subject of color in plants and fruits, written by Byron D. Halstead.

REVIEWS.

"Labor Laws of America" is the title of a small hand-book by H. A. Haigh, '74. The book gives a summary of the laws and the mutual duties and relations of employer and employe; the law of garnishment; law as it relates to strikes, boycotts, etc., and other topics of interest to one desirous of getting a clear idea of the relative duties and rights of these classes. It is published by the Co-operative Publishing Co., 58 Congress street, Detroit, and is sold for 35 cents.

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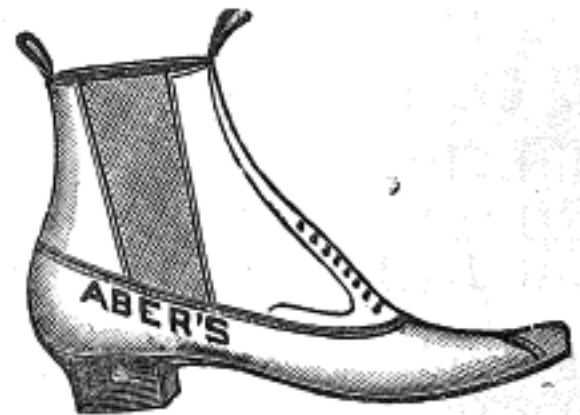
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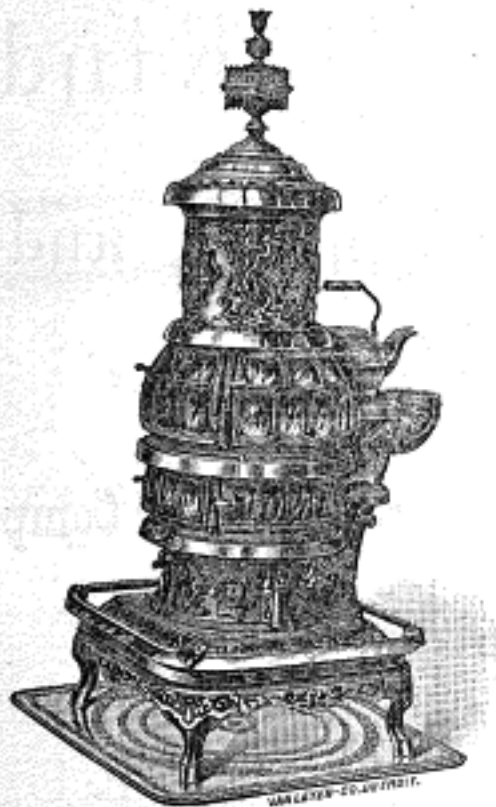
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