

# THE SPECULUM.

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## Some Remarks Upon Flower-beds.

[The following abstract of a bulletin by Prof. L. H. Bailey ('82) of Cornell University, we have been asked to publish as especially applicable to our own campus. —EDITOR.]

It is commonly assumed that many people have no love or appreciation of flowers, but it is probably nearer to the truth to say that no person is wholly lacking in this respect. Even those persons who declare that they care nothing for flowers, are generally deceived by their dislike of flower-beds and the conventional methods of flower-growing. I know many people who stoutly deny any liking for flowers, but who, nevertheless, are rejoiced with the blossoming of the orchards and the purple bloom of the clover fields. The fault is not so much with the persons themselves as with the methods of growing and displaying the flowers.

The greatest fault with our flower-growing is the stinginess of it. We grow our flowers as if they were the choicest rareties, to be coddled in a hotbed or under a bell-jar, and then to be exhibited as single specimens in some little pinched and ridiculous hole cut in the turf, or perched upon an ant-hill which some gardener has laboriously heaped upon a lawn. Nature, on the other hand, grows her flowers in the most luxurious abandon, and you can pick an armful without offense. She grows her flowers in earnest, as a man grows a crop of corn. You can revel in the color and the fragrance, and be satisfied.

The next fault with our flower-growing is the flower-bed. Now, nature has no time to make flower-beds; she is busy growing flowers. And, then, if she were given to flower-beds, the whole effect would be lost, for she could no longer be luxurious and wanton, and if a flower

were picked her whole scheme might be upset. Imagine a geranium bed or a coleus bed, with its wonderful "design," set out into a wood or in a free and open landscape! Even the birds would laugh at it!

What I want to say is that we should grow flowers when we make a flower garden. Have enough of them to make it worth the effort. I sympathize with the man who likes sunflowers. There is enough of them to be worth looking at. They fill the eye. Now show this man ten square feet of pinks, or asters, or daisies, all growing free and easy, and he will tell you that he likes them. All this has a particular application to the farmer. He grows potatoes and buckwheat and weeds by the acre; two or three unhappy pinks or geraniums are not enough to make an impression.

I suppose that everyone feels that the greatest charm of any landscape in the north is the greensward. It is the canvas upon which every artist-planter attempts to make a picture. But imagine a painter putting a glowing bed of coleuses on his canvas, for a center-piece! The fact is the easiest way to spoil a good lawn is to put a flower-bed in it; and the most effective way in which to show off flowers to the least advantage is to plant them in a bed in the greensward. Lawns should be large, free and generous, but the more they are cut up and worried with trivial effects the *smaller* and *meaner* they look.

But if we consider these lawn flower-beds wholly apart from their surroundings, we must admit that they are at best unsatisfactory. It generally amounts to this, that we have four months of sparse and downcast vegetation, one month of limp and frost-bitten plants, and seven months of bare earth or mud. I am not now opposing the carpet-beds which pro-

professional gardeners make in parks and other museums, but desire to direct my remarks to those humble home-made flower-beds which are so common in lawns of country and city homes alike. These beds are cut from the good fresh turf, often in the most fantastic designs, and are filled with such plants as the women of the place may be able to carry over in cellars or in the window. The plants themselves may look very well in pots, but when they are turned out of doors they have a sorry time for a month adapting themselves to the sun and winds, and it is generally well on towards mid-summer before they begin to cover the earth. During all these weeks they have demanded more time and labor than would have been needed to have cared for a plantation of much greater size, and which would have given flowers every day from the time the birds began to nest in the spring until the last robin had flown in November.

I wish that instead of saying flower-bed we might say flower-border. Any good place should have its center open. The sides may be more or less confined by plantings of shrubs and trees and many kinds of plants. This border-planting sets bounds to the place, makes it one's own; it is homelike. The person lives inside his place, not on it. He is not cramped up and jostled by things scattered all over the place, with no purpose or meaning. Along the borders, against groups, often by the corners of the residence or in front of porches,—these are places for flowers. When planting, do not aim at designs or effects; just have lots of flowers, a variety of them growing luxuriantly, as if they could not help it.

I have asked a professional artist, Mr. Mathews, to draw me the kind of a flower-bed that he likes. It is a border,—a strip of land two or three feet wide along a fence. This is the place where pig-weeds usually grow. Here he has planted marigolds, gladiolus, goldenrod, wild asters, China asters, and—best of all—hollyhocks. Any one would like that flower

garden. It has some of that local and indefinable charm which always attaches to an "old fashioned garden," with its exuberant tangle of form and color. Every yard has some such strip of land along a rear walk or fence or against a building. It is the easiest thing to plant it,—ever so much easier than digging the hideous geranium bed into the center of an inoffensive lawn.

There is no prescribed rule as to what you should put into these flower-borders. Put in them the plants you like. Perhaps the greater part of them should be perennials, which come up of themselves every spring and which are hardy and reliable. Wild flowers are particularly effective. Everyone knows that many of the native herbs of woods and glades are more attractive than some of the most prized garden flowers. The greater part of these native flowers grow readily in cultivation, sometimes even in places which, in soil and exposure, are much unlike their native haunts. Many of them make thickened roots, and they may be safely transplanted at any time after the flowers have passed. To most persons, the wild flowers are less known than many exotics which have smaller merit, and the extension of cultivation is constantly tending to annihilate them. Here, then, in the informal flower-border, is an opportunity to rescue them. Then one may sow in freely of easy-growing annuals, as marigolds, China asters, petunias and phloxes, and the like. One of the advantages of these borders is that they are always ready to receive more plants, unless they are full. That is, their symmetry is not marred if some plants are pulled out and others are put in. And if the weeds now and then get a start, very little harm is done. Such a border half full of weeds is handsomer than the average well kept geranium bed, because the weeds enjoy growing and the geraniums do not. I have such a border, three feet wide and ninety feet long beside a rear walk. I am putting plants into it every month in the year when the frost is out of the ground. Plants are dug in the woods or

fields, whenever I find one which I fancy, even if in July. The tops are cut off, the roots kept moist, and even though the soil is a most unkindly one, most of these much abused plants grow. Such a border has something new and interesting every month of the growing season; and even in the winter the tall clumps of grasses and aster-stems wave their plumes above the snow and are a source of delight to every frolicsome bevy of snow-birds.

### The College and the University.

J. H. KIMBALL, PHI DELTA THETA FRATERNITY.

The SPECULUM has often advocated a change in the governing board of the college. The election of the State Board of Agriculture by popular vote has been their remedy most frequently suggested. As far as we can learn, however, no one has yet proposed directly to place the college under the control of the regents of the university. For some reason any proposition which connects the Agricultural College with the university even in name is looked upon with such disfavor as to entirely discourage those who would wish to see closer relations established between the two institutions. There seems to be a prejudice on the part of the college against anything which savors in the least of such a union. This prejudice is undoubtedly inspired by very consistent fears that it would injure or perhaps destroy the smaller institution.

Looked at from the outside the college seems to have much in common with the university. It partakes of much of the character of the professional departments and as a professional school pure and simple, it deserves to rank with those departments. There seems to be no logical reason why the colleges of medicine, law, homœopathy, dental surgery and pharmacy should be incorporated in the university, while the colleges of agriculture, mechanics, mining and pedagogy should entirely without its jurisdiction. To be sure such colleges as those last

named require different locations. They could not all be clumped together in one town, as are the various departments at Ann Arbor, but they might yet be united under one head. The Agricultural College and the Mining School must from their very natures be situated in localities different from those required by a medical school. The various schools now incorporated in the university demand the same privilege. The homœopathic school is now about to be moved to Detroit where the advantages for such an institution are much superior to those afforded by a small city like Ann Arbor. It is only a question of time when the regular school will likewise move to a more suitable location and the various other professional departments will inevitably follow.

All this will not mean the dissolution of the university. The same general board of regents will still govern all the departments. This plan has been found to work well in the large universities near Chicago; the literary departments are suburban while the professional schools are urban.

In the case of our Agricultural College this separation as far as location is concerned which is beginning to be found so necessary in the university, has always existed. Why would it not now be advisable to unite the college with the various other state institutions into one great university, a university in spirit as well as in name?

On the part of our own college such a union would be advantageous for several reasons:

First, it would provide for the change in the governing board of the college which is everywhere acknowledged to be necessary. We do not need to say that the present method of government is far from perfect. Its faults are too well known to need even mentioning. Foremost among them is the ultra-conservatism of the board. Changes in the courses, in the teaching force, and in the methods of instruction which are necessary to keep the college abreast of the

times are made only after the most energetic pushing.

Secondly, it would give the college a greater prestige by adding to its own weight the influence of the whole university.

Thirdly, in regard to the university, such a union would very materially strengthen it, increasing its attendance, enlarging its sphere of influence and placing it still another step in advance of its contemporaries.

The objections to such a union as that proposed are numerous. We are told that the agricultural colleges which have been embodied in the state universities all over the country have been gradually overshadowed by the various other courses. This objection is indeed a strong one, but does it apply to the case in hand? If the condition of these colleges be examined it will be seen that the agricultural college is in each case in the same place as are the other departments, often being sheltered beneath the same roof and holding many of its classes in common with the other departments. This readily explains the failure of these colleges. There is a certain odium which must inevitably attach itself to an industrial course when brought into intimate relation with the more refined and "genteel" classical studies. This condition does not obtain in the case under discussion. We are so far removed from the university that no such deteriorating influence could possibly be felt. Another objection to this plan would probably be made, were the matter ever very strongly agitated, in the form of a plea that the college would be neglected at the hands of the university government. It is true that the governing board of the college would not in that case be composed necessarily of farmers as it now is, and discriminating action might result, but such would be far from probable; the case is not on record where the regents of the university under its present organization have showed discriminating action as against one professional school and in favor of another. And even were such a

result likely to follow the college could not suffer materially as it would still possess the liberal endowment which the generosity of the state and national governments has provided for it, and which cannot be diverted to other ends.

It has been said that our college is gradually developing into a great industrial university; that in a few years we shall see, not a single school of agriculture and mechanics, but a collection of industrial colleges, colleges of agriculture, of horticulture, of diaring, of veterinary, of mechanical, electrical and civil engineering. Such a prospect could be more pleasing only when we include all these with the various departments of the present university and with the mining and normal schools into a vast state university, a university whose position would be unrivalled not only in this country but in the old world as well.

### Outing in Montana.

H. L. CHAMBERLAIN, DELTA TAU DELTA FRATERNITY.

Outing in Montana is usually spent in sight-seeing and hunting. Before going into detail, it may be well to describe the entrance into the State and the Rocky Mountains.

Taking the most popular route, the Northern Pacific railroad, the first glimpse of the Rockies will be the Bad Lands, which mark the entrance to this great range. They are rightly named. Imagine, if you can, a long low range of mountains, nearly devoid of vegetation and cut up by spurs branching in all directions. Some of the peaks, if they may be called so, are solid masses of bare rock, while others are coated with thick layers of dirty-colored clay; while here and there wide deep fissures are to be seen, showing the powerful force that must have been employed at some past time. This, then, is the country that is opened to our view, and in reality is introductory to the great range itself.

Passing through the Bad Lands, which are about ninety miles wide, the land begins to be more elevated, and before one

is aware, he enters the outlying spurs or short ranges. And then, in turn, passing through these, he is soon in the very heart of nature in her wildest beauty. Here one may see snow covered peaks, silvery streams, clear as crystal, and level valleys dotted here and there with the cabins of the ranchmen.

As the aspect of the country is the same in nearly all parts I will confine myself to the description of the Smith River Valley where I spent most of my time.

This valley is about ninety miles east of Helena, the capital of Montana, and is hemmed in by the Diamond range on the west, the Castle on the east, and the Belt on the north. In the Diamond range can be seen Mt. Edith, a peak nearly ten thousand feet high, which towers far above the rest, and pushes her snow covered crest into the clouds.

The Castle mountains are much smaller as compared with the Diamond range but are not less beautiful. The body of the mountains are solid granite and as the force of the elements has worked upon the soil, which was piled upon them, it has gradually been carried away, leaving huge granite pillars, rearing their lofty tops far above the surrounding valleys and in the distance looking not unlike ancient castles.

The Belt range is long and low but nevertheless is the hunter's paradise. Because it is most remote from habitation and also is abundantly supplied with the purest water, it is the home of wild game.

To enter the range we must travel through the foot-hills which are about five miles in width. These hills are nearly all covered with a thick growth of sage brush which affords a fine place to try our skill in marksmanship, for this is the home of the sage hen, a species of grouse. They are large birds, gray in color, mottled with white, and their flesh is suitable for food only in the early part of the summer season. Later they feed upon the ripened sage which taints their flesh.

Directly back of the foot-hills the

mountains loom up and in their vast depths is the home of the wild game. Bear, deer, mountain lions, sheep, and many other animals are to be found here. It is also the home of the blue, or mountain grouse. When full grown these birds weigh not less than two pounds. During the summer they stay around the base of the mountains, but as winter approaches, they work their way to the tops of the mountains and live on the pine trees through cold weather.

But to get a better idea of the mountains and hunting, let us join a hunting party.

Several of us will go with the outfit, composed of tents, stoves, blankets, and the many different articles which will be needful. After passing through the foot-hills already described, we wend our way up a narrow canon, to the very foot of one of the highest divides. Here, in an enclosed basin, we pitch our tents in the shelter of a clump of evergreens, near which a mountain stream flows, furnishing us with a plenty of pure water. Although it is October, snow is on the ground, and the air is crisp and keen.

By the time our camp is put in order, night is upon us and we turn in, either to dream of the morrow, or to lie awake and listen to the sighing and moaning of the wind in the tree tops. Long before daylight the next morning, all are preparing for the day's sport, and at the first faint streak of dawn we shoulder our rifles and set off in different directions.

Now, for an experienced woodsman, hunting without getting lost is comparatively easy, but for a tenderfoot it is entirely different. After receiving careful directions he sets off. He is hunting for deer now and signs and tracks are plentiful, but the animals are always a little farther ahead and the trail seems endless. After wandering about in this fashion and getting turned around several times, he finally concludes to make for camp. He finds that it is a very easy thing to travel through the mountains when his mind is intent upon the game he is following, but to get back is more difficult.

He travels around ravines and gorges that seem innumerable, and at last reaches camp, but it is nearly dark and he is very hungry and tired and almost discouraged.

Others of the party have been more fortunate, three deer having been killed. The evening is spent around the camp stoves, stories and adventures being related to pass away the time. Before retiring the shrill scream of a mountain lion is heard, but as it is not repeated, no attention is paid it.

The next day we start out, but the sun rises behind dark clouds and by noon a violent snow-storm begins to rage. We start for camp and have some difficulty in reaching it because of the blinding storm. It lasts only a few hours and the tracks made by the animals during the night are much easier to follow the next day.

And so we hunt for several days, each night more deer being added to the number already killed.

Besides deer, smaller animals are killed, valuable for their fur only, but it is too late in the season for bruin, and most of the party are glad of the fact.

The last day one of the party has an adventure that he will not soon forget. Wearied after a long walk he stops to rest, and while doing so, he happens to look down the long park, on top of the divide, which he has been following. Not far away he sees a band of what he takes to be coyotes, but as they approach nearer he is startled to find them to be timber wolves. He does not wait for closer acquaintance, but fires several shots into their midst, and then starts for camp, which is not far away. They do not attempt to follow him farther but he says they came near enough.

The day after this occurrence, we pack our wagons with the spoils, and return to the valley.

Here in the valley we may spend much time with the fowling-piece, for game birds are plentiful. Along the creeks and rivers may be found prairie chickens,

willow grouse, and different kinds of water fowl.

But hunting is not the only pleasure to be had from an outing trip in Montana. One may spend much time in visiting mines, sheep and cattle ranches, western cities and towns. And in all a very pleasant summer may be spent in the regions of the Rockies.

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## SCIENTIFIC.

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### Some Observations of Mechanical Matters in Europe.

During a recent sojourn in Europe there came to my notice many things that would have been interesting to any one and especially those of the SPECULUM readers interested in engineering. Much of my time was spent in engineering establishments, and not a little of it in gaining access to the places I wished to visit. Any one anticipating such a trip would save much time by paving the way long in advance, as most processes of business and form move slowly in the old world. Letters of introduction are indispensable and such as will secure one local letters are the most serviceable. While our prominent engineers and societies are known and appreciated by the intelligent, there are many concerns in Europe, as well I fear in our own country, who know only that which they use from day to day and of local character. The cities which I visited having attractions of a mechanical nature were Liverpool, Glasgow, Manchester, London and Thames Ditton in Great Britain, Rouen and Paris in France; Zurich in Switzerland and Berlin in Germany. Liverpool is from its location a city where establishments for repairing especially thrive and is not essentially a manufacturing center. Its shops are equipped as a rule with machines capable of doing marine repair work and are very much the same as similar establishments in our own country. The docks extend six or seven miles along the river Mersey and present the most remarkable feature of Liverpool,

impressing one with the immense sea traffic and huge engineering undertakings. They are seemingly built without regard to first cost and with a view to last for all time. The largest ocean steamers may be seen in the basins undergoing repairs or unloading and are apparently handled with perfect ease and safety. The devices for unloading grain are models of ingenuity and splendid construction. The warehouses are in some cases a quarter of a mile away from the docks and connected by endless conveyers running through subways. Glasgow as the largest shipbuilding city in the world presents a multitude of attractions in manufacturing. The shops are equipped with extremely large and heavy machinery. There seemed to be no especial hurry in the places I visited but a regularity of process and continuous force of men doubtless compensate for its absence. One noticeable fact is that many machines which we are accustomed to see running with the attendance of one man are not only worked by two but are so designed that one man could not operate them unaided. The machines are as a rule much heavier than are seen in American shops and present more old types and in fact there is a larger proportion of old machines. Whether they are better preserved than they would be with us I am unable to say but certain it is that many of the equipments would not stay in the race in this country. A machine however which may have been worked by several generations of one family should show some leniency in refusing to properly work. There is little incentive to invent new machines for the traditions of a shop will enable any work to be done on some existing machine. The character of the workmanship appeared excellent and I was told that a piece scarcely ever required to be duplicated because of blunder on the part of the journeyman. The conveniences for rapid transference of work from one part of the plant to another seem insufficient and many common laborers are required for this work. Traveling cranes are not

unusual but are slow in motion. In one instance I saw the entire motive power carried on the crane, engine, boiler and coal pile. At the University of Glasgow I had the pleasure of seeing the engine model which started James Watt to work on his gift to the world. Here also is a marble statue of the great man by Chantrey.

At Manchester I tried to gain access to the Whitworth establishment but was unable to do so owing to the fear I presume that I might carry away with me Sir Joseph's latest invention, possibly the slide rest. It is really too bad that some one should not tell them that the invention has gotten out. The Crossley gas engine works was interesting as a well organized shop with much system and many special tools for their line of work. The officers of this establishment were also interesting as having a most supreme hatred for America, Americans and in fact strange as it may seem, for protective tariff. In London the most instructive shops I visited was that of Henry Mandsleys Sons & Co. I was told that it was the oldest shop in London and may well have been. I here recognized designs which I had supposed were new, but which I learned had been in use in this shop for nearly one hundred years. Here is an engine of the table type that has been driving the shops since 1820 and also the first slide-rest from which Whitworth so they said stole the idea when an apprentice in this shop.

An interesting feature in the early construction of the lathe, which is still in use in many of their old machines, is the round belt running in a V groove. Many of the designs of Mandsley have the peculiarity that they might have been designed yesterday, so far as the style of proportioning is concerned. I was fortunate enough to have for a guide a delightful gentleman whose ancestors had been associated with the concern for several generations, and who himself had seen many years pass there. At Thames Ditton, the home of the Williams engine, I found the shop located in one of the

quaintest and most picturesque towns it has been my fortune to see. The foot path from the station to the establishment passes by many cosy homes, including a graveyard which it passes through, and by such circuitous routes that one is led to believe that it is a place they would fain lose the stranger. Here one finds an establishment strictly up to date in its push and excellence of production. The oft heard claim of interchangeability of parts is surely lived up to here. All parts of their engines go to a store room where they are gauged and accepted or rejected according to accuracy. An illustration of the accuracy attained in certain parts was given me by placing on a plane surface two piles of eight piston rings and measuring the comparative heights by placing a straight edge over the two piles, they varied by the thickness of a piece of paper which was one one-thousandth of an inch in thickness. I noticed that the mode of measuring the variation from standard gauges was by interposing slips of paper which were of standard thicknesses. An engine can be erected in this establishment with parts never together before, in the same time that an engine which has been taken apart can be put together.

At Rouen, France, the works of Matter et Cie were visited and were of especial interest as being the place where M. M. Delemare-Deboutville has designed and built the largest gas engine extant, *viz.*: of three hundred and twenty horse power. This engine has shown the remarkable economy of eight-tenths of a pound of coal per indicated horse power per hour and one and two-hundredths pounds per horse power per hour at the brake.

In Paris, Bariquand and Marre as builders of fine machinery and instruments of precision were very interesting. The milling and grinding machines of this company so strongly resemble those of our own Brown and Sharpe that it would seem more than a coincidence. Without having definite data with which to substantiate I can say that I think they

run their tools at a much higher speed than in other countries. One is surprised to see how many girls are here employed on milling and other light machines. A peculiarity that I noticed in nearly all back gearing was that twisted gears were used for the purpose so it was said to secure smoother running and greater strength. The Anciens Establishments Cail Society Anonyme was well worth a visit if only on account of the great variety of its work, locomotives, marine engines, refrigerating machines, dynamos, boilers, cannons, cables, hydraulic machinery, presses and a host of other things. Each department is under the supervision of a special corps of engineers who devote their energies to the one specialty. Zurich and Berlin each presented their peculiar methods but I find that I have already transgressed the limits I set at starting. I can say however that nowhere did I find so much similarity to American practice as in Berlin and also that which I least expected a readiness to accord excellence to our practice and inclination to imitate. I would not be understood as saying that they accord to Americans a greater excellence of product but great ingenuity in designing and producing economically.

P. M. CHAMBERLAIN.

Prof. Davis recently visited a peach orchard near Grand Rapids to determine the cause of the death of a large per cent. of the trees. The injury was caused by a new pest, a minute beetle, which bores into the trunk of the tree thus destroying it. Remedies are being tried on it that will probably prove effectual. Similar injuries have been reported from several other parts of the state.

Dr. Grange visited a reported outbreak of glanders at Midland and found the disease in acute form existing in one case. A case reported from Freeland supposed to be glanders turned out to be free from disease. During field day the Dr. applied the tuberculine test on a herd of cattle at Hudsonville but there was no reaction thus proving the cattle to be healthy.

Dr. Vaughan, bacteriologist of the University of Michigan, reports having found the bacillus of tuberculosis and other characteristic lesions of that disease in the specimens sent him from Coldwater by Dr. Grange.



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AGRICULTURAL COLLEGE, JUNE 15, 1895.

EVERYTHING gives way before athletics in this number of the SPECULUM.

A STREET sprinkler for the drives would be a valuable addition to the equipment of the horticultural department during the heated season. A small amount invested in some such appliance would return one hundred per cent. dividends in the appearance of the campus and the general comfort of its residents.

THE legislature of 1895 is dead and the Linderman student labor bill has died with it, despite the efforts of the alumni and the students to push it through. Its defeat means the postponement of a reform in the labor system, but it does not prove that such a reform is not needed nor that all opposition to the present system will die with the bill.

With the exception of such occasions as the annual election of officers, the recent meetings of the Students' Organization have rivalled even chapel exercises for small attendance. The students who do not take enough interest in the man-

ner in which their affairs are conducted to go to the meetings have no cause to complain when an occasional tax reminds them of the fact that they are members of the student body.

AN important amendment has been proposed to the constitution of the Students' Organization. It provides for a new system of regulating the financial part of the association; a matter which, it is unnecessary to say, is most worthy of attention. The measure provides for a more equal division of the work between the secretary and the treasurer. It relieves the secretary of the most disagreeable feature of his office, that of collecting the taxes; and it provides for an annual fee of one dollar from each student to be paid to the secretary of the college upon classifying. This scheme is practically the same as that which has worked so well in the Boarding Club Association, and there is no apparent reason why it should not be equally successful in the organization.

FIELD day has come and gone, and was all things considered the most successful yet held. Hillsdale College proved a charming host, the weather was perfect, and the attendance very large. The only thing to be regretted is the rivalry between Albion and the other colleges in the association headed by M. A. C., a rivalry which was approaching a very unhealthy stage when the contest closed. It would not be our place to say which side is in the wrong, if indeed, the blame can be laid directly to either, but no one will deny that anything like a lack of harmony is dangerous to the life of the M. I. A. A. Good natured rivalry adds a zest and a stimulus to the sports, which cannot be obtained from any other source, but the moment the spirit becomes bitter a critical stage has been reached, and care must be taken or open war will result in dissolution. We do not think this stage has yet been reached in the M. I. A. A., but it was not very far away when the events closed at Hillsdale.

## COLLEGE NEWS.

## PROCEEDINGS OF THE BOARD.

June 4-5, 1895.—At the monthly meeting of the State Board of Agriculture important action was taken regarding the student labor system, which has been agitating students and faculty for some time. The following resolutions were adopted:

WHEREAS, During the recent session of our legislature there appeared to be a diversity of opinion among the friends of the college concerning the original purpose of the institution, the purpose for which the government endowment in support of agricultural colleges in the various states was given, and especially in the interpretation of the organic law of the college relative to the objects sought in the maintenance of the college; therefore,

*Resolved*, That the Michigan State Board of Agriculture assembled this day to look after the best interests of our State Agricultural College, hereby express its belief that our college was established by the State for the purpose of educating young people toward a high type of rural life which depends upon success in agricultural pursuits for its fruition and that whatever course of training shall be established must have this in view. Further, that our interpretation of the contract entered into by this State in accepting what are known as the Morrill endowments, does not in the least change the intrinsic purpose sought in the establishment of the Agricultural College.

*Resolved*, That we hereby affirm our allegiance to the system of compulsory labor provided for in our organic law, and assert that we have the authority in the interpretation of that law to provide that kind of manual training which in our judgment will best prepare the young people studying at our college for a successful agricultural career.

*Resolved*, That the faculty of our college are hereby instructed to enforce the provisions of the law relative to manual labor in our college as a feature of our course of instruction that applies to every student enrolled at the college, whether regular, special, summer or winter, who enjoy the advantages of our course and accept the tuition of our corps of instructors, and we invite the faculty by recommendation to assist this board in so arranging our system of manual instructions as to be of the highest value in carrying out the object sought in our scheme of education.

*Resolved*, That in the assignment of labor no special line of work done for any attaché of the college or for any department of the college shall be allowed to be substituted for manual labor in the regular course unless such labor shall be considered by vote of the faculty of the college equally valuable to the regular required labor in subserving the cardinal purpose of the institution.

*Resolved*, That we earnestly entreat the faculty, the students and all attaches of the college in conversation, action and influence to be loyal to the view of our labor system in the college course as expressed in these resolutions.

A considerable amount of routine business was transacted, of which the following is the most important: Kenyon L. Butterfield was appointed superintendent of institutes for Michigan. Dr. Beal was authorized to procure a map of the college botanic gardens for publication. The purchase of several new instruments for the college military band was authorized, the instruments to be placed under the care of Lieut. Lewis. The band is to practice five hours per week hereafter. A resolution was passed inviting the State horticultural society to hold its June meeting at

the college. Profs. Weil and Chamberlain were authorized to attend the meeting of mechanical engineers to be held at Detroit, as delegates from this college. The publication of 1,000 copies of the triennial catalogue was also authorized.

The Commissioner of the State Land Office is requested to offer for sale the college lands located in Manistee county at the price as appraised. The director of the Experiment Station will be a delegate from the station to the Association of Colleges and Experiment Stations at Denver, July 16, 1895. A team will be purchased for the Horticultural Department of the Experiment Station.

Adjourned to June 25.

## ABOUT THE CAMPUS.

A number of summer students have arrived.

Mrs. Taft and children have gone to Massachusetts to spend the summer.

Two hundred and thirty seven classification cards have been taken out this term.

In a large number of the flower beds on the campus tiles have been laid for sub irrigation.

Mr. Ray Stannard Baker, '89, of the *Chicago Record* was a visitor on faculty row last week.

The graduating class of the Albion high school with their superintendent, Mr. C. C. Hull, visited the college June 10.

Mrs. E. M. Kedzie and Mrs. C. F. Wheeler visited their daughters at Olivet last week and attended the commencement exercises.

Several new bulletins are out—Pests of the Orchard, Small Fruit Notes, Native Plums and Russian Cherries, and the Apple Orchard.

Prof. and Mrs. Davis and Profs. Crozier and Stevens took part in the program at the meeting of the Pomona Grange of Ingham county on June 8.

The street car service to the college is not of the very best, but it brings hundreds of visitors to our beautiful campus which is becoming a popular picnic ground.

The student body, in evening full dress, gave Prof. and Mrs. Mumford a lively reception one evening recently. A pleasant time interspersed with vocal and instrumental music is reported.

The new irrigating scheme on the Horticultural department is completed and is now in use although it is not yet attached to the large fire pump at the boiler house. Thus far it is a complete success.

During the absence of the faculty at field day and elsewhere, Mrs. Edwards and Mrs. Vedder gave a lawn party to the "faculty widows." Professors Noble and Chamberlain furnished the amusements.

On Decoration day the battalion under command of Lieutenant Lewis, took part in the parade at Lansing. The boys made a very presentable appearance and were highly complimented by the citizens' committee on Decoration day.

*Reclus.*  
A large number of books for each department has been added to the library. Among others are "The Earth and Its Inhabitants" in nineteen volumes by Elisee Beches, and "Library of Historic Characters" by A. R. Spofford.

Among the distinguished visitors at the college recently were Congressman D. D. Atkin, H. H. Mach of the *Michigan Farmer*, and Hon. Levi L. Barbour, Hon. W. J. Cocker and Hon. P. N. Cook, Regents of the University of Michigan.

Dr. Beal and Prof. Wheeler attended a meeting of the Michigan Academy of Science at Orion, Oakland county on Thursday, May 30. The meeting was a success and a large number of interesting plants was obtained for the botanic garden.

#### FARM DEPARTMENT.

A small plot of alfalfa on the curiosity strip was cut the last part of May, and yielded at the rate of five tons per acre of green forage.

Mr. B. E. Bullock of Toledo, Ohio, a noted breeder of fine stock, has presented the college with "General Longstreet," a full blooded Jersey bull.

Of the eight varieties of wheat grown on muck land in one-fourth acre plots, the Golden Chaff and White Clawson passed the winter in the best condition.

The new barn, 40 feet by 50 feet, for the Experiment Station is being built near the grain barn. In this building will be stored the different crops of the Experiment Station.

The grist-mill building and the old wind-mill and pump house have been moved to the new poultry yards on the west side of field No. 4. Here also is being built a model poultry house.

#### MECHANICAL DEPARTMENT.

A new combination pattern makers vise has recently been placed in the wood shop.

The department is now contracting for a dynamo to light all drawing rooms, shops, etc.

The pump room floor has been taken up, an excavation made and a cement bottom put in, the piping overhauled and a new floor is being put in place.

Arrangements are being made to secure some prominent designers of the State to give lectures to the senior mechanicals. Mr. O. J. Root, '89, will lecture on steam engine Design on June 24.

The subjects of the theses of the mechanical students are as follows: Determination of the error in various types of indicator rigs; Tests to determine the efficiency of a rotary engine; Determination of the moment of Inertia of Solids by dipping process; Design for an automatic coal stoker; Test of a marine engine; Engine Design; and Arch design (under direction of Prof. Vedder.)

#### DEPARTMENT OF ZOOLOGY AND GEOLOGY.

The McMillan collection of lepidoptera has recently been re-labeled according to the latest Smith catalogue.

A re-arrangement of the collections in the General Museum is in progress, which it is hoped will increase the attractiveness of the display. Much duplicate material will be stored in order to allow the remainder to be more effectively arranged; but at best, the specimens must remain badly crowded.

The Zoological Department has just received a series of fifty-seven fine wall charts by Leuckart and Nitche, imported from Germany. They relate mainly to invertebrate animals, and give in the clearest manner the details of external and internal anatomy. About one-fourth of the plates relate to insects.

Two notable additions have been made recently to the material for effective illustration in teaching. The first consists of a series of about sixty large mounted photographs of geological and geographical subjects, prepared by the United States Geological Survey. Among the views are volcanic phenomena; erosion by wind, water, and ice; shore deposits, lake and marine; and canons, gorges, and geysers. The shores of Lakes Michigan and Superior are illustrated by sixteen plates.

### PERSONALS.

We desire the earnest co-operation of every person who has ever been connected with the college in trying to make this department an interesting one. Let every alumnus and every person who has been with classes here send in news to the editor of the department, often, thus making his work much easier and the department more interesting to all.

'62.

Pres. O. Clute of the Florida Agricultural College has a very interesting and well-written article on "Agriculture in Florida" in the June number of the *Grange Visitor*.

WITH '65.

B. A. Forbes is enjoying a large trade as druggist in Jackson, Mich.

'70.

A letter from H. G. Reynolds of Pasadena, California, dated April 19, contains the following description.—"We are in the perfection of our rose season and I could easily gather the blossoms by the bushel from my own place if there was occasion to use so many. I visited a place the other day where on either side of the entrance drive way were two Gold of Ophir rose plants each fully 25 feet in diameter and each showing about as great a surface of bloom as of foliage. There could not have been fewer than several times ten thousand blossoms on the two. I have a La Marque over a trellis the blossoming of which I can compare to nothing less than billows of foam tumbling over one another.

'71.

Dr. H. P. Halsted, formerly a resident of Morrice, Shiawassée county, went to Guthrie, Oklahoma territory. It took him only a few weeks, however, to recover from his western fever and conclude to return.

to Michigan. He is now located at Perry, a town two miles from Morrice.

'73.

Attorney B. T. Halstead, of Harbor Springs, visited the college June 5.

'74.

Geo. W. Mitchell is engaged in the mining business with the Red Rock Mining Co., of Newbury, Oregon. The company is incorporated at eleven million dollars and has a very valuable mine, assaying ten dollars per ton on an average. The lead ore presents a face 1,500 feet in length by 100 feet in depth and extends back into the mountain for 1000 feet or more. Mr. Mitchell writes that the prospects for a large crop of fruit and grain are also very promising.

'76.

C. B. F. Bangs, has recently located at Belding and is engaged in the drug business.

'78.

A promising son arrived at the home of Mr. and Mrs. Eugene Gregory of Ann Arbor, May 16.

WITH '80.

Mr. Ira T. Sayre, president of the board of trustees of the Industrial School for boys at Lansing, attended the first meeting of the national conference of corrections and charities held at New Haven, Conn., May 24. He also visited, for comparative study, the various industrial and training schools of Pennsylvania, New York, Connecticut, Massachusetts and Rhode Island.

'83.

Arthur F. Kinnan received the degree of B. L. at the Columbian University Law School, Washington, D. C., June 11.

'84.

R. J. Coryell is landscape gardener and general manager of Peche Island. His green houses, lawns and garden crops are in fine condition, and reflect very favorably his excellent training while at the college.

Charles Grimes still continues to teach school in Livingston county.

WITH '84.

Richard L. Frost is solicitor of American and foreign patents at Manistee, Mich. He recently designed a steam pump which has several new and valuable features. Illustrations and explanations of this pump may be found in the *American Machinist* of May 9. He is also the inventor of the Frost pump which has gained a wide reputation.

WITH '86.

C. Judson has quit engineering on the L. S. and M. S. railroad and is now trying his hand at farming near Toledo, Ohio.

'88.

J. N. Estabrook was not a lobbyist in the legislature

as indicated in the last SPECULUM, he occupied the reading clerk's chair in the house.

A unique bulletin from the pen of Fred H. Hillman of Nevada, contains a key to the early flora of the Truckee valley. It is a very valuable bulletin and shows much hard work as well as a broad knowledge of botany, especially in the western states.

'89.

Dame Rumor says that in all probability A. D. Baker of Lansing will take it Cool (ey) this summer even if the temperature should reach 95 in the shade.

Oliver C. Hollister paid the college a visit, May 24.

'90.

Joe Foster, U. of M. '94, is instructor in the diseases of the eye, ear and throat at the State university.

Chas Ferris, teacher of mechanical drawing in the University of Tennessee, is at the college taking post graduate work in the mechanical department.

Victor M. Lowe is doing some special work on the plum scale. This is quite a pest on plum trees in Long Island. He is studying its life history and is experimenting with various remedies for its destruction.

John W. Toane, travelling agent for the Portland Furniture Co., will enter the Chicago Dental College next fall.

E. G. Cooney, advertising manager of the *Practical Farmer* and *Fruit Grower*, has located in Grand Rapids.

H. G. Hall will take the degree of Bachelor of Arts at Leland Stanford this year.

O. A. Turner is book-keeper for Churchill & Co. at Leipsie, Ohio.

W. Petrie is managing his father-in-law's farm in Pennsylvania.

J. R. McCall, professor of Mechanic Arts in the University of Tennessee, will visit M. A. C. in July.

WITH '90.

F. Robinson will be graduated from the course of Architecture in Cornell at the June commencement.

C. F. Weidman is draughting for the Detroit Dry Dock Co.

'91.

Prof. C. F. Wheeler attended the recent meeting of the Michigan Academy of Science at Orion, Oakland county.

Prof. W. O. Hedrick employs all his spare moments in preparing for the final examination for the degree of Master of Science at the University of Michigan. The examination extends over a period of four years, and is, in more ways than one, by no means a passing event.

K. L. Butterfield, editor of the *Grange Visitor*, has been appointed superintendent of the Farmers' Institutes for the coming two years by the State Board of Agriculture. The last legislature appropriated \$5,000

for institute work and empowered the State Board to appoint a superintendent whose duty it shall be to provide lecturers, arrange dates, and look after each institute. The selection is a good one and insures increased efficiency and value to this much needed work. The law provides that at least one institute shall be held in each county of the State.

WITH '91.

Joe Bettinger is a coroner in the city of Detroit. He recently pitched a winning game of ball for the city officials in their contest with the board of aldermen.

'92.

D. W. Trine has been engaged as superintendent of the grounds of the State Industrial School at Lansing.

H. B. Fuller, commissioner-elect of Montmorency county, visited the college June 3.

L. C. Brooks has just finished a very successful year of school in Pierport, Mich. He will spend some time at the college doing special work in subjects more or less closely connected with teaching.

B. W. Peet has been re-engaged as science teacher in the Grand Rapids high school at a salary of \$850. He expects to take special work in the sciences at the U. of M. this summer.

J. E. Hinkson will take the degree of M. D. at the University of Michigan this year.

H. N. Peck of Jackson intends to leave the farm and begin the study of medicine.

'93.

John B. Dimmick is with Thos. H. Fox & Co., manufacturers of elm and white ash staves, at East Tawas Mich.

F. J. Porter made a short visit at the college June 11.

W. A. Maxfield finished the sophomore year in Rush Medical College last month. He will spend the summer in selling drugs in the Upper Peninsula.

L. J. Briggs and W. W. Parker are candidates for the degree of M. S. at the university. Mr. Briggs has taken physics for his major and Mr. Parker chemistry.

O. H. Pagelson has been promoted to director of the chemical laboratories in the Northwestern University.

WITH '93.

Vernon Hooper, principal of the Mackinac schools was a recent college visitor.

'94.

O. S. Groner is taking the course for college graduates at the State Normal and will finish it during the present month.

R. S. Welsh will teach mathematics in the Sault Ste Marie high school next year.

S. F. Scott is assistant to R. J. Coryell and has charge of the shrubbery on Peche Island.

L. B. Plummer has been engaged as principal of the Burnips Corners schools.

C. B. Smith has accepted the principalship of the Lawton schools in Van Buren county.

WITH '95.

Married, June 6, at the residence of the bride's parents, Harry D. Baker of St. Croix Falls, Wisconsin, to Miss Helen D. Gower of Lansing. They will make their home at St. Croix Falls, where Mr. Baker has an extensive real estate business. THE SPECULUM extends its usual congratulations.

Chas. Harmon is a student at the State Normal and captain of the "Ypsi." winning team.

WITH '96.

G. E. Miles of Mendon has lately taken unto himself one of the fair damsels of St. Joseph county. The SPECULUM wishes him future success and happiness.

Miss Fay Wheeler of Olivet College will resume studies at M. A. C. next term.

R. J. Robb was a recent visitor at the college. He expects to teach another year and will then finish the course with '99.

J. L. Horne graduated from the Brigham Young Academy, Provo, Utah, last month.

S. H. Fulton has completed a successful year of school near Detroit and will spend the summer months on the farm. He will re-enter college next fall and finish with '97.

## ATHLETICS.

"Well, it's all over now," and a good many of us are glad of it. Three days of such excitement and bustle as we witnessed at Hillsdale last week, will tire any man, even though he is enjoying himself all the time.

At 8:30 Thursday morning, June 6, about 100 M. A. C. students took the special L. S. & M. S. train for Hillsdale. We were joined at South Lansing by 35 from Olivet, and at Albion by about 40 from there. We arrived at Hillsdale at 11:30 o'clock, and immediately took possession of the Smith Hotel, the Albionites going to the Keefer. Considerable time was spent in registering and getting rooms, but finally all was settled satisfactory.

The sports began Thursday afternoon at 2:00 o'clock at Hillsdale fair grounds. The first event was the mile walk. In this there were five starters, but one dropped out, two were ruled out and only North of Olivet and Boys of Albion finished—North first in 7:54.

Next came the hundred yard dash, with nine contestants at the scratch. It was one of the prettiest races we have ever seen. All the runners were bunched until within twenty feet of the line when Speare spurted ahead and won in 10 2-5 seconds with Harris of Olivet second.

The five-mile bicycle next engaged our attention,

and the result was a surprise to everyone present. Rork got the pole and set the pace for the nine who started with him. He set a swift pace and held it to the end, winning in 14:32 2-5. Woodworth, Albion, second. In the third lap, three men and bicycles were piled in a bunch, Fox of Albion being one of them. He was their strong man and the one on whom they relied to win this race.

After this, the all-around men ran the hundred yard. Cole won in 10 4 5 with Bateson second.

The ball game between M. A. C. and Olivet engaged our attention for the remainder of the afternoon. There was nothing especially brilliant about the game, except that we won it. The infield and outfield were miserable—not fit to play ball on. As M. A. C. and Olivet were both accustomed to playing on good ground they did not put up as good a game as they would have under other circumstances. The official score is as follows:

M. A. C. VS. OLIVET, AT HILLSDALE.

M. A. C.						
	AB	R	H	PO	A	E
Gorenflo, c	5	2	1	3	0	0
McKinnon, 1 b	6	4	2	13	0	2
Ansorge, 2 b	6	4	3	1	1	2
King, 3 b	6	3	2	1	0	2
Bateson, ss	4	2	1	1	2	2
Crosby, 1 f	6	1	1	0	0	2
Parish, r f	5	1	3	1	0	0
Reed, p	4	1	0	0	2	0
Fisher, p	2	0	1	0	2	0
Krental, c	6	0	1	7	2	1
<b>Totals</b>	<b>59</b>	<b>18</b>	<b>15</b>	<b>27</b>	<b>9</b>	<b>12</b>

OLIVET.						
	AB	R	H	PO	A	E
Davidson, 2 b	6	2	2	4	1	3
Archer, 3 b	3	4	1	0	0	3
Moore, c	6	2	3	9	3	4
Emerson, ss	6	2	3	2	0	2
Terwilliger, 1 f	5	1	1	0	0	0
Mackay, c f	6	1	1	1	0	0
Foster, 1 b	5	1	1	8	0	0
Steele, r f	5	1	0	0	0	0
Hinkley, p	5	1	1	0	3	0
<b>Total</b>	<b>47</b>	<b>15</b>	<b>13</b>	<b>24</b>	<b>7</b>	<b>14</b>

Innings	1	2	3	4	5	6	7	8	9	R
M. A. C.	1	0	2	2	6	0	2	4	*	—18
Olivet	1	0	0	1	2	6	0	3	2	—15

Batteries, M. A. C., Fisher, Reed and Krental; Olivet, Hinkley and Moore.

Earned runs, M. A. C. 2, Olivet 0; 2-base hits, M. A. C. 2, Olivet 3; 3-base hits, M. A. C. 1, Olivet 2; stolen bases, M. A. C. 10, Olivet 8; struck out by Fisher 2, Reed 5; Hinkley 5. Umpire, Tray.

Thursday evening a reception was tendered the visiting students, by one of the societies of Hilldale College. It was attended mostly by M. A. C. visitors.

Friday morning just before the sports began, Albion's band and about 200 Albion students arrived on a special train.

The first event this morning was the running broad jump. Won by Cole, 19 ft. 6 in. 2d, Bateson, 17 ft. 8 1/2 in.

Next, shot put—won by Fisher, 34 ft. 10 1/2 in. 2d, Flagg of Olivet, 32 ft. 3 1/2 in.

Pole vault—Alger, Albion, first at 8 ft. 4 in. 2d, Bateson.

One mile bicycle—won by Peck of Albion. Rork, second. Time, 2:34 3-5.

The all absorbing event of this morning was the quarter-mile run. Out of 16 entries there were 12 starters. The race was between Partridge and Shipp of Albion. As they were nearing the line, some over enthusiastic Albion man darted out and coached Shipp over the line. According to the rules governing such cases, no attendant shall accompany any competitor, and on this ground the race was declared illegal. Shipp came in first with Partridge a close second. Time, 54 3-10 seconds. The judges, after considerable discussion, decided to have the race run again at Eaton Rapids, Saturday, June 15th.

While these sports were in progress Ypsilanti and Hilldale were playing ball. The game was attended by Ypsilanti and Hilldale people principally. The score was 17 to 16 in favor of Ypsilanti. Batteries—Ypsilanti, Hinkley and Churchill; Hilldale, Storms and Gage. Umpire, Tray. We were unable to get the tabulated score.

Friday afternoon led off with the 2:20 hurdle. Cole had this race easily but fell on next to last hurdle, Dunster, Albion, got ahead on this, and won in 30 2-5 seconds. Walker, 2d.

The half-mile run brought forth six out of 14 contestants. This was a walkaway for Partridge. 2d, Ducham, Hilldale. Time, 2:28 2-5.

Speare was our winner in the 220 yard dash. He won first easily in 24 4-5 seconds. 2d, Shipp of Albion. Speare is one of the neatest runners ever seen in any of the M. I. A. A. contests. M. A. C. can congratulate herself on having such a man within her dominions.

In the standing broad jump, Cole won at 9 ft. 10 in. Flagg, Olivet, 2d at 9 ft. 8 1/2 in.

Cole had the running hop, step and jump his own way, winning with a record of 41 ft. 2 in. 2d, Seyder, Hilldale, 39 ft. 7 1/2 in.

The base ball game between Albion and M. A. C. this afternoon was the best amateur game we have ever had the pleasure of witnessing. It was ahead of many of the league games of this season. Only four errors were made during the whole game, and had it not been for them, it is safe to say that the score would have been 0 to 0 at the end of the ninth inning. Albion played an errorless game and three scores were made on those errors of ours. Although we lost the game, it is no discredit to M. A. C's team, and they have our most hearty approval of the game they did play:

M. A. C.

	AB	R	IB	PO	A	E
Gorenflo, c f	4	0	0	2	0	0
McKinnon, 1 b	4	0	2	6	0	0
Ansorge, 2 b	4	0	1	2	2	2
King, 3 b	4	0	0	3	0	0
Bateson, ss	3	0	0	0	0	1
Crosby, 1 f	3	0	0	2	1	0
Parish, r f	3	0	0	1	0	1
Fisher, p	3	0	0	0	1	0
Kentral, c	3	0	1	11	2	0
<b>Totals</b>	<b>31</b>	<b>0</b>	<b>4</b>	<b>27</b>	<b>6</b>	<b>4</b>

ALBION.

	AB	R	IB	PO	A	E
White, 3 b	5	1	1	2	1	0
Buck, 2 b	5	2	2	0	3	0
Narrin, 1 b	5	0	1	15	0	0
Perine, ss	3	0	1	0	2	0
Jacobs, p	4	0	0	2	6	0
Dean, 1 f	3	0	0	1	0	0
Thoms, c f	4	0	1	0	0	0
Cogshall, r f	4	0	0	0	0	0
Fox, c	4	0	0	7	2	0
<b>Totals</b>	<b>37</b>	<b>3</b>	<b>6</b>	<b>27</b>	<b>14</b>	<b>0</b>

Innings	1	2	3	4	5	6	7	8	9	R
M. A. C.	0	0	0	0	0	0	0	0	0	0-0
Albion	1	0	1	0	0	0	1	0	0	0-3

Batteries, M. A. C., Fisher and Kentral; Albion, Jacobs and Fox. Earned runs, M. A. C. 0, Albion 0; 2-base hits, M. A. C. 0, Albion 0; stolen bases, M. A. C. 1, Albion 2; struck out by Fisher 11, by Jacobs 6. Umpire, Tray.

Friday evening, the indoor sports occurred at Baw Beese Park. Fully 1,000 people were in attendance, and nearly all stayed, although it was at an early hour when we adjourned.

Howe of Albion, and Ward of Hillsdale, were the only contestants in the club swinging, which was won by Howe.

In the feather weight wrestling, Howe and Shaw were the first on the mat. Howe won first two bouts easily.

Then Dibble and Abby, Albion paired off—Abby won after a hard struggle. In the third bout, Dibble was thrown off the mat and hurt quite severely. This was the only accident of the evening. Myers, Hillsdale, who was paired off with Frisby, Hillsdale forfeits, and Abby forfeits to Howe. This leaves Howe and Frisby for the finals, and Frisby forfeits after the first bout which was won by Howe, giving Howe first medal and Frisby second.

The first bout of the middle weights brought out Tucker of Hillsdale and Mitchell, M. A. C. After these rounds with no fall, the match was given to Tucker on points. Moench forfeits to Bateson, and Bateson forfeits to Tucker. Tucker gets first medal and Bateson gets second, while sleeping the sleep of the just at the hotel.

Only Whitney, Hillsdale, and Kendrick, Albion, contested in the running high kick. Whitney won out at 8 ft. 6 in.

The light weight contest was forfeited to Elliot by

Howe, Albion. Laitner won from Bates, and Normal lost to Howe after six bouts without a fall. The referee gave decision to Howe on excellence. Then Howe and Elliot wrestle finals. After three draws, Howe forfeits to Elliot.

Horizontal bar contest won by Whitney, Hillsdale, McPherson, Albion, second.

Becker, M. A. C., and White, Albion, come on in heavy weight. Although White is about one hundred pounds heavier than Becker, Becker had no trouble in winning from him. White depended entirely on his weight and showed no skill whatever. Then Becker wins easily from Tucker, Normal.

McPherson, Albion, wins from Redfern, M. A. C., in Welter—and gives up to Tucker in middle of first bout.

Swift of the Normal was matched against Yebena, M. A. C., in the fencing contest. Swift wins easily with seven points to Yebena's four.

M. A. C. wins two of the wrestles, Hillsdale two and Albion one.

Saturday morning everyone was tired out, and glad that it was the last day. The mile run brought out seven contestants. The M. I. A. A. record for this event was broken in royal style by North of Olivet, he winning in 4:48½. Partridge, M. A. C., showed his metal to the crowd by the sprint which he made on the home stretch. North lead by a good fifty yards, and Partridge crossed the line only about two feet behind him. If there had been one more rod to go, Partridge would have won without a doubt.

The result in the quarter-mile bicycle was a surprise to everyone. Rork, M. A. C., had shown himself to be a good long distance man, and no one believed that he could win on a short distance. He ran away from the rest of the men though, and won in 36 1-5 seconds. Peck, Albion, came in second, but second place was given to Owen, Olivet, because Peck cut him out.

In the running high jump, Whitney, Hillsdale, could not be touched. He won at 5 ft. 6 in. Cole, second.

Flagg of Olivet, won the hammer throw with a record of 87 ft. 1 in. Cogshall, Albion, 2d, 86 ft. 7 in.

Saturday afternoon opened with the 120 hurdle, which was won by Cole. Flagg, 2d; time, 18 seconds.

After this occurred the two crowning events of the meeting—the final ball game, between Albion and Ypsilanti, and the relay race. The two \$75 cups were at stake, and as these are the two prizes dearest to every college man's heart, all were intensely interested.

Excitement quieted to eager anticipation when the race for the relay cup was announced. Albion college had held it for one year and it was hoped that one of the other colleges would win from her. Olivet, Albion and M. A. C. brought out teams. It was expected that Partridge, Walker, Rider and Speare would make up our team but Partridge not feeling well and Rider being absent, Cole and Bateson stepped in to fill their places. These men had worked hard to win first and second all around medals and were tired.

when they went in but with nerve and will power that is to be complimented, they determined to make a great effort, which they did under the circumstances. Bateson set the pace in the 1st quarter, but was unable to sprint on the finish, and Albion got a lead of 30 yards, with Olivet closely following. In the 2d quarter Walker gained about 10 yards. In the 3d Cole was unable to keep the pace he started with and lost about 40 yards. In the 4th Speare took the stick, and from the distance he gained on Albion at the beginning of the quarter it seemed as though M. A. C. would easily win. He was unable to keep up his speed and came in about 15 yards behind Albion the winner. Time 3:41 1-5.

In the final base ball, Olivet, Hillsdale and M. A. C. sided with the Normal team, although there was not much hope that they would win. But Albion had done her best work in the game with us, and her second game was no comparison with the first. Clark went into the box, but he was hit so hard that they soon changed to Jacobs. The fifth inning saw the score four to three, in favor of N. A. A., but in the seventh Albion took advantage of loose playing and got in seven runs. The Albion spectators were now sure of the game and raised a large pole, floating the pink and green. But this only incited the Normals to more vigorous playing and in the sixth they made four runs, and in the seventh piled up five more. Albion had only two chances now and they were shut out in both. The first half of the ninth closed the game with fourteen runs for N. A. A., and ten for Albion. The Albionites immediately lowered their pole without the pleasure of winding it. After two men were out in the ninth inning, Albion entered a protest on the ground that the Normal team was not the same team which had played Hillsdale the day before. The affidavit of F. W. Green, N. A. A's. director, rendered the protest of no avail.

Pandemonium reigned from the close of the game until 8 o'clock, when all the outsiders left. Speeches and parades too numerous to mention. Everybody except Albion seemed well satisfied with the result, and perhaps in due time, they will recover from their soreness.

The tennis contests were all played off at the college campus, and as we were unable to be there and at the fair grounds at the same time, we cannot give as full reports as we would wish to.

In singles, Albion wins from M. A. C., Normal wins from Hillsdale, Albion wins from Olivet, and in the finals Albion wins from Normal.

In doubles, M. A. C. wins from Olivet, Albion from Hillsdale, Albion from N. A. A., and in finals Albion from M. A. C.

Although we won neither the base ball nor the relay cup, M. A. C. can feel proud of the record which she made. As to score of points, M. A. C. leads, Albion second, Hillsdale third, Olivet fourth, and Ypsilanti fifth. Out of \$265 worth of medals, we bring back \$131 worth, consisting of first and second all-rounds, 13 firsts and 11 seconds. Cole wins the first

all-around with 17 points to his credit, and Bateson the second with 14 points.

The eighth annual field day of the Michigan Inter-Collegiate Athletic Association was an unqualified success, and great praise is due the directors for their untiring efforts. Field day has come to be an established institution and is as much a part of college life as are the commencement exercises.

M. A. C. AND LANSING STATE LEAGUE.

On Friday, May 10th, the closing day of last term, we played the Lansing league team. Of course, we did not go into the game expecting to win, and the result was even better than we expected. The score was:

M. A. C.

	AB	R	IB	PO	A	E
Morrissey, c	3	0	0	7	0	0
Gorenflo, c f	3	0	1	2	0	0
McKinnon, 1 b	3	2	2	5	0	1
Ansorge, 2 b	3	0	1	1	1	1
Bateson, s s	3	0	0	0	1	2
King, 3 b	3	0	0	0	1	1
Crosby, 1 f	2	0	1	2	0	1
Eiman, r f	2	0	1	1	0	1
Fisher, p	2	0	0	0	1	0
Totals	24	2	6	18	4	7

LANSING LEAGUE.

	AB	R	IB	PO	A	E
Sholta, 2 b	4	1	1	4	1	2
Steins, c f	4	2	2	0	0	0
McKavitt, 1 f	4	0	0	0	0	0
Holland, 3 b	4	1	2	2	1	1
Daily, 1 b	3	0	0	4	1	0
Parke, s s	3	0	0	3	3	0
Ferguson, p	3	1	1	0	0	0
Elton, c	3	0	0	4	0	0
Clark, r f	3	0	0	1	0	0
Totals	27	5	6	18	6	3

Innings,	1	2	3	4	5	6	R
M. A. C.,	0	0	0	1	0	1	2
Lansing,	1	1	2	0	1	0	5

M. A. C. VS. KALAMAZOO.

Score 11 to 12 in our favor. This is the way we played Kalamazoo on their return game with us, May 25. Rather different from 21 to 7, isn't it? In the first two innings it looked as though they were going to win from us as easily as they did when we played at Kalamazoo, but in the fourth, we tied them, and through the remainder of the game the result was doubtful. Kalamazoo made seven scores in the first two innings, four of which were due to errors on our part. From the second inning until the eighth they scored only zeros, and in the eighth and ninth made four more, making a total of 11.

The feature of the game was Bateson's home run in the seventh. Official score as follows:



M. A. C.

	AB	R	H	PO	A	E
Gorenflo, c f	5	1	0	3	0	1
McKinnon, 1 b	5	3	0	9	0	2
Ansorge, 2 b	4	2	2	2	5	0
King, 3 b	3	1	0	1	2	1
Bateson, s s	4	2	1	1	0	0
Crosby, 1 f	4	0	1	2	0	0
Fisher p	4	1	2	0	2	2
Reed, r f	3	1	1	0	0	1
Krental, c	4	1	0	9	1	4
<b>Totals,</b>	<b>38</b>	<b>12</b>	<b>7</b>	<b>27</b>	<b>10</b>	<b>11</b>

KALAMAZOO.

	AB	R	H	PO	A	E
Cadwallader, p	5	1	3	2	5	0
Axtelle, s s	4	1	0	1	4	3
Warwick, 2 b	2	2	0	3	3	1
Smith, c f	5	1	2	2	0	1
Thomas, 1 b	5	2	0	10	0	0
Boyan, c	5	1	1	4	0	1
MacDougall, 3 b	5	2	2	0	1	0
Jackson, 1 f	3	0	0	1	0	2
Stripp, r f	5	1	0	1	0	2
<b>Totals,</b>	<b>39</b>	<b>11</b>	<b>3</b>	<b>24</b>	<b>13</b>	<b>10</b>

Innings,	1	2	3	4	5	6	7	8	9	R
M. A. C.	0	0	4	3	0	0	2	3	*	12
Kalamazoo,	3	4	0	0	0	0	0	1	3	11

Earned runs, M. A. C. 1, Kalamazoo 0; 2 base hits, M. A. C. 1, Kalamazoo 2; Home run, Bateson; struck out by Fisher 3; by Cadwallader 2.

Our victory over Kalamazoo gave the team a new grip on life, and June first they went down to Olivet with blood in their eyes, determined to have Olivet's scalp or perish in the attempt. This game surpassed all our previous ones, both in batting and fielding. Reed is fast developing into a first-class pitcher, and the rest of the team, with one or two exceptions, are keeping up with him.

Score by innings:

Innings,	1	2	3	4	5	6	7	8	9	R
M. A. C.	0	0	3	1	1	6	7	3	0	21
Olivet,	0	1	1	2	3	5	1	0	0	13

Saturday, June 15, the quarter-mile race was run over at Eaton Rapids. The only contestants who presented themselves were Partridge, M. A. C., and Shipp, Albion. The track was poor, and as each man wanted the other to set the pace, the time was slow. Partridge took the lead and held it to the finish. Shipp started to sprint on the last 220 and came close to Partridge, who then let himself out and crossed the line with 10 feet between him and Shipp. Time, 57 seconds. "Pat" was met on his return home by the entire student body, who escorted him in a carriage decked with olive green down faculty row to Wells Hall.

His winning this medal gives M. A. C. exactly one-half the entire value of the medals. In the previous statement the first and second medals for this race were left out. Counting them, the entire value is \$273, of which M. A. C. has \$136.50.



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9.00 "	1.00 "	5.00 "	8.30 "
9.30 "	1.30 "	5.30 "	9.00 "
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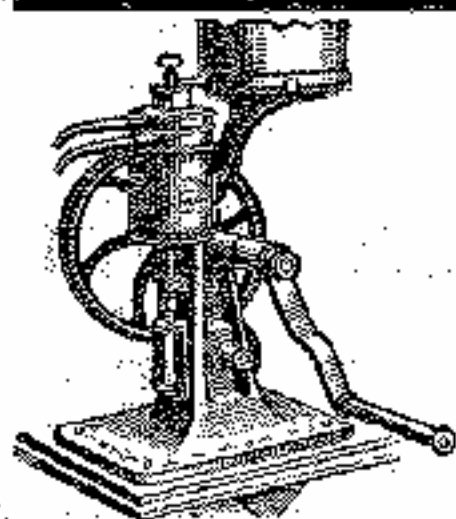
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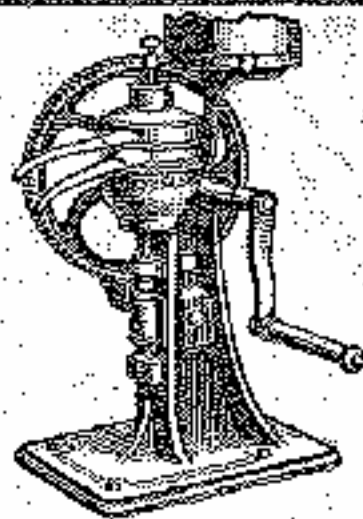


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